

**May 2002**

**The regulation of Independent Gas  
Transporter charging  
Consultation document**

## Summary

This consultation paper is an important part of Ofgem's review of Independent Gas Transporter (IGT) charging arrangements. It proposes a set of guiding economic and commercial principles to be used as the basis for the review. These principles derive from Ofgem's statutory duties and include:

- 1) promoting effective competition where practicable:
  - a) between connection providers;
  - b) within gas transportation; and
  - c) between Gas Shippers and between Gas Suppliers.
- 2) regulating where competitive pressures are not sufficient by:
  - a) promoting efficiency of IGTs;
  - b) sharing efficiency gains with consumers;
  - c) allowing a reasonably efficient IGT to make a reasonable profit and to finance its activities;
  - d) promoting the efficient use of gas through cost-reflective charges; and
  - e) protecting the interests of consumers in rural areas.

This is followed by an analysis of existing IGT charging arrangements against these principles, which identifies gaps between current and more appropriate charging structures. These issues are summarised below.

- 1) it is not clear that effective competition exists between IGTs in securing new contracts;
- 2) connection and gas transportation services are lacking clear and consistently applied definitions for (i) the activities involved in each service, (ii) the costs (and relevant assets) of providing each service, and (iii) the structure of charges;

- 3) the cross-subsidisation of competitive connection activities with monopoly transportation revenues may be distorting competition in the connections market;
- 4) the payment of allowances by IGTs to gain network development and connection contracts is distorting competition in the connections market;
- 5) the statutory connections (the 23m and 10m rules) distort competition in the connections market;
- 6) effective competition does not exist within gas transportation;
- 7) the lack of transparency and consistency in IGT charging methodologies and statements may be distorting shipper and supply competition;
- 8) there are insufficient incentives on IGTs to invest and operate efficiently;
- 9) there are insufficient incentives on IGTs to share efficiency gains with consumers;
- 10) there are insufficient controls on the ability of IGTs to exploit their monopoly position to earn excessive profits on 4B and 4C charges;
- 11) there is no formal definition and verification of reasonable profit for IGTs;
- 12) cross-subsidisation of new gas connections with transportation revenues may not encourage efficient connection to the gas network and efficient use of gas; and
- 13) existing licence conditions may not be encouraging development of the rural gas network as intended.

Finally, this consultation paper discusses options designed to address the issues identified above. These include:

- A. increase the competitive pressure on IGTs;
- B. introduce rate of return regulation for IGTs' gas transportation charges;
- C. introduce formal price regulation for IGTs' gas transportation charges;
- D. introduce relative price regulation for IGTs' gas transportation charges; and
- E. develop a revised approach to enforcing the existing licence conditions.

Responses to this consultation should arrive no later than 5 July 2002.

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# 1. Introduction

## **Purpose of this document**

- 1.1 This consultation paper is an important part of Ofgem's review of IGT charging arrangements. It proposes a set of guiding economic and commercial principles to be used as the basis for the review. It also includes an analysis of the existing situation and goes on to consider a range of options for the future regulation of IGT charging arrangements.

## **Background**

- 1.2 Shippers arrange for the transfer of gas over transportation networks to final consumers. Gas Transporters (GTs) own and operate these networks and levy transportation charges on Shippers. Typically a transportation network is a monopoly in the area that it serves. The Gas Act and the Utilities Act provide for all licensed GTs to be regulated by Ofgem. Transco is the largest GT operating the national transmission system and local distribution zones. IGTs operate relatively small local distribution networks.

## **Rationale**

- 1.3 There are indications that the existing structure and level of IGT connection and transportation charges, including excessive payments to developers for the laying or adoption of networks, are not acting in the best interests of end consumers.
- 1.4 Some gas suppliers and consumers have expressed concerns to Ofgem about the transparency and level of IGT transportation charges. Some of the IGTs' transportation charges are higher than Transco's charges to equivalent sites. At least one supplier has chosen to increase its charges to consumers on IGT networks above its charges for those on Transco's network. Ofgem understands that other suppliers are also considering differentiated charging for consumers on IGT networks.
- 1.5 In addition, competition in the gas connections, shipping and supply markets may also be adversely affected by the charging policies and methodologies adopted by the IGTs. It is important that IGTs are regulated in a transparent and

consistent manner that promotes competition and efficiency, with consumers seeing real benefits from the operation of the IGTs.

- 1.6 Although transportation charges are levied on gas Shippers, they are passed on to Suppliers and end consumers and make up a significant proportion of final bills. For domestic consumers these charges typically represent 35 to 40 per cent of the final price, with somewhat lower percentages applying to commercial and industrial users. This represents a significant cost for households. A Shipper serving a consumer on an IGT network connected to Transco's network will incur transportation charges from both Transco and the IGT, as the gas has to travel over both networks.
- 1.7 It is also important that IGTs have incentives to invest and operate efficiently.

#### **Previous documents and correspondence**

- 1.8 An earlier paper titled Independent Gas Transporter charges and Cost of Capital was published on 20 February 2002. Appendix One provides a summary of responses received to date on the Cost of Capital paper. The responses to the paper on the cost of capital will be considered alongside the responses to this paper in formulating draft proposals.
- 1.9 This paper focuses on the economic and commercial principles that should underpin IGT charging. Issues relating to the quality of gas transportation have been addressed by the recent papers on the Guaranteed and Overall Standards of Performance for IGTs<sup>1</sup>. Matters relating to financial viability and ring-fencing will be addressed by a separate consultation paper to be published later this year.
- 1.10 As a result of Ofgem's concerns about some IGT charging practises (condition 4C in particular), Ofgem has introduced Interim Arrangements for all applications for charging methodology acceptances under Condition 4C received after 7 December 2001. These Interim Arrangements have established criteria for acceptance of Condition 4C methodologies for new gas networks. These criteria require that the combined Condition 4 and Condition 4C charges for transporting gas to IGTs' sites should not exceed the equivalent "all the way"

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<sup>1</sup> Papers were published on 19 October 2001, December 2001, 23 January 2002 and 19 February 2002.



charge levied by Transco to similar sites on its network. These arrangements will remain in effect until this review has been completed.

### **Structure of the document**

1.11 The document has the following structure.

- ◆ Chapter two describes the history, ownership and characteristics of the IGTs and the legislation and licence conditions that apply to charging by IGTs for connection and transportation;
- ◆ Chapter three sets out the principles and objectives proposed to guide Ofgem in this consultation process;
- ◆ Chapter four outlines Ofgem's views on how effectively the current regime of IGT charging is achieving the proposed objectives and identifies issues with the current regime; and
- ◆ Chapter five discusses options for the future regulation of IGT charging arrangements.

### **Consultation responses**

1.12 If you would like to comment on these issues, please respond by the 5 July 2002. Written responses should be addressed to:

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1.13 Electronic responses should be sent as an MS-Word document or else in the main body of the email message. Responses to this document will be placed in the Ofgem library and therefore any confidential material should be included as a separate annex. If you would like to discuss this document, Frances

Warburton on 020 7901 7089 or John Holmes on 020 7901 7072 would be pleased to help.

### **Timetable**

- 1.14 Responses to this document will be considered together with the responses already received on the Independent Gas Transporter charges and Cost of Capital paper in developing draft proposals for the IGT charging regime. It is intended to publish draft proposals in the fourth Quarter of 2002.

## 2. Background

2.1 This chapter starts by outlining the history, ownership and characteristics of the IGTs. It then goes on to describe the legislation and licence conditions that apply to charging by IGTs for transportation and connections, and discusses some of the main features of the charging arrangements.

### *2a. The IGTs*

2.2 IGTs are engaged in several activities within the gas industry, including the provision of connections, gas transportation and metering services. IGTs compete to provide connection services to consumers without a gas supply and then provide a monopoly gas transportation service to all consumers connected to their network. They either build their own network extensions and connections or purchase and adopt networks constructed by other parties. In addition, IGTs may provide metering services to consumers.

2.3 Since the level of costs incurred by IGTs affect the level of charges, it is important to consider both costs and charges together. The charges levied by IGTs can affect consumers in a number of ways. Consumers' bills are indirectly affected by the structure and level of transportation charges, which make up about 35 to 40 per cent of the average domestic gas bill. IGTs also make charges for services provided directly to consumers (for example meter repositioning). In addition, consumers can be affected through the way IGT charges influence competition in related markets, such as supply.

2.4 There are currently 11 companies that are licensed to transport gas in Great Britain. These companies consist of Transco plus 10 IGTs<sup>2</sup>.

2.5 Transco is the major GT in Great Britain. Its network is divided into the high pressure National Transmission System (NTS) and 12 Local Distribution Zones (LDZs). The NTS transports gas from the beach terminals and interconnectors to the LDZs and large industrial consumers connected directly to the NTS. The LDZs distribute gas from the NTS to consumers and to Connected System Exit Points (CSEPs).

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<sup>2</sup> The ten IGTs together hold twelve gas transportation licences.

- 2.6 In 1995 the Gas Act 1986 was amended to allow for the creation of IGTs which develop, operate and maintain local gas transportation networks. IGT networks are connected directly to Transco's system via a CSEP or indirectly to Transco's system via another IGT. Both business and domestic consumers are connected to IGT networks. Each IGT has a monopoly in the transportation of gas to the consumers on its network.
- 2.7 Ofgem estimates that around 20 million consumers are directly connected to Transco's network and around 240,000 consumers are connected to IGT networks (see Table 2.1 below). Independent Pipelines Ltd (IPL) is the largest IGT with around 130,000 consumers. GTC is the second largest company with around 50,000 consumers. Some IGTs have only recently started operating and have a small number of consumers.

**Table 2.1: Supply points connected to IGT networks at 1<sup>st</sup> April 2001**

IGT		Connected supply points
Independent Pipelines Ltd <sup>1</sup>	IPL	130,000
The Gas Transportation Company Ltd <sup>2</sup>	GTC	49,250
British Gas Connections Ltd	BGCL	34,120
ScottishPower Gas Ltd	SPG	15,523
SSE Pipelines Ltd	SSEP	6483
E.S. Pipelines Ltd	ESP	1
East Midlands Pipelines Ltd	EMP	2,662
United Utilities Gas Pipelines Ltd <sup>3</sup> and United Utilities Gas Networks Ltd <sup>3</sup>	UUGP UUGN	214
Utility Grid Installations Ltd	UGI	1
Mowlem Energy Ltd	MEL	0
Total		238,254

<sup>1</sup> Formerly known as TotalFinaElf Pipelines Ltd and before that AGAS Developments Ltd.

<sup>2</sup> Holds two licences

<sup>3</sup> Both of these companies are wholly owned subsidiaries of United Utilities plc

- 2.8 In many cases an IGT is part of a larger energy sector group, for instance, Scottish Power Gas Pipelines is owned by Scottish Power UK plc. Several IGTs have affiliated companies that provide multi-utility connections, ship gas over transportation networks and supply gas to end consumers. IGT ownership and their affiliates within the gas industry are set out in Table 2.2.

**Table 2.2: Ownership of IGT networks and some affiliated companies**

<b>IGT</b>	<b>Ownership Group</b>	<b>Relevant affiliates</b>
IPL	Recent management buyout	Connect (undertakes multi-utility connection work)
GTC	International Energy Group Limited	IEG has UK gas supply subsidiary The Gas Supply Company (GSC) and gas supply subsidiaries on Isle of Man, Guernsey and Jersey; owns LPG company in Portugal
BGCL	Centrica plc	British Gas Trading (shipper and supplier); British Gas Home Services
SPG	Scottish Power plc	Scottish Power (shipping and supply), Gas Design, Network Project Management
SSEP	Scottish and Southern Energy plc	Southern Electric, Scottish Hydro Electric, Electricity Generation, Swalec (electricity and gas suppliers), Power Systems, Energy Services
ESP	East Surrey Holdings plc	Surrey and East Surrey Water plc, Phoenix Natural Gas
EMP	Powergen plc	East Midlands Electricity (design of networks, project management, meter installation)
UUGP UUGN	United Utilities plc	United Utilities Distribution, United Utilities Networks (design networks)
UGI	Bord Gais Eireann	Gate Power, Conservation Energy Ltd, CM Power Ltd, BGE (UK) Ltd, Natural Gas Finance Ltd
MEL	John Mowlem and Company plc	Mowlem infrastructure Services; Mowlem Utility Services Aquaman

## ***2b. Relevant Legislation***

- 2.9 The Gas Act 1986 (as amended) provides for the regulation of the onshore gas regime and for the separate licensing of transportation, shipping and supply. The Gas Act is the main piece of primary legislation that sets out the duties of each GT in connecting premises and charging for transportation services.
- 2.10 The Gas Act provides for the licensing of the GTs. The GT licences contain additional regulatory obligations that IGTs must comply with. GT licences and charging arrangements are described in more detail in part 2c below.
- 2.11 Under Section 10(7) of the Gas Act, Ofgem, with the consent of the Secretary of State, may make regulations entitling a GT to levy charges on consumers for the installation of the main used to provide a consumer with a connection.

- 2.12 The Gas (Connection Charges) Regulations 2001 were made by Ofgem exercising its powers under Sections 10(7) and 47(3)(b) of the Gas Act. Under certain circumstances the regulations allow a GT to require a person requiring a connection to a relevant main to pay a contribution towards the expenses of laying the main used to make that connection. Expenses are not recoverable if the connection is required more than 5 years from the date the main is laid. The Regulations allow for expenses to be recovered with regard to mains laid before 1 October 2001 (the date that the Regulations came into force). But in that situation, the amount of the expenses may not exceed any amount paid in respect of those expenses by any person previously required to make a payment under the 2001 or 1986 Regulations.
- 2.13 Ofgem has consulted on a proposal to extend the prescribed period in Regulation 2(a) of the regulations from five years to twenty years<sup>3</sup>. The revised regulations are in the final stages of authorisation. It is hoped that this measure will further enable the development of gas networks in rural areas.

### ***2c. Relevant Licence Conditions***

- 2.14 IGTs are generally involved in the following three activities:
- ◆ the provision or adoption of new gas networks or system extensions referred to as network development, involving the installation of new gas mains;
  - ◆ the provision or adoption of new connections to existing or new gas networks, involving the installation of individual service pipes to connect consumers' premises to a network; and
  - ◆ the ongoing operation and maintenance of gas networks, referred to herein as gas transportation.
- 2.15 The first two of these activities are together referred to as connection services. The cost of connection services or connection costs can be either recovered as an up-front charge to the party requesting the connection, as part of ongoing transportation charges, or a combination of the two. This depends upon the

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<sup>3</sup> Amending the Gas Connection Charge Regulations, A consultation document, Ofgem August 2001

extent to which up-front connection charges are deep or shallow. Gas transportation costs are generally recovered through ongoing transportation charges.

- 2.16 Deep and shallow connection charges refer to the extent that that the incremental infrastructure costs of connecting and supplying an individual consumer are recovered up-front from that consumer. A deep connection policy requires consumers to pay up-front for all connection costs, possibly including the reinforcement of the existing network required to transport the additional gas consumed at their premises. A shallow connection policy recovers only some elements of incremental infrastructure costs up-front, for example the cost of new service pipes, with the remaining costs recovered via ongoing transportation charges levied on all consumers.
- 2.17 Currently, only Transco is subject to full price control regulation of its transportation charges, via a special condition in its GT licence. The IGTs' charges are governed through requirements to submit and adhere to charging methodologies (and in some cases charging statements) that conform to certain requirements, as discussed below.
- 2.18 The GT licence has a number of conditions that govern the method of charging for transportation and connection. These comprise:
- ◆ standard condition 4 - Charging of Gas Shippers, General;
  - ◆ standard condition 4A - Obligations as Regards Charging Methodology;
  - ◆ standard condition 4B - Connections Charges etc, including the 10 metre rule (explained below); and
  - ◆ standard condition 4C - Charging of Gas Shippers, Supplemental Connection Charges.
- 2.19 These standard conditions have been reproduced in full in Appendix Four. Particular extracts from each of the standard conditions that consultees might like to consider when providing responses are provided below.

## Standard Condition 4: Charging of Gas Shippers - General

2.20 Standard condition 4(1) requires a GT to furnish 'a statement of...charges to be made in pursuance of transportation arrangements...and the methods by which, and the principles on which, those charges are determined...'. These charges must 'conform to the methodology so established...in accordance with standard condition 4A'<sup>4</sup>.

### Standard Condition 4A: Obligations as Regards Charging Methodology

2.21 Standard condition 4A outlines in more detail the obligations on the GT regarding its condition 4 charging methodology. These obligations include:

- ◆ the GT should '...from time to time make such modifications of the..."charging methodology"...as may be requisite for the purpose of achieving the relevant methodology objectives.'<sup>5</sup> (as discussed below);
- ◆ 'Except in so far as [Ofgem] otherwise approves, the [GT] shall not make a modification of the charging methodology unless it has...consulted the relevant shippers on the proposed modification and allowed them a period of not less than 28 days within which to make written representations...'<sup>6</sup>;
- ◆ the GT must provide Ofgem '...with a report setting out...(i) the terms originally proposed for the modification; (ii) the representations (if any) made by relevant shippers; and (iii) any change in the terms of the modification intended in consequence of such representations...'<sup>7</sup>; and
- ◆ generally the GT cannot make a modification of the charging methodology '...unless 28 days have elapsed since the said report was furnished without [Ofgem] having given the licensee a direction requiring that the modification be not made.'<sup>8</sup>.

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<sup>4</sup> Standard Condition ("SC")4(5)(b)

<sup>5</sup> SC4A(1)

<sup>6</sup> SC4A(2)

<sup>7</sup> SC4A(2)(b)

<sup>8</sup> SC4A(2)



2.22 The 'relevant methodology objectives' outlined in condition 4A(5) state that the methodology should result in charges which:

- ◆ '...reflect the costs incurred by the licensee in its transportation business';
- ◆ '...properly takes account of developments in the transportation business'; and
- ◆ '...facilitates effective competition between gas shippers and between gas suppliers'.

2.23 In addition, where no special price control condition is in place, the charging methodology must also result in '...charges which, taking one charge with another and one year with another, permit the licensee to make a reasonable profit, and no more, from its transportation business...'<sup>9</sup>. However, the following items are excluded from this objective<sup>10</sup>:

- ◆ 'costs incurred for the purposes of that business in connection with the construction of pipe-lines for the benefit of an area...designated for the purposes of standard condition 4C...';
- ◆ 'revenue derived from that business by way of charges (within the meaning of standard condition 4B (Connection Charges etc))...and which are in respect of premises within an area for the time being so designated';
- ◆ 'revenue derived from that business by way of supplemental charges (within the meaning of standard condition 4C...'; and
- ◆ 'any payments made by the licensee in connection with the proposed development of an area for the time being not so designated to a person who has an interest in land in that area, other than by way of reasonable consideration of an interest in land or for goods or services with which the licensee is provided'.

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<sup>9</sup> SC4A(6)

<sup>10</sup> SC4A(6)

## Standard Condition 4B: Connection Charges etc

- 2.24 Standard condition 4B stipulates that ‘...where any pipe is supplied and laid by the licensee...for the purpose of connecting premises (“the premises concerned”) to a relevant main, the licensee may charge the person requiring the connection (“the person concerned”) in respect of the cost of supplying and laying the pipe...’<sup>11</sup>.
- 2.25 Standard conditions 4 and 4A refer to transportation charges paid solely by gas shippers. By contrast, charges levied through standard condition 4B are paid by the person requiring the connection to the gas network, which may be a property developer or consumer for new domestic properties.
- 2.26 Condition 4B also stipulates that the GT ‘...shall comply with any directions given by [Ofgem] to furnish it with a statement showing the methods by which, and the principles on which,...charges in respect of the cost of connecting, supplying and laying a pipe or the expenses of the laying of a main are normally to be determined in different cases or circumstances...’<sup>12</sup>.
- 2.27 The statement must ‘...where practicable, include examples of the charges likely to be made in different classes of case...’<sup>13</sup> and be published ‘...in such manner as will ensure adequate publicity for it...’<sup>14</sup>.
- 2.28 However, unlike charging methodologies derived under standard condition 4, there are no relevant objectives and no requirements regarding changing the methodology stated in the condition 4B, beyond furnishing a statement to Ofgem. There is nothing in this licence condition to prevent collection of the costs of a connection over time.
- 2.29 There are two supplementary rules that a GT must comply with when charging for connections under standard condition 4B: the 23 metre rule and the 10 metre rule. Each of these restrictions is described briefly below.

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<sup>11</sup> SC4B(1)

<sup>12</sup> SC4B(3)

<sup>13</sup> SC4B(5)

<sup>14</sup> SC4B(6)(a)

### *The 23 metre rule*

- 2.30 Under sections 10 (1), (2), (5) and (5A) of the Gas Act 1986, a GT may be required by an owner or occupier of premises to:
- ◆ connect those premises within 23 metres of a relevant main of the GT and supply and lay any pipe necessary for that purpose. The owner or occupier may be charged for provision and laying of the pipes but not for the final connection; or
  - ◆ connect a pipe supplied and laid by the owner or occupier of a premises to a main of the GT. A GT may charge for the final connection to the relevant mains. The pipe supplied by the owner or occupier of the premises becomes the property and responsibility of the GT.
- 2.31 The above duties only apply to connections where the supply of gas will not exceed 75,000 therms per year.

### *The 10 metre rule*

- 2.32 Standard condition 4B states that when connecting domestic premises, the GT '...shall only so charge in respect of the cost of supplying and laying the pipe insofar as it is attributable to the supplying and laying of -
- (a) so much of the pipe as is laid upon property owned or occupied by the person concerned, not being property dedicated to public use; and
  - (b) so much of the pipe as is laid for a greater distance from a relevant main than 10 metres, although not on such property as is mentioned in sub-paragraph (a).'<sup>15</sup>. (this is referred to as the 10-metre rule).
- 2.33 The 10 metre rule does not apply if the premises concerned are in an area designated for the purposes of standard condition 4C.

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<sup>15</sup> SC4B(1)

## Standard Condition 4C: Charging of Gas Shippers – Supplemental Connection Charges

- 2.34 This standard condition allows a GT to charge gas shippers (and not the person requiring the connection) for the costs of providing a connection in certain circumstances.
- 2.35 The GT must first apply to have the area concerned identified as a ‘designated area’. Ofgem has authority to designate an area if:
- (a) ‘it appears to [Ofgem] that gas has not previously, or has not within the previous 3 years, been conveyed through pipes to any premises therein other than ones which had been supplied with gas at a rate in excess of 2,196,000 kilowatt hours a year; and
  - (b) it appears to [Ofgem] that, taking into account both any existing premises and probable developments in the area, it is likely that the area will contain premises of which more than a half will not be within 23 metres of a relevant main, whether of the licensee or of any other gas transporter, which was in existence before the designation of the area.’<sup>16</sup>
- 2.36 Standard condition 4C will then apply ‘...only if, the charges to be made of gas shippers by the licensee in pursuance of transportation arrangements include an element referable in whole or in part to the laying of pipes for the purpose of conveying gas to premises in a designated area and any such element is hereinafter referred to as a “supplemental charge”’<sup>17</sup>.
- 2.37 For each designated area, the GT must ‘...establish a methodology which has been accepted by [Ofgem]...setting out the provisions in accordance with which supplemental charges are to be determined...’<sup>18</sup> and ‘...ensure that each supplemental charge made conforms to the methodology as in force immediately before the charge fell due.’<sup>19</sup>.

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<sup>16</sup> SC4C(1)

<sup>17</sup> SC4C(3)

<sup>18</sup> SC4C(4)(a)

<sup>19</sup> SC4C(4)(b)

2.38 Standard condition 4C does not contain any explicit objectives for the methodology. However, it is possible for Ofgem to issue an acceptance subject to certain conditions set out by Ofgem.

2.39 As discussed in the Introduction, Ofgem has introduced Interim Arrangements for all applications for charging methodology acceptances under Condition 4C received after 7 December 2001.

### ***2d. Charging by the IGTs and Transco***

2.40 The licence conditions 4 to 4C allow an IGT to recover the costs of providing network extensions (i.e. laying mains), network connections (i.e. laying service pipes) and gas transportation (i.e. moving gas through pipes). The licence conditions can be combined in a number of ways to enable recovery of these costs, although all IGTs must have a condition 4 methodology. The structure of charges for each development depends upon the specific methodology or methodologies designed by the IGT.

2.41 The range of possible charging combinations includes:

- 1) using conditions 4 and 4B to recover all connection and gas transportation costs, allocating the recovery of connection costs between upfront connection (4B) charges and ongoing transportation (4) charges depending upon the extent to which connection charges are described to be deep or shallow (as discussed in part 2c above);
- 2) using conditions 4 and 4C to recover all initial connection and transportation costs through ongoing transportation charges (and condition 4B to recover subsequent connection costs); and
- 3) using condition 4 alone to recover all initial connection and transportation costs through ongoing transportation charges (and condition 4B to recover subsequent connection costs).

2.42 Each of these three options is discussed in the table below.

**Table 2.3: Characteristics of each charging option**

Option	Summary of option	Benefits to GT	Limits / Risks to GT
<p><b>Option 1</b> C4 &amp; C4B</p>	<ul style="list-style-type: none"> <li>• GT recovers up-front costs through up-front connection charges</li> <li>• GT recovers ongoing operating expenditure through ongoing transportation charges</li> </ul>	<ul style="list-style-type: none"> <li>• Low risk of capital expenditure under-recovery</li> <li>• General methodologies can be applied to new sites without specific acceptance</li> <li>• Upfront C4B charges not constrained to make only a reasonable profit and be cost-reflective</li> </ul>	<ul style="list-style-type: none"> <li>• Ongoing C4 charges constrained to make only a reasonable profit and be cost-reflective</li> <li>• 10 metre rule applies to all C4B connections</li> </ul>
<p><b>Option 2</b> C4 &amp; C4C</p>	<ul style="list-style-type: none"> <li>• GT recovers all costs through ongoing C4 and C4C transportation charges</li> <li>• GT not restricted to recovering connection costs only from person requiring connection</li> <li>• Once accepted, C4C charges can apply for full term of designation (typically 20 years)</li> <li>• Ten metre rule does not apply to initial connections</li> </ul>	<ul style="list-style-type: none"> <li>• Greater revenue stability since do not have to update C4C methodologies to meet further objectives</li> <li>• C4C charges not constrained to make only a reasonable profit and be cost-reflective</li> <li>• Can encourage new connections since costs can be recovered from other shippers</li> </ul>	<ul style="list-style-type: none"> <li>• Time limit over which up-front costs can be recovered</li> <li>• As there are no upfront connection charges, some risk of stranded assets, for example if the demand for gas is significantly below that expected in developing the network</li> <li>• C4 charges constrained to make only a reasonable profit and be cost-reflective</li> <li>• C4C charges need designation and acceptance on a case-by-case basis</li> </ul>
<p><b>Option 3</b> C4</p>	<ul style="list-style-type: none"> <li>• GT recovers all up-front and ongoing costs through ongoing C4 transportation charges</li> <li>• Ten metre rule does not apply to initial connections</li> </ul>	<ul style="list-style-type: none"> <li>• General methodologies can be applied to new sites without specific acceptance</li> <li>• No time limit over which can recover up-front costs</li> <li>• Can encourage new connections since costs can be recovered from other shippers</li> </ul>	<ul style="list-style-type: none"> <li>• As there are no upfront connection charges, some risk of stranded assets, for example if the demand for gas is significantly below that expected in developing the network</li> <li>• Total charge constrained to make only a reasonable profit and be cost-reflective</li> </ul>

- 2.43 One impact of the existing charging arrangements is that each IGT has considerable flexibility in designing its charging methodologies, both in terms of which charging conditions to use and in how to apply each condition. This flexibility derives both from the drafting of the licence conditions themselves and the absence of a formal definition separating of the activities and costs of connection and transportation.
- 2.44 This flexibility may have advantages in that it allows IGTs to develop charging arrangements that encourage more gas connections than might otherwise be possible. However, this flexibility has also resulted in a wide range of charging arrangements (both in terms of the structure and level of charges) faced by shippers, suppliers, and ultimately consumers.
- 2.45 Another impact of the current charging arrangements is that the requirements for transportation charges to be cost reflective and result in a reasonable profit are not applied consistently to all charging options. Therefore shippers and ultimately consumers may not benefit from cost-reflective and reasonable charges.
- 2.46 A copy of Transco's charging statement and methodology can be found on its web site at [www.transco.uk.com](http://www.transco.uk.com). Copies of the IGT charging methodologies are available from each IGT upon request.

### 3. Principles of Gas Transportation charging

3.1 This chapter focuses on the economic and commercial principles that should underpin GT charging. The first part below sets out Ofgem's statutory duties. The second part highlights specific objectives derived from standard licence condition 4. The third part summarises the overall objectives that Ofgem proposes to use as the basis for this review. The final part discusses each of these objectives in more detail.

#### *3a. Ofgem's Statutory Duties*

3.2 The Gas Act 1986, as amended by the Utilities Act 2000, sets out the statutory duties of Ofgem. In regulating the gas industry, Ofgem's principal objective is to:

- ◆ 'protect the interests of consumers in relation to gas conveyed through pipes, wherever appropriate by promoting effective competition between persons engaged in, or in commercial activities connected with, the shipping, transportation or supply of gas so conveyed.'<sup>20</sup>

3.3 The Gas Act states that Ofgem must also have regard to:

- ◆ 'the need to secure that, so far as it is economical to meet them, all reasonable demands in Great Britain for gas conveyed through pipes are met'<sup>21</sup>;
- ◆ 'the need to secure that licence holders are able to finance the activities which are the subject of obligations imposed by or under this Part or the Utilities Act 2000.'<sup>22</sup> and
- ◆ 'the interests of... individuals residing in rural areas'<sup>23</sup>.

3.4 The Gas Act states that Ofgem will carry out its functions under the Act 'in the manner which ... it considers is best calculated to promote efficiency and

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<sup>20</sup> Section 4AA (1)

<sup>21</sup> Section 4AA(2)(a)

<sup>22</sup> Section 4AA(2)(b)

<sup>23</sup> Section 4AA(3)(d)



economy on the part of persons authorised by licences or exemptions to carry on any activity and the efficient use of gas conveyed through pipes...'<sup>24</sup>.

3.5 In light of the above duties, Ofgem has set out its main tasks in relation to the regulation of the gas and electricity sectors in the latest version of the Ofgem Corporate Plan. These tasks are to:

- ◆ 'promote competition in all parts of the gas and electricity industries by creating the conditions which allow companies to compete fairly and which enable consumers to make an informed choice between suppliers'; and
- ◆ 'regulate areas of the gas and electricity industries where competition is not effective by setting price controls and standards to ensure consumers get value for money and a reliable service.'

### ***3b. Specific Gas Transportation Objectives***

3.6 The relevant methodology objectives outlined for transportation charging at present in License Condition 4A (and hence only currently applicable to Condition 4 charges) state that charges should:

- ◆ reflect the costs incurred by the GT in its transportation business;
- ◆ take into account developments in the transportation business;
- ◆ facilitate effective competition between gas shippers and between gas suppliers; and
- ◆ permit the licensee to make a reasonable profit, and no more, from its transportation business (subject to certain qualifications).

### ***3c. Overall Objectives for this Review***

3.7 Ofgem's principal statutory duty indicates that where it is appropriate the regulatory regime should promote effective competition, and where this is not practicable consumers' interests should be protected by regulation. Therefore, it

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<sup>24</sup> Section 4AA(5)(a)

is proposed to use the following overall objectives for the purpose of evaluating IGT charges:

- ◆ **Objective 1:** Promote effective competition where practicable, in the following markets:
  - a) between connection providers;
  - b) within gas transportation;
  - c) between Gas Shippers; and
  - d) between Gas Suppliers.
  
- ◆ **Objective 2:** Regulate where competitive pressures are not sufficient. This will involve:
  - a) promoting efficiency of IGTs;
  - b) sharing efficiency gains with consumers to make sure consumers get value for money;
  - c) allowing a reasonably efficient IGT to make a reasonable profit and to finance its activities;
  - d) promoting the efficient use of gas through cost-reflective charges; and
  - e) protecting the interests of consumers in rural areas.

### ***3d. Discussion of promoting effective competition***

3.8 The following three objectives relate to encouraging effective competition where practicable.

#### **Objective 1a: Promote effective competition between connection providers**

3.9 As discussed in Chapter 2, GTs are involved in connection and gas transportation services. Connection services have been open to competition since 1996, while gas transportation has remained a monopoly activity undertaken only by the licensed GT that owns the relevant network.

3.10 Hence, GTs are involved in both competitive and monopoly activities. A clear separation of competitive and monopoly activities usually encourages competition in those activities that are genuinely contestable. This separation prevents the cross-subsidisation of competitive activities from monopoly revenues, which can result in predatory pricing (the targeted reduction of prices by a monopolist for competitive services to prevent effective competition).

3.11 Ofgem considers that the principal requirements for efficiency and economy in the gas transportation sector to be:

- ◆ clear and transparent separation between the competitive and monopoly activities of GTs – discussed below;
- ◆ effective competition between the players in the competitive connections market – discussed under objective 2b; and
- ◆ regulation of any monopoly activities of GTs – discussed under objective 3.

3.12 Effective separation between the competitive and monopoly activities of GTs could involve the following separation requirements:

- ◆ a clear and consistently applied definition of the activities involved in the competitive and monopoly parts of the business;
- ◆ separate accounting of the costs (and relevant assets) and revenues of providing competitive and monopoly services; and
- ◆ a structure of charges that separates the cost recovery of connection and transportation services as far as practicable.

3.13 The principal benefit of these requirements is clear and consistent charges that would enable consumers to make informed choices between service providers and so facilitate competition.

3.14 The extent to which the current charging regime achieves the three separation requirements is considered in Chapter 4.

- 3.15 GT charging should facilitate competition in the gas connection market. Ofgem has also been developing a number of policies to promote effective competition in the provision of gas connections. The types of companies competing for new gas connections include Transco, the IGTs and Independent Connection Providers (also referred to Utility Infrastructure Providers).

**Objective 1b: Promote effective competition within gas transportation**

- 3.16 Gas transportation appears to be a monopoly activity since the fixed costs required to provide a new network or connection are so substantial that the emergence of widespread competing parallel transportation networks appears unlikely.
- 3.17 It will be important to consider whether it is practicable to promote competition within gas transportation. This is discussed further in Chapter 5.

**Objective 1c: Promote effective competition between Gas Shippers and between Gas Suppliers**

- 3.18 GT charging should facilitate competition in the gas shipping market and in the gas supply market. Therefore charging arrangements will need to be transparent. In addition it will be necessary to consider whether there should be more consistency in the structure and level of charges across IGTs.

***3e. Discussion of regulating where necessary***

- 3.19 The following five objectives relate to regulating where competitive pressures are not sufficient.

**Objective 2a: Incentivising efficiency of IGTs**

- 3.20 It is widely acknowledged that monopoly providers are not subject to the same incentives to operate efficiently as companies in competitive markets, where firms compete on price and quality to gain market share.
- 3.21 To protect consumers' interests there must be sufficient incentive on a GT to generate efficiency savings and to pass these on to consumers in the form of improved services and lower transportation prices. For natural monopolies there

is unlikely to be sufficient commercial incentive to deliver these benefits. This issue is often addressed by formal regulation of monopolies, including:

- ◆ rate of return regulation;
- ◆ formal price controls; and
- ◆ relative price regulation.

3.22 These matters are described in more detail in Chapter 5.

**Objective 2b: Sharing efficiency gains with consumers**

3.23 For consumers to receive value for money from monopoly providers, incentives for sharing efficiency gains through lower prices and improved services are required.

**Objective 2c: Allowing a reasonably efficient IGT to make a reasonable profit**

3.24 It is widely accepted that some control over the amount of profit a monopolist can make is desirable in order for consumers to obtain value for money. In setting formal price controls, developing rate of return regulation or relative price regulation, it is appropriate to allow a reasonably efficient business to finance its activities.

**Objective 2d: Promoting the efficient use of gas through cost-reflective charges**

3.25 In structuring charges a GT should only recover reasonably incurred and appropriate costs. The costs should be recovered from those consumers or classes of consumer in a manner that reflects the costs they impose upon the gas network and provides the correct economic signals to allow consumers to make informed choices.

3.26 Consumers should take the actual cost of their choices into account when making decisions about whether to connect to the gas network and how and when to consume gas. The decision to locate a supply point in a particular location should take into account the cost of transporting gas to that location,

including the need to build, operate and maintain a more extensive pipeline network.

3.27 The following requirements would facilitate the efficient use of gas:

- ◆ charges should reflect efficiently incurred and appropriate costs (excluding payments to parties that do not reflect actual costs of goods and services rendered);
- ◆ charges should reflect fixed (including costs of connection) and variable (including use of system) costs on a consistent basis in the structure of charging as far as possible; and
- ◆ charges should reflect key cost characteristics or cost drivers as far as practicable (including the distance that gas is transported and peak demand charges to reflect any reinforcement of the system to increase peak capacity.)

**Objective 2e: Protecting the interests of rural consumers**

3.28 Ofgem has a duty to consider the interests of consumers in rural areas. The extension of the gas network to non-gas areas (termed infill schemes) might benefit some of these consumers. These benefits need to be balanced against costs for efficient service delivery.

**3.29 Views are invited on any of the matters raised in this Chapter and in particular on whether these objectives provide a sound basis for the review of the IGT charging regime.**

## 4. Issues arising from IGT Charging Policies

- 4.1 This chapter sets out initial views on how effectively the current regime of IGT charging is achieving each of the objectives discussed in Chapter 3 and identifies issues with the current situation.

### ***4a. Assessment of promoting effective competition***

- 4.2 The following three objectives relate to encouraging effective competition where practicable.

#### **Objective 1a: Promote effective competition between connection providers**

*Issue 1: It is not clear that effective competition exists between IGTs in securing new contracts.*

- 4.3 The IGTs compete to provide new network extensions and the associated connections and then function as natural monopoly providers of gas transportation services within their respective areas of operation.
- 4.4 Most of the gas connections made each year are for new domestic properties that are connected prior to occupancy. In most of these cases, the housing developer negotiates with connection providers to secure the most favourable terms and conditions for connection to a number of properties. Housing developers have an incentive to minimise the up-front costs that they must incur, but do not have any incentive to minimise the total costs incurred by the future homeowners. Therefore, opportunities exist for developers to agree to arrangements with connection providers that are sub-optimal for the future homeowner and gas consumer.
- 4.5 It is not clear that effective competition currently exists between GTs. Although commercial rivalry exists between GTs, in some cases this leads to inappropriate payments offered to developers to secure contracts. GTs may then try to recover these costs through increased transportation charges to shippers, and ultimately consumers.
- 4.6 These arrangements do not appear to allow gas consumers to benefit directly from the competition between connection providers.

*Issue 2: Connection and gas transportation services are lacking clear and consistently applied definitions of: (i) the activities involved in each service, (ii) the costs (and relevant assets) of providing each service, and (iii) the structure of charges that separates the cost recovery of each service.*

- 4.7 Ideally, the **activities** of connections and gas transportation should be clearly and consistently defined. However, formal separation of activities involved in the competitive and monopoly elements is not necessarily a precondition of separate costs and charges. Where common activities are shared between the elements, a method of allocating and apportioning the costs of the common activities (referred to as 'joint costs') is required.
- 4.8 Transco has separated its connection business from its regulated activities. The connections business will now compete to provide connection services to both Transco and other businesses.
- 4.9 As discussed in Chapter 3, a clear and consistent accounting of the **costs** (and relevant assets) of providing connection and gas transportation services is required to promote competition and prevent predatory pricing.
- 4.10 At present the standard licence conditions provide little guidance as to the types of costs that should, or should not, be recovered from any particular condition. Standard condition 4 refers to 'charges to be made in pursuance of transportation arrangements with...shippers'<sup>25</sup>. The definition of transportation arrangements in the GT licence is reproduced in Appendix Four. Broadly, transportation arrangements are arrangements between GTs and shippers for gas to be introduced into, conveyed across and taken out of the licensee's pipeline system.
- 4.11 Standard condition 4B paragraph 3(a) refers to 'charges in respect of the cost of connecting, supplying and laying a pipe or the expenses of the laying of a main'. Paragraph one of standard condition 4B also refers to section 10(2)(a) of the Gas Act (the duties of GTs in relation to the 23-metre rule). This section of the Gas Act defines 'connection' as 'connect to a relevant main of a public gas

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<sup>25</sup> Section 4(1)(a)



transporter<sup>26</sup>. However, the Act's definition of the terms for relevant main, distribution mains and service pipes are somewhat tautological (see Appendix Three).

- 4.12 Finally, a clear and consistent structure of **charges** that separates the cost recovery of connection and gas transportation services as far as practicable is required.
- 4.13 At present there is no clearly defined boundary that separates transportation charges from charges for the other services a GT may provide, including connections. This allows IGTs to recover their costs in different ways, as discussed in Chapter 2, part 2d. A clearly defined boundary for transportation charges would separate those costs to be recovered through monopoly charges and those costs to be recovered through competitive activities.
- 4.14 Ofgem's paper on electricity companies' distribution charging<sup>27</sup> noted that a 'clearly defined boundary between connection and use of system charges will encourage competition in the provision of connections and reduce the number of connection charge disputes that occur.' This issue is relevant to the gas connections market and to the charging methodologies of the IGTs in particular. A boundary would make charging more transparent to both shippers and consumers and enable clearer price comparisons to be made.
- 4.15 The use of different charging structures across IGTs in part arises as IGTs are facing different forms of regulation for comparable networks. For example, an identical type of site on a new housing development could have its charges regulated either through standard condition 4 and 4A or through standard condition 4C, with no clear rationale for this difference in treatment.
- 4.16 The situation can be exacerbated by a lack of transparency in IGT charging methodologies for transportation and connection services. It can be difficult to estimate the likely charges for transportation services and connections. The form of many IGT charging statements makes it difficult for consumers to sensibly compare prices across IGTs for connection or on-going charges. This problem may particularly affect industrial and commercial gas consumers.

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<sup>26</sup> Section 10(2)(b)

<sup>27</sup> The structure of electricity distribution charges, Initial Consultation Document, Ofgem December 2000

*Issue 3: The cross-subsidisation of competitive connection activities with monopoly transportation revenues may be distorting competition in the connections market.*

- 4.17 Since 1996 Ofgem has been developing a framework for the competitive provision of connections. Ofgem monitors the development of competition in this market to inform appropriate policy development. IGTs provide a significant number of connections, principally network extensions undertaken as part of a new property development. Therefore, IGTs compete directly with other connection providers.
- 4.18 Ofgem estimates that IGTs are gaining around 60 per cent of connections to new premises. Over the next three years the number of consumers connected to IGT systems may reach 500,000.
- 4.19 An IGT can establish a charging methodology that reduces the initial charge for providing a connection by recovering any remaining connection costs through transportation charges, as discussed in Chapter 3. Such a transportation methodology can most successfully be applied where future transportation revenue is likely to be stable and secure, which is typically the case for new housing developments. These charging methodologies allow IGTs to cross-subsidise their competitive connection business with monopoly transportation revenues received from all their gas users.

*Issue 4: The payment of allowances by IGTs to gain network development and connection contracts is distorting competition in the connections market.*

- 4.20 The current structure of charges allows some IGTs to make payments to the person requiring the connection. The amount of money paid in an allowance depends upon the extent to which up-front connection costs are cross-subsidised by future transportation revenues. In some cases the allowance may exceed the connection costs, allowing a GT to subsidise connection costs and recover these payments through transportation charges. An allowance may be payable directly to those requiring a connection, principally property developers, or for adoption of a gas pipeline network installed by an independent contractor.

4.21 In May 2001, Ofgem published a report titled Review of Competition in Gas and Electricity Connections which reported on the findings from a review of gas and electricity connections. The report noted that charging structures and excessive payments to developers 'can distort the development of competition through reducing the initial connection charge against which independent contractors have to compete to win contracts.' Independent contractors install individual connections and networks but do not operate gas networks or transport gas for shippers. Ofgem continues to consider charging methodologies that involve excessive payments to developers (above the level necessary to reimburse any reasonably incurred costs) distort competition in the connections market to the detriment of consumers.

*Issue 5: The statutory connections (the 23m and 10m rules) distort competition in the connections market.*

4.22 In the May 2001 report on competition in gas connections, Ofgem also concluded that 'the combined effect of the 23m and 10m rules, termed statutory connections, is to distort competition in the provision of connections made at the request of a customer'. This distortion derives from the requirement to cross-subsidise connections within 23 m of an existing gas main.

4.23 Transco has proposed a standard allowance scheme that would allow all eligible parties to apply for an allowance towards the cost of connection. This could potentially provide financial support for those requiring a gas connection without imparting an unfair advantage to GTs in securing connections.

**Objective 1b: Promote effective competition within gas transportation**

*Issue 6: Effective competition does not exist within gas transportation and may not lead to an efficient outcome.*

4.24 As noted in Chapter 3, it appears unlikely that effective competition exists within gas transportation at present.

4.25 However, there are a number of scenarios consistent with existing arrangements under which competition in gas transportation may occur. One scenario would involve a consumer (most likely a large industrial consumer) with an existing connection who wished to significantly increase its gas consumption. If the

existing GT was unable to undertake the reinforcement required to support this increased demand, the consumer might be able to approach another GT to obtain a second connection. The consumer could then decide when and how much gas to have transported on each of the two networks. Hence, the two GTs would be in direct competition for gas transported to this consumer.

4.26 A second scenario would involve a consumer with an existing connection in an area where another GT is undertaking a network extension. The consumer may be offered a second connection at a low price, due to the low incremental cost of connecting them as the second GT installs the new network in close proximity. If the second GT were to offer the consumer more competitive transportation charges than the existing GT, it is possible that the consumer might elect to have some or all of their gas transported on the second network. Hence, the two GTs would be in direct competition for gas transported to this consumer.

4.27 However, these scenarios are not common and in general gas transportation is a natural monopoly activity, as the vast majority of consumers have a single gas connection and cannot justify a second connection. It is unlikely that the small number of consumers with multiple connections will be able to influence the gas transportation market.

### **Objective 1c: Promote effective competition between Gas Shippers and between Gas Suppliers**

*Issue 7: The lack of transparency and consistency in IGT charging methodologies and statements may be distorting shipper and supply competition.*

4.28 A gas shipper purchases gas from a gas producer and makes arrangements for a GT to deliver the gas to a supplier. A gas supplier is the last link in the gas supply chain. It buys gas from shippers, and supplies it to consumers through the pipes of the relevant GT and sends the consumer a bill. The total costs of supply include the costs for transporting gas to the consumer. In general, the shipper and supply markets are vigorous and competitive.

- 4.29 IGT charging policies can affect the choice and prices available to consumers. It is important that consumers on IGT networks are allowed to participate in the competitive gas supply market to the same extent as those on Transco's network
- 4.30 Some gas suppliers and consumers have expressed concerns with the transparency and level of IGT transportation charges. Some consumers have identified the lack of transparency in charging statements as directly affecting their ability to secure a supply contract.
- 4.31 Shippers and suppliers must deal with a wide range of charging methodologies across IGTs. In some cases these methodologies are not easily understandable and future transportation charges may not be clearly identified, especially where IGTs charge on a site-by-site basis. A lack of transparency in IGT methodologies and charges results in uncertainty for suppliers and consumers over the level and future direction of transportation charges.
- 4.32 In addition, suppliers have indicated that the often complex charging structures on IGT networks raise their costs. At least one supplier has chosen to increase its charges to consumers on IGT networks above its charges for those on Transco's network.
- 4.33 There are a number of other issues that influence the development of supply competition on an IGT network. For instance, Standard Condition 9 of the Gas Transporters Licence requires each GT to produce a Network Code that establishes the transportation arrangements for its network. The Code is written to facilitate the achievement of the following objectives, set out in Standard Condition 9(1):
- (a) 'the efficient and economic operation by the licensee of its pipeline system;
  - (b) so far as is consistent with paragraph (a), the efficient discharge of its obligations under the licence;
  - (c) so far as is consistent with sub-paragraphs (a) and (b), the securing of effective competition between relevant shippers and between relevant suppliers; and

(d) so far as is so consistent, the provision of reasonable economic incentives for relevant suppliers to secure that the domestic customer supply security standards...are satisfied as respects the availability of gas to their domestic customers.'

- 4.34 All shippers are required to sign Transco's Network Code. For shippers to provide gas to a consumer located on an IGT network, they must also sign and adhere to the IGT's Network Code. The signatories to each IGT Network Code are provided in Appendix Two.
- 4.35 Each code may differ in detail. In future it is important that certain sections of the codes are harmonised to facilitate competition in supply.
- 4.36 In addition Ofgem is supportive of the work undertaken to date by the industry in the Gas Industry Governance Group (GIGG) that is seeking to reform the governance arrangements of the Gas retail sector and introduce a Supplier agreement. A long- term aim of this work is to move the Supply Point Administration (SPA) activity that currently sits within the network codes to this new agreement. Ofgem will be involved in these discussions.
- 4.37 Table 4.1 gives the market share by volume of gas transported for the principal shippers on different IGT networks.

**Table 4.1 Majority Shippers on IGT Networks at March 2002**

GT	Majority Shipper	Market Share	Affiliate to GT?
BGCL	British Gas Trading	83%	Yes
EMP	Powergen Retail Gas Ltd	65%	Yes
ESP	Npower Gas	88%	No
GTC	Scottish Power	66%	No <sup>1</sup>
GTC Pipelines	Eastern Power & Energy Trading	88%	No
IPL	London Electricity	56%	No <sup>2</sup>
SPG	Scottish Power	92%	Yes
SSEP	Southern Electric Gas Ltd	87%	Yes
UUGP	London Electricity	49%	No
UUGN	ScottishPower	44%	No
UGI	Eastern Power & Energy Trading	85 %	No
MEL	Data not available	N/A	N/A

<sup>1</sup>GTC's parent company IEG also owns The Gas Supply Company, which has an agency agreement with ScottishPower to promote gas and electricity supply

<sup>2</sup>Elf at Home used to be an affiliate of IPL (when IPL was part of TotalFinaElf) and Elf at Home's customers were acquired by London Electricity

- 4.38 It is not clear at this time whether the problems described above, and the market shares, are indicative of constraints in choice of supplier on these networks.

***4b. Assessment of regulating where necessary***

- 4.39 The following five objectives relate to regulating where competitive pressures are not sufficient.

**Objective 2a: Incentivising efficiency of IGTs**

*Issue 8: There are insufficient incentives on IGTs to invest and operate efficiently.*

- 4.40 In the monopoly parts of the energy sector (electricity transmission and distribution, and gas transportation and distribution), regulation has been introduced to act as a substitute for competition and to provide incentives for these businesses to improve efficiency.
- 4.41 Transco is subjected to RPI-X regulation, where an annual efficiency target (X) is factored into the transportation charges that Transco is allowed to levy on consumers. This form of regulation provides incentives to achieve improvements in efficiency and passes some of these savings on to consumers.
- 4.42 For the proportion of IGTs' costs that are capitalised and then recovered through fixed transportation charges, it is important that these up-front costs are incurred efficiently. For ongoing operational expenditures, it is equally important that these costs are incurred efficiently and improvements that reflect developments in technology and business practise are adopted (especially for charges covering 20 to 25 years).
- 4.43 However, unlike Transco, the IGTs are not currently subject to any formal incentives to operate efficiently. Although cost reductions below budgeted levels may result in higher profits in some cases, cost over-runs do not necessarily result in decreased profits. Several IGTs' charging methodologies specifically allow for complete pass-through of over-runs in costs above expected levels. In these cases, there are little or no incentives for the IGTs to either commit to efficient levels of costs in advance, or to adhere to cost

estimates once made. These methodologies protect the IGTs from any risks arising from cost over-runs.

- 4.44 Some of the IGTs' transportation charges are higher than Transco's charges to equivalent sites. At least one supplier has chosen to increase its charges to consumers on IGT networks above its charges for those on Transco's network. Ofgem understands that other suppliers are also considering differentiated charging for consumers on IGT networks.
- 4.45 In addition, the current arrangements for network extension by Transco and the IGTs may not provide sufficient incentives for all parties to achieve efficient overall network development. The responsibility for ensuring that development of the GB gas network is undertaken in the most efficient manner possible is currently shared among all GTs.

#### **Objective 2b: Sharing efficiency gains with consumers**

*Issue 9: There are insufficient incentives on IGTs to share efficiency gains with consumers, which may be reducing the value for money provided to consumers.*

- 4.46 As discussed above, Transco is incentivised through its price control to achieve improvements in efficiency and to pass some of these savings on to consumers. Unlike Transco, the IGTs are not currently subject to any formal incentives to share efficiency gains with consumers.
- 4.47 The evidence that we have received to date indicates that IGTs are earning returns in the range of 8 to 19 per cent. It appears that the returns that IGTs are earning are higher than might be expected and quite varied between IGTs. There is no evidence to suggest that the IGTs are sharing efficiency gains with consumers.

#### **Objective 2c: Allowing a reasonably efficient IGT to make a reasonable profit**

*Issue 10: There are insufficient controls on the ability of IGTs to exploit their monopoly position to earn excessive profits on 4B and 4C charges.*



4.48 Gas transportation charges made under Licence Condition 4 methodologies are limited in that they must result in the GT earning only a reasonable profit. Condition 4A stipulates that generally Condition 4 charges must 'result in charges which, taking one charge with another and one year with another, permit the licensee to make a reasonable profit, and no more, from its transportation business...'.

4.49 However, gas transportation charges made under Condition 4B and 4C are not covered by this requirement. Ofgem has become increasingly concerned about the levels of return earned through charging via standard condition 4C.

*Issue 11: There is no formal definition and verification of reasonable profit for Condition 4 charges to prevent IGTs from exploiting their monopoly position to earn excessive profits.*

4.50 For GT charges covered under Condition 4 alone, there is no formal definition and verification as to what constitutes 'reasonable profit'. This issue has been raised in Ofgem's recent paper on IGT charges and the Cost of Capital.

4.51 The levels of return earned by many IGTs are not clearly justified by the risks incurred in transporting gas to, predominantly, domestic consumers. These rates of return will directly affect the level of transportation charges. At least one supplier has chosen to increase its charges to consumers on IGT networks above its charges for those on Transco's network.

#### **Objective 2d: Promoting the efficient use of gas through cost-reflective charging**

*Issue 12: Cross-subsidisation of new gas connections with transportation revenues may not encourage efficient connection to the gas network and efficient use of gas.*

4.52 An IGT can establish a charging methodology that reduces the initial charge for providing a connection by recovering a portion of connection costs through transportation charges, as discussed in Chapter 3.

4.53 These charging methodologies allow IGTs to cross-subsidise their competitive connection business with monopoly transportation revenues. This cross-

subsidisation may lead to charges that do not reflect the actual costs of connection and transportation. If charges do not reflect actual costs, then this may distort the decisions of consumers and suppliers.

### **Objective 2e: Protecting the interests of rural consumers**

*Issue 13: Existing licence conditions may not be encouraging development of the rural gas network as intended.*

- 4.54 Condition 4C, which specifically allows recovery of costs for laying pipes to designated areas, was intended to enable development of the gas network to rural areas. However, Ofgem's consultation paper suggesting amendment of the connection charges regulations<sup>28</sup> noted that most of the GTs that use C4C methodology 'have only applied it in relation to new housing developments.' It went on to note that within 'such new developments there is an immediate uptake of connections to the main for all the premises on the development since they will have been equipped to burn gas.' Given that transportation charges are levied on the relevant shippers immediately, this suggests IGTs may be exposed to lower risk in the recovery of connection costs in designated areas than was expected.
- 4.55 The consultation paper went on to note that GTs were actually reluctant to use condition 4C for infill projects. One reason suggested was that 'as these charges are recovered from shippers, it would not be possible to recover contributions from premises where pipes are installed but the consumer does not consume gas. In an infill area, consumers may take the opportunity to connect their premises at the time of the infill project but delay consuming gas. This is often because the consumers' existing heating or cooking appliances cannot burn natural gas.'
- 4.56 Ofgem estimates that the number of connections and system extensions to rural areas has fallen from approximately 1500 connections in 1998 to 500 connections in 2000. However, it is not clear whether this reduction reflects rural consumers that could be efficiently connected but are not being served, or whether many of the remaining rural consumers cannot contribute sufficient funds to justify a connection to the gas network.

## Summary of Issues

- 4.57 Views are invited on any of the matters raised in this Chapter and in particular on the following main issues identified in the review of the existing charging arrangements.
- ◆ **Issue 1:** It is not clear that effective competition exists between IGTs in securing new contracts;
  - ◆ **Issue 2:** Connection and gas transportation services are lacking clear and consistently applied definitions of: (i) the activities involved in each service, (ii) the costs (and relevant assets) of providing each service, and (iii) the structure of charges that separates the cost recovery of each service;
  - ◆ **Issue 3:** The cross-subsidisation of competitive connection activities with monopoly transportation revenues may be distorting competition in the connections market;
  - ◆ **Issue 4:** The payment of allowances by IGTs to gain network development and connection contracts is distorting competition in the connections market;
  - ◆ **Issue 5:** The statutory connections (the 23m and 10m rules) distort competition in the connections market;
  - ◆ **Issue 6:** Effective competition does not exist within gas transportation and may not lead to an efficient outcome;
  - ◆ **Issue 7:** The lack of transparency and consistency in IGT charging methodologies and statements may be distorting shipper and supply competition;
  - ◆ **Issue 8:** There are insufficient incentives on IGTs to invest and operate efficiently;

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<sup>28</sup> Amending the Gas Connection Charges Regulations, A Consultation Document, Ofgem August 2001

- ◆ **Issue 9:** There are insufficient incentives on IGTs to share efficiency gains with consumers, which may be reducing the value for money provided to consumers;
- ◆ **Issue 10:** There are insufficient controls on the ability of IGTs to exploit their monopoly position to earn excessive profits on 4B and 4C charges;
- ◆ **Issue 11:** There is no formal definition and verification of reasonable profit for Condition 4 charges to prevent IGTs from exploiting their monopoly position to earn excessive profits;
- ◆ **Issue 12:** Cross-subsidisation of new gas connections with transportation revenues may not encourage efficient connection to the gas network and efficient use of gas; and
- ◆ **Issue 13:** Existing licence conditions may not be encouraging development of the rural gas network as intended.

## 5. The Way Forward

- 5.1 This chapter describes a number of options for regulating IGTs in the future. It builds upon the key principles set out in Chapter 3 and the issues identified in Chapter 4. The following broad options are proposed for consideration:
- A. increase the competitive pressure on IGTs;
  - B. introduce rate of return regulation for IGTs' gas transportation charges;
  - C. introduce formal price regulation for IGTs' gas transportation charges;
  - D. introduce relative price regulation for IGTs' gas transportation charges; and
  - E. develop a revised approach to enforcing the existing licence conditions.
- 5.2 If respondents to this paper suggest other options then these will also be considered in formulating draft proposals. Refinements to some of the options could be considered, for example revising or removing some of the elements currently included under each option. In addition, a combination of specific elements included under several options could be grouped together to form draft proposals.
- 5.3 Each of the five options is discussed below, with an initial assessment of each option evaluated against the overall objectives set out in Chapter 3.

### ***Option A: Increase competitive pressure on IGTs***

- 5.4 This option could be implemented through the consistent separation of connection and transportation charges and through increasing the competitive pressure in both the connections and gas transportation markets.
- 5.5 This approach could include some or all of the following elements:
- ◆ introduce a formal and consistent boundary between connection and transportation costs and charges through revision to the licence conditions used for charging;

- ◆ extend and define the relevant methodology objectives (currently applicable only to Condition 4 charges) to all methods of IGT charging;
  - ◆ remove or revise the 10 metre and 23 metre rules;
  - ◆ increase competitive pressure in the connections market through either removing condition 4C or modifying condition 4C so that it only applies in clearly defined circumstances, such as for rural infill sites (as discussed below); and
  - ◆ increase competitive pressure in the gas transportation market (as discussed below).
- 5.6 The introduction of a formal and consistent boundary between connection and transportation charges would improve the clarity of IGT charging and encourage competition in gas connections. It might be appropriate to use the boundary between assets used by Transco as this would provide an easily understood basis for separation and would also facilitate effective competition with Transco.
- 5.7 Modification of standard condition 4C could be achieved by the rewording of paragraph one of standard condition 4C. The current method of designating sites could be replaced with one that more accurately described the nature of infill sites (e.g. geographically distant, existing premises in rural areas). This might reduce the existing distortion created in the connections and transportation markets by the operation of standard condition 4C.
- 5.8 If standard condition 4C is to be retained, there could be further modifications made to the condition. These could remove the acceptance requirement, and introduce the requirement to develop a methodology in line with a set of relevant objectives. The standard condition could also outline exactly which costs could be recovered through use of the condition, so assisting in the creation of a clear boundary between connections and transportation charges.
- 5.9 It is arguable that competitive pressure in the gas transportation market could be increased. One approach might be to introduce competition in ownership and operation of all network extensions within a fixed area by the use of franchises. These areas could possibly be based on Transco's Local Distribution Zones.

These franchises could be competitively tendered for a fixed period, say every five to ten years.

- 5.10 Companies could compete to win each franchise based on published forward-looking charges they would offer for the duration of the franchise. These charges would need to cover network extensions and subsequent network operation. Ofgem could award the franchise for an area to the IGT offering the lowest basket of charges.
- 5.11 The separation of asset ownership and asset operation is already evident in certain IGT networks and Transco already performs some of the asset operation functions (ie emergency response) for IGTs. It is also evident in the separation of the System Operator (SO) and Transmission Asset Owner (TO) functions for Transco and NGC, and in the separation of asset ownership and operation evident in a number of electricity distribution companies. This separation might allow asset owners to seek competitive bids for network operation services. However, it is unlikely that separation of asset ownership from operation in itself would be sufficient to protect the interests of consumers.
- 5.12 Competitive franchising would represent significant change for the industry and it is not clear that the scale of the changes required would be justified given the problems so far identified with IGTs. It would appear to be less disruptive to rely on some form of price or rate of return regulation to deal with Gas Transportation. The outcomes for consumers would also be more predictable.
- 5.13 Finally, some of the advantages of this approach in terms of efficiency gains could remain available under other mechanisms. For example, companies would have the option of separating out asset ownership from operation and contracting out activities under price control regulation.
- 5.14 The strengths of Option A include:
- ◆ it might allow the most efficient provider of transportation services to win the franchise through competitive tendering and hence pass some of these efficiency savings through to consumers; and
  - ◆ it would allow competitive pressures to achieve many of the objectives of this consultation without having to resort to formal price regulation.

5.15 The weaknesses of this approach include:

- ◆ the introduction of competitive franchises for IGT network extension and/or operation might require significant legislative changes;
- ◆ the lack of consistency with the existing arrangements for ownership and operation of other gas and electricity networks, including Transco and the electricity Distribution Network Operators (DNOs);
- ◆ there has been only limited experience with competitive franchising to date (including the franchising of Train Operators on the GB rail network); and
- ◆ it would be difficult to predict how these new arrangements would affect prices and how effectively they would protect the interests of consumers.

***Option B: Rate of return regulation for IGTs' gas transportation charges***

5.16 Rate of return regulation is the most commonly used form of utility regulation in the United States and has been in use for decades. The regulator establishes an appropriate rate of return for the regulated utility based in part on the cost of capital to the utility. This rate of return is then applied to the asset base of the utility to provide a guaranteed return.

5.17 This option could be implemented through the consistent separation of connection and transportation charges and through the extension of the reasonable profits constraint currently applied only to Condition 4 charges to all IGT gas transportation charges. The introduction of formal specification and verification of the allowed costs and rate of return could further support this option.

5.18 The strengths of rate of return regulation include:

- ◆ rate of return regulation creates a low risk environment for the regulated company and prevents it from earning excessive profits.

5.19 Weaknesses of rate of return regulation include:



- ◆ there is little incentive for the company to minimise costs. Any reduction of costs would produce a downward adjustment in prices charged in order to earn the same rate of return. In fact, there may be an incentive to increase capital costs – over-engineering or goldplating of assets – which could increase prices;
- ◆ obtaining detailed industry data requires an expensive effort including very significant regulatory involvement; and
- ◆ consumers are primarily concerned with prices and quality of service. Rate of return regulation does not directly address these concerns.

***Option C: Formal price regulation for IGTs' gas transportation charges***

- 5.20 The most common form of price regulation for utilities in the UK is called RPI-X (Retail Price Index minus X) regulation. In using RPI-X, revenue or prices are allowed to rise by the rate of inflation (RPI) minus an efficiency factor (X). The setting of X takes into account the reasonable rate of return and the potential for efficiency savings.
- 5.21 RPI-X regulation is also often called performance-based regulation in that it seeks to achieve economic efficiency through altering the incentive structure of the industry. Revenue is capped at a particular level encouraging companies to become more efficient.
- 5.22 Transco (and most of the monopoly network operators in the UK) are explicitly price controlled, with a limit on the revenue that may be recovered through use of system charges. Transco's price control also establishes a boundary between costs recovered through transportation charges and connection charges. This results in transportation charges that recover operating costs, and network capital costs arising from statutory allowances and reinforcement (which are not recovered directly from consumers). The remaining network costs are recovered directly from the party requesting the connection through an up-front connection charge.
- 5.23 This option could be implemented for IGTs through the consistent separation of connection and transportation charges and through formal price regulation of gas

transportation charges. This would have the added advantage of encouraging competition in the provision of connections.

5.24 A mechanism to support formal price regulation could be to implement comparative benchmarking between the IGTs. This approach has been used successfully for the regulation of electricity DNOs and the water companies. This process usually involves the definition of controllable costs that are within the control of the companies and can be affected by improvements in efficiency. These costs are then related to an agreed measure of output through some benchmarking exercise, sometimes involving statistical techniques. This results in a ranking of the companies in terms of efficiency and the setting of targets for improved performance.

5.25 The strengths of formal price regulation include:

- ◆ it avoids some of the problems associated with rate of return regulation. RPI-X promotes efficiency by providing an incentive for the company to increase profits by reducing its cost base;
- ◆ the sharing of efficiency gains with consumers through the operation of the forward looking efficiency X factor. In each year of the price control, the company is required to reduce prices by X. Furthermore, past efficiency gains made by the company are passed on to consumers in the next price review by imposing a tighter price control; and
- ◆ when combined with quality of service regulation, it directly addresses the issues that concern consumers.

5.26 The weaknesses of formal price regulation include:

- ◆ Given the number of IGTs, the dispersed nature of their operations and the relatively small number of consumers connected to IGT networks, then obtaining and interpreting detailed industry data requires an expensive effort including significant regulatory involvement.

### ***Option D: Relative price regulation for IGTs' gas transportation charges***

- 5.27 Relative price regulation involves the setting of prices charged by a regulated utility by linkage to an external reference point. An example of relative price regulation is the Interim Arrangements that have been put in place for IGTs charging under Condition 4 and 4C. These arrangements require that the total charge for these IGT sites be no more than the Transco equivalent "all the way" charge to a supply point.
- 5.28 This option could be implemented through the consistent separation of connection and transportation charges and through relative price regulation of IGTs' gas transportation charges.
- 5.29 One option for introducing relative price regulation for IGTs would be to develop and extend to all sites the existing Interim Arrangements for accepting standard condition 4C charges. This could involve requiring the IGTs to adopt Transco's boundary between connection and use of system costs and charges, and then applying a relative price cap referenced to Transco's charges for equivalent sites. This price cap could be set at a level equal to or below (perhaps 5 or 10 per cent) Transco's charges, and could be linked to the RPI or could track Transco's charges over time. This method could later be refined to reflect regional variation in costs in line with the possible separation of Transco's LDZ price control.
- 5.30 One potential problem that exists with this approach is that IGTs may be given strong incentives to target certain sites while ignoring others. This might arise due to incentives for the regulated companies to target sites where the relative price cap is above their costs of connection and to avoid sites where the relative price cap is close to or exceeds their cost of connection.
- 5.31 The strengths of this approach include:
- ◆ it provides incentives for efficiency;
  - ◆ depending on how the reference point is set, it may provide lower prices for consumers; and
  - ◆ it provides a clear and unambiguous pricing regime.

5.32 The weaknesses of relative price regulation include:

- ◆ the external reference point may not reflect the cost or operations of the regulated companies; and
- ◆ it can be perceived as arbitrary or unfair by the regulated companies if the costs or efficiency associated with the reference point are difficult for the companies to match.

***Option E: A revised approach to enforcing existing licence conditions***

5.33 A revised approach to enforcing the current licence conditions might be used to address some or all of the issues identified in Chapter 4. This approach could encompass some or all of the following elements:

- ◆ set out the implications of the relevant methodology objectives included in Condition 4A (for instance defining reasonable profit);
- ◆ conduct a detailed review of all IGT charging methodologies, possibly through working groups convened for each IGT and including shippers, suppliers and Ofgem;
- ◆ agree an approach to simplify and standardise the charging methodologies to be adopted by the IGTs;
- ◆ in the light of the above consider whether it would be appropriate to modify the Interim Arrangements for the acceptance of standard condition 4C charges; and
- ◆ introduce standard regulatory accounts for all IGTs.

5.34 The strengths of this approach include:

- ◆ speed and relative ease with which this approach could be introduced; and
- ◆ the limited impact of these changes upon all players in the gas industry.

5.35 The weaknesses of this approach include:

- ◆ it may be difficult to harmonise the different charging methodologies between IGTs; and
- ◆ the drafting of existing licence conditions may not be sufficiently robust to achieve the objectives proposed for this review. For example, it is not clear that the existing licence conditions are compatible with a uniform boundary between connection and transportation and the development of effective competition in connections.

### ***Initial Assessment of Options***

5.36 The table below summarises the initial assessment of strengths and weaknesses of each option.

**Table 5.1 Initial assessment of strengths and weaknesses of each option**

Option	Strengths	Weaknesses
<p><b>Option A:</b> Increase competitive pressure on IGTs</p>	<ul style="list-style-type: none"> <li>• Might allow most efficient provider of transportation services to win franchise</li> <li>• Formal price regulation not needed to meet the objectives of this review</li> </ul>	<ul style="list-style-type: none"> <li>• Introduction of franchises might require major legislative changes</li> <li>• Lack of consistency with existing ownership and operation arrangements</li> <li>• Limited experience with competitive franchising</li> <li>• Difficult to predict effect on prices and interests of consumers</li> </ul>
<p><b>Option B:</b> Rate of return regulation</p>	<ul style="list-style-type: none"> <li>• Creates a low risk environment and prevents excessive profits</li> </ul>	<ul style="list-style-type: none"> <li>• Little incentive to minimise costs with scope for “goldplating” of assets</li> <li>• Expensive effort in obtaining and interpreting detailed industry data</li> <li>• Does not directly address the key issues concerning consumers</li> </ul>
<p><b>Option C:</b> Formal price regulation</p>	<ul style="list-style-type: none"> <li>• Incentive to reduce costs and thus avoid ‘goldplating’ of assets</li> <li>• Sharing of efficiency gains with consumers</li> <li>• When combined with quality of supply regulation, directly addresses issues that concern consumers</li> </ul>	<ul style="list-style-type: none"> <li>• Expensive effort in obtaining and interpreting detailed industry data, given the number and nature of IGT operations</li> </ul>
<p><b>Option D:</b> Relative price regulation</p>	<ul style="list-style-type: none"> <li>• Provides incentive for efficiency</li> <li>• May provide lower prices for consumers</li> <li>• Provides a clear and unambiguous pricing regime</li> </ul>	<ul style="list-style-type: none"> <li>• External reference point may not reflect costs or operations of regulated company</li> <li>• Can be perceived as arbitrary if costs or efficiency of the reference point are difficult to match</li> </ul>
<p><b>Option E:</b> Revised approach to enforcing existing licence conditions</p>	<ul style="list-style-type: none"> <li>• Speed and relative ease of introducing this approach</li> <li>• Limited impact of these changes upon players in the gas industry</li> </ul>	<ul style="list-style-type: none"> <li>• May be difficult to harmonise different IGT charging methodologies</li> <li>• Existing licence conditions may not be sufficiently robust to meet the objectives of this review</li> </ul>

5.37 The table below provides the initial evaluation of each option against the overall objectives identified in Chapter 3 (where H= High, M= Medium and L= Low). At this stage it is not clear how all the options might work in practice. For instance, there is uncertainty as to whether competitive franchising can be made to work. There is also some uncertainty as to whether formal price controls would be practicable for IGTs given the dispersed nature of their operations. Collecting and assessing information on a large number of different sites scattered across the country might be difficult and make it administratively burdensome to set price formal controls. In the light of these factors, the following table includes ranges in evaluating some of the options.

**Table 5.2: Initial evaluation of each option against overall objectives**

Overall objective	Option A	Option B	Option C	Option D	Option E
Competition between connection providers	H	M / H	H	H	M
Competition within gas transportation	M / H	L	M	M	L
Competition between Shippers and Suppliers	M	M	M	H	M
Promote efficiency of GTs	M / H	L	M / H	M	L
Share efficiency gains with consumers	M / H	M	M / H	H	L
Allow GTs to make a reasonable profit	M	H	H	H	L
Promote efficient use of gas	M / H	M	M / H	M	L
Protect consumers in rural areas	L	M	L	L	L

5.38 Ofgem would welcome views on the appropriate weighting between each of the overall objectives that should be used in determining our draft proposals.

5.39 There is some uncertainty about how well the various options might work in practice. For example, the discussion of Options A and C identifies some possible difficulties with the implementation of these arrangements. Option D might provide more certain benefits for consumers but may be inferior to Options A and C if they could be made to work effectively. It would be particularly helpful if respondents could comment on these matters. The selection of the appropriate way forward will also need to take account of the

issues raised in Table 5.1 above and the views of respondents to this consultation exercise.

- 5.40 As mentioned at the beginning of this chapter, these options are not intended to be a definitive list of all options that could be considered. It is also possible that a combination of certain elements included under several options might represent the most appropriate way forward.
- 5.41 **Views are invited on any aspect of the issues raised in this Chapter and in particular on the five options for regulating IGT charging arrangements identified above.**



## Appendix One - Summary of responses to the Cost of Capital paper

- 1.1 Ofgem received 11 responses to the February 2002 consultation on Independent Gas Transporter charges and Cost of Capital. The majority of responses were from IGTs with the remaining from shippers and suppliers. Many of the responses addressed a number of wider issues and concerns beyond those specifically consulted upon. The issues raised in response to the cost of capital paper will be considered together with the responses to this paper when developing draft proposals. An overview of responses is set out below.
- 1.2 One respondent supported Ofgem's approach to estimating the cost of capital, preferring the lower range of around 6.5% cost of capital, while the remaining respondents were critical of either Ofgem's overall approach or specific aspects. Some respondents questioned whether the use of CAPM to estimate the cost of equity is appropriate for small IGTs. Some respondents stated that Ofgem should allow all IGTs to benefit from a small company premium and in addition allow a premium to reflect restricted access to debt finance.
- 1.3 In assessing industry specific factors a number of respondents questioned whether the use of Transco and two water only companies (WOCs) as comparators to IGTs was appropriate given the differences in size, composition of networks and method of developing new networks. The majority of respondents felt more detailed analysis of IGT cost of capital was required.
- 1.4 In assessing reasonable profit a number of respondents identified the difficulties of comparing different cost bases or charges across businesses. Overall the net present value (NPV) approach to estimating reasonable profit was preferred but views on whether returns should be measured before (ex-ante) or after (ex-post) investment were mixed. Some respondents stated that an ex-ante approach would more properly reflect the risks arising from the competitive environment in which IGTs were said to operate (see below). Others believe that an ex-post approach would more accurately measure the impact on consumers and fit more closely with the requirements of the licence.

- 1.5 In assessing schemes some respondents preferred a portfolio approach across a number of individual gas networks. Other respondents felt reasonable profits should be measured against an industry-wide standard and that Ofgem should make more use of company accounts. Some respondents felt that the profit levels and cost of capital should be sufficient to provide incentives for IGTs to continue to extend the gas network.
- 1.6 The wider issues raised by respondents included the view that the estimate of cost of capital did not fully account for the competitive environment in which IGTs were described as developing new networks. This competitive process was felt to leave IGTs facing more risk than Transco or the WOCs, with IGT network investments being of a speculative nature and tied closely to the cyclical house building market. These respondents felt that current rates of return were generated by the competitive process and therefore more robust than regulatory estimates. Two respondents felt that the competitive process tended to favour developers without delivering benefits to end consumers, and that where connection charging was not clearly separated from transportation a degree of cross-subsidy existed.
- 1.7 Other issues raised included concerns over Ofgem's approach to reviewing IGT charging issues. A number of respondents felt that the cost of capital was not the principal issue to be considered, citing price and quality and innovation of service as more relevant to consumers and IGTs. These respondents urged Ofgem to take a more holistic view of IGT charging issues. Finally, some respondents questioned whether the use of Competition Act powers were perhaps suitable to address any concerns Ofgem may have over the level of profit earned by IGTs.

## Appendix Two – Signatories to IGT Network Codes

The shippers that have signed the Network Code for each IGT network are provided below.

### British Gas Connections Ltd – Signatories of their Network Code

Eastern	Scottish Power
Northern Electric	Contract Natural Gas
Seaboard Energy Gas	Yorkshire Energy
Amerada Hess	Powergen UK
British Gas Trading	Severn Trent
Aquila	Npower Direct
Yorkshire Energy Gas	Elf at Home (now owned by LE)
London Electricity	TXU Energy Europe Trading
Southern Electric Gas	Powergen Retail

### East Midlands Pipelines – Signatories of their Network Code

Powergen	Eastern/TXU
Elf at Home (London Electricity)	Scottish Power
Aquila	Northern
Mobil	Sempra Energy
Beacon Gas	

### Gas Transportation Company – Signatories of their Network Code

Amerada Hess	Midland Sales
Aquila	Mobil Gas
Beacon Gas	Northern Electric
British Gas Trading	Npower Gas
Eastern/TXU	Npower Direct
ELF	Powergen UK
Powergen Retail Gas	Powergen Gas Ltd
Scottish Power Energy Services	Severn Trent
SEG	Gas Light & Coke Company
Gas Supply Company	Vector Gas
London Electricity	Contract Natural Gas
Natural Gas Shipping services	Npower Commercial Gas
Yorkshire Energy	Yorkshire Energy Gas
Enron Direct	

### East Surrey Pipelines – Signatories of their Network Code

Aquila	TXU Europe Energy Trading
BP Gas Trading	Scottish Power
Seaboard Energy	Npower Gas
Northern Electric & Gas	BP Gas Marketing
Total Fin Elf Gas & Power	Statoil (UK) Ltd

### **Independent Pipelines – Signatories of their Network Code**

Elf Gas and Power	Amerada Hess
TXU Europe Energy Trading	Southern Electric Gas
Powergen Gas Retail	Powergen UK
Scottish Power	SWEB
Northern Electric Gas	Midlands Gas
NPower Gas	NPower Direct
London Electricity	Contract Natural Gas
Yorkshire Energy Gas	Mobil
British Gas Trading	Severn Trent Energy
Aquila Energy UK	Vector Gas
BP Gas	

### **Scottish and Southern Electric Pipelines Ltd – Signatories of their Network Code**

Southern Electric Gas	
British Gas Trading	Npower
Scottish Power	Powergen UK
Yorkshire Energy	Elf Gas and Power
Beacon	London Electricity
Yorkshire Energy Gas	Contract Natural Gas
Powergen Retail Gas	

### **Mowlem – Signatories to Network Code**

Scottish Power	Powergen
TXU Europe Energy Trading	London Electricity

### **Scottish Power – Signatories to Network Code**

Amerada Hess	Aquila
Beacon Gas	British Gas Trading
Calortx	Contract Natural Gas
Enron Direct	London Electricity
Mobil Gas Marketing	National Power Gas Direct
Npower Northern	Npower Direct
Powergen Retail Gas	Powergen UK
Quantum Energy Distribution	Scottish power
Total Fina Gas & Power	TXU Europe Energy Trading
Yorkshire Energy Gas	Yorkshire Electricity

### **Utility Grid Installations – Signatories to Network Code**

TXU Europe Energy Trading

### **United Utilities Gas Pipelines – Signatories to Network Code**

Elf Gas	Beacon Gas
Powergen UK	British Gas Trading
Scottish Power Gas	Northern Electric & Gas

Mobil Gas marketing UK  
Powergen Retail

London Electricity

**United Utilities Gas Networks – Signatories to Network Code**

Beacon Gas  
Powergen  
Npower Gas  
London Electricity  
Powergen UK  
British Gas Trading

Total Fin Elf Gas & Power  
Scottish Power UK  
TXU Europe Energy Trading  
Powergen Retail Gas  
Vector gas

## Appendix Three – Extract from the Gas Act

### A summary of the definition of 'Connection' within the Gas Act

Paragraph one of standard condition 4B refers to section 10(2) of the Gas Act (the duties of GT in relation to the 23-metre rule). This section of the Gas Act defines 'connection' as 'connect to a relevant main of a public gas transporter'<sup>29</sup>. The Gas Act later defines a relevant main as 'any distribution main in his authorised area which is being used for the purpose of giving a supply of gas to any premises in that area at a rate not exceeding 75,000 therms a year'<sup>30</sup>. The Act in turn defines a distribution main as 'any main of the [transporter] through which the [transporter] is for the time being distributing gas and which is not being used only for the purpose of conveying gas in bulk'<sup>31</sup>.

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<sup>29</sup> Section 10(2)(b)

<sup>30</sup> Section 10(12)

<sup>31</sup> Section 48(2)

## Appendix Four – Extracts from the GT Licence

### Definition of 'Transportation Arrangements'

The GT licence defines transportation arrangements as 'arrangements (including sub-duct arrangements defined in paragraph 2) whereby gas shippers may, from time to time and in different cases and circumstances, have gas introduced into, conveyed by means of and taken out of the licensee's pipe-line system and arrangements falling within the preceding provisions of this definition shall be transportation arrangements notwithstanding that they may involve the utilisation of -

- (a) facilities for the storage of gas in so far as the licensee uses them in connection with its independent systems, including such facilities so used for the purpose of conveying gas to such a system; or
- (b) storage facilities used by the licensee solely for the diurnal storage of gas which has been introduced into its pipe-line system,

subject, however, to paragraph 9 of standard condition 4 (Charging Gas Shippers – General), paragraphs 2 and 4 of standard condition 4E (Requirement to Enter into Transportation Arrangements in conformity with Network Code), and paragraph 6 of standard condition 25 (Long Term Development Statement)<sup>32</sup>.

### Extracts from Standard Conditions

#### SECTION B. GENERAL

##### *Condition 4. Charging of Gas Shippers - General*

1. The licensee shall furnish the Authority with a statement of -
  - (a) the charges to be made in pursuance of transportation arrangements with specified descriptions of gas shippers in different specified cases or descriptions of cases; and

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<sup>32</sup> Standard Condition1(1)

- (b) the methods by which, and the principles on which, those charges are determined in accordance with the methodology referred to in paragraph 5;

and, without prejudice to paragraph 2, if any change is made in the charges to be so made, or in the methods by which, or the principles on which, those charges are to be so determined, the licensee shall, before the change takes effect or, if that is not reasonably practicable, as soon as is reasonably practicable thereafter, furnish the Authority with a revision of the statement or, if the Authority so accepts, with amendments to the previous statement, which reflect the change.

2. The licensee shall -

- (a) give the Authority notice of any proposals which it is considering to change the charges mentioned in paragraph 1, together with a reasonable estimate of the effect of the proposals (if implemented) on those charges, and shall use all reasonable endeavours to do so at least 150 days before the proposed date of their implementation; and
- (b) where the licensee has decided to implement any proposals to change the charges mentioned in paragraph 1, give the Authority notice of this decision and the date on which the proposals will be implemented which shall not, unless the Authority otherwise consents, be less than a month after that on which the notice required by this sub-paragraph was given.

3. The licensee shall -

- (a) publish any statement, or revision or amendment of a statement, furnished, or notice given, under paragraph 1 or 2 in such manner as will, in its reasonable opinion, secure adequate publicity for it; and
- (b) send a copy of any such statement, revision, amendment or notice so published to any person who asks for one.

4. Except in a case in which the Authority accepts otherwise, the licensee shall only enter into transportation arrangements which secure that the charges in pursuance thereof will be in conformity with the statement last published under paragraph 3 either -

- (a) before it enters into the arrangements; or
- (b) before the charges in question from time to time fall to be made,

and, for the purposes of this paragraph, the reference to the statement last published under paragraph 3 shall be construed, where that statement is subject to



amendments so published before the relevant time, as a reference to that statement as so amended.

5. Subject to paragraph 6, the licensee shall -
  - (a) establish a methodology showing the methods by which, and the principles on which (except in a case in which the Authority accepts otherwise) such charges as are mentioned in paragraph 1(a) are to be determined; and
  - (b) conform to the methodology so established as from time to time modified in accordance with standard condition 4A (Obligations as Regards Charging Methodology).
6. In any case in which the licensee is willing to enter into storage arrangements in respect of such facilities as are mentioned in paragraph 9 -
  - (a) if the charges in pursuance of those arrangements are not governed by the methodology established under paragraph 5, the licensee shall avoid any undue preference or undue discrimination in the terms on which it enters into such arrangements; and
  - (b) if either those charges or any charges made in pursuance of transportation arrangements other than storage arrangements are not governed as aforesaid, the licensee shall ensure so far as is reasonably practicable, that no unjustified cross-subsidy is involved between the terms on which it enters into the storage arrangements and those on which it enters into other transportation arrangements.
7. Any question which arises under paragraph 6 as to whether a cross-subsidy is unjustified, shall be determined by the Authority.
8. References in paragraphs 1 to 5 to charges do not include references to -
  - (a) charges related to the acquisition or disposal of gas for purposes connected with the balancing of the licensee's pipe-line system; or
  - (b) to the extent (if any) to which the Authority has accepted that they should, as respects certain matters, be so determined, to charges determined by reference to provisions in that behalf set out in the Network Code,and, subject as aforesaid, references in this condition and in standard conditions 4A (Obligations as Regards Charging Methodology) and 4B (Connection Charges etc) to charges-
  - (i) include references to the means whereby charges may be ascertained; and

- (ii) exclude references to supplemental charges within the meaning of standard condition 4C (Charging Gas Shippers – Supplemental Connection Charges).
- 9. In this condition “transportation arrangements” includes storage arrangements which relate to the utilisation of -
  - (a) an offshore gas storage installation;
  - (b) storage cavities in natural strata, or
  - (c) containers for the storage of gas in a liquid state.
- 10. If the Authority, having regard, in particular, to any representations made to it by the licensee and other persons as to the extent to which there is competition in relation to the storage of gas in particular categories of the facilities mentioned in paragraph 9(a), (b) or (c) and the Authority’s view on that question, considers it appropriate that paragraph 9 should be modified by the omission of sub-paragraph (a), (b) or (c), then the subparagraph in question shall be omitted with effect from a date specified in a notice relating thereto published by the Authority for the purposes of this condition generally; and, if all three subparagraphs come to be omitted, paragraphs 6 and 7, paragraph 9 and the reference thereto in the definition of “transportation arrangements” in condition 1 shall cease to have effect.

**Condition 4A. Obligations as Regards Charging Methodology**

- 1. Except in so far as the Authority consents to the licensee not doing so, the licensee shall, subject to paragraphs 2 and 3, from time to time make such modifications of the methodology established in pursuance of paragraph 5 of standard condition 4 (Charging of Gas Shippers – General) (“the charging methodology”) as may be requisite for the purpose of achieving the relevant methodology objectives.
- 2. Except in so far as the Authority otherwise approves, the licensee shall not make a modification of the charging methodology unless it has -
  - (a) consulted the relevant shippers on the proposed modification and allowed them a period of not less than 28 days within which to make written representations; and
  - (b) furnished the Authority with a report setting out -
    - (i) the terms originally proposed for the modification;
    - (ii) the representations (if any) made by relevant shippers; and

- (iii) any change in the terms of the modification intended in consequence of such representations,

and unless 28 days have elapsed since the said report was furnished without the Authority having given the licensee a direction requiring that the modification be not made.

3. Subject to paragraph 4, the licensee shall in each calendar year furnish the Authority with a report on the application of the charging methodology during the 12 months preceding 1st October in that year including a statement as to -
  - (a) the extent to which, in the licensee's opinion, the relevant methodology objectives have been achieved during the period to which it relates;
  - (b) whether those objectives could more closely be achieved by modification of the charging methodology; and
  - (c) if so, the modifications which should be made for that purpose.
4. As respects the calendar year in which this licence came into force:
  - (a) if it came into force on or after 1st October in that year, paragraph 3 shall not apply; or
  - (b) if it came into force before that date, paragraph 3 shall have effect as if for the reference to the 12 months preceding that date there were substituted a reference to the period preceding that date beginning with the date on which the licence came into force.
5. In paragraphs 1 and 3 "the relevant methodology objectives" means, subject to paragraph 6, the following objectives -
  - (a) that compliance with the charging methodology results in charges which reflect the costs incurred by the licensee in its transportation business;
  - (b) that, so far as is consistent with sub-paragraph (a), the charging methodology properly takes account of developments in the transportation business; and
  - (c) that, so far as is so consistent, compliance with the charging methodology facilitates effective competition between gas shippers and between gas suppliers.
6. Where -
  - (a) the charging methodology results in charges which, or the revenue derived from which, are, in the main, not controlled or limited in

pursuance of any standard condition of this licence other than standard condition 4 (Charging of Gas Shippers – General) ; and

- (b) the Authority has not accepted that, for a specified period, this paragraph should not apply or has so accepted subject to standard conditions which are not satisfied,

“the relevant methodology objectives” shall include the following objective, namely, that the charging methodology results in charges which, taking one charge with another and one year with another, permit the licensee to make a reasonable profit, and no more, from its transportation business so, however, that, for the purposes of this paragraph, there shall be disregarded -

- (i) costs incurred for the purposes of that business in connection with the construction of pipe-lines for the benefit of an area for the time being designated for the purposes of standard condition 4C (Charging of Gas Shippers – Supplemental Connection Charges);
- (ii) revenue derived from that business by way of charges (within the meaning of standard condition 4B (Connection Charges etc)) to which any provisions of that standard condition have effect and which are in respect of premises within an area for the time being so designated;
- (iii) revenue derived from that business by way of supplemental charges (within the meaning of standard condition 4C (Charging of Gas Shippers – Supplemental Connection Charges)); and
- (iv) any payments made by the licensee in connection with the proposed development of an area for the time being not so designated to a person who has an interest in land in that area, other than by way of reasonable consideration for an interest in land or for goods or services with which the licensee is provided,

and, for the purposes of this paragraph, “costs” and “revenue” mean costs and revenue determined on an accrual basis.

7. The licensee shall comply with any direction given from time to time by the Authority requiring the licensee -

- (a) subject to paragraphs 8 and 9 to publish such information as may be specified or described in the direction-
  - (i) as to any of the costs incurred by the licensee in its transportation business, or

- (ii) relating to the charging methodology as modified from time to time in accordance with paragraph 1; and
  - (b) to do so in such form and manner and with such frequency as may be so specified.
- 8. The licensee shall not be required by paragraph 7 to publish any information or any document -
  - (a) which it could not be compelled to give in evidence or produce in civil proceedings before the court; or
  - (b) so far as it comprises information relating to costs incurred in connection with the construction of pipe-lines for the benefit of an area for the time being designated for the purposes of standard condition 4C (Charging of Gas Shippers – Supplemental Connection Charges) or so incurred in preparation for the area becoming so designated.
- 9. In publishing any information in pursuance of paragraph 7 the licensee shall have regard to the need for excluding, so far as is practicable, any matter which relates to the affairs of any person where the publication of that matter would or might seriously and prejudicially affect his interests.
- 10. Any question arising under paragraph 9, as to whether the publication of some matter which relate to the affairs of a person would or might seriously and prejudicially affect his interests, shall be determined by the Authority.
- 11. In this condition “transportation business” includes activities connected with the storage of gas in pursuance of storage arrangements which relate to the utilisation of -
  - (a) an offshore gas storage installation;
  - (b) storage cavities in natural strata; or
  - (c) containers for the storage of gas in a liquid state.
- 12. If the Authority, having regard, in particular, to any representations made to it by the licensee and other persons as to the extent to which there is competition in relation to the storage of gas in particular categories of the facilities mentioned in paragraph 11(a), (b) or (c) and its view on that question, considers it appropriate that paragraph 11 should be modified by the omission of sub-paragraph (a), (b) or (c), then the sub-paragraph in question shall be omitted with effect from a date specified in a notice relating thereto published by the Authority for the purposes of this condition generally; and, if all three sub-paragraphs come to be omitted, paragraph 11 and the reference thereto in the definition of “transportation

business" in standard condition 1 (Definitions and Interpretation ) shall cease to have effect.

**Condition 4B. Connection Charges etc**

1. Subject to paragraph 2, where any pipe is supplied and laid by the licensee in discharge of the duty imposed by section 10(2)(a) of the Act, for the purpose of connecting premises ("the premises concerned") to a relevant main, the licensee may charge the person requiring the connection ("the person concerned") in respect of the cost of supplying and laying the pipe-  
  
provided that in a case in which the supply of gas is to domestic premises, the licensee shall only so charge in respect of the cost of supplying and laying the pipe insofar as it is attributable to the supplying and laying of -
  - (a) so much of the pipe as is laid upon property owned or occupied by the person concerned, not being property dedicated to public use; and
  - (b) so much of the pipe as is laid for a greater distance from a relevant main than 10 metres, although not on such property as is mentioned in subparagraph (a).
2. Paragraph 1 shall have effect as if the proviso thereto were omitted where -
  - (a) the person concerned may be required in pursuance of regulations made, or having effect as if made, under section 10(7) of the Act to make a payment in respect of the expenses of the main used for the purpose of making the connection; or
  - (b) the premises concerned are in an area designated for the purposes of standard condition 4C (Charging of Gas Shippers – Supplemental Connection Charges) and the charges to be made of a gas shipper by the licensee in respect of the conveyance of gas to those premises would include a supplemental charge.
3. The licensee shall comply with any directions given by the Authority to furnish it with a statement showing the methods by which, and the principles on which, (consistently with its duties under section 9 of the Act) -
  - (a) where a connection is required in pursuance of subsection (2) of section 10 of the Act, charges in respect of the cost of connecting, supplying and laying a pipe or the expenses of the laying of a main are normally to be determined in different cases or circumstances;

- (b) where a connection is required in a case not falling within subsection (1)(a) or (b) of the said section 10 and the premises are not likely to be supplied with gas at a rate exceeding that from time to time mentioned in subsection (8) of the said section 10 (subject to section 8A(1) of the Act, 2,196,000 kilowatt hours in any period of 12 months), the charges to be made for the connection, including charges for supplying and laying a pipe are to be determined;
  - (c) where a connection or disconnection is required in the case of any premises likely to be, or which have been, supplied with gas at a rate exceeding that from time to time mentioned in subsection (8) of the said section 10, the charges to be made for the connection or disconnection including, so far as appropriate, charges for supplying or laying a pipe or main and charges in respect of anything done or provided in connection with the connection or disconnection in different cases or circumstances are to be determined; and
  - (d) without prejudice to sub-paragraph (a), in the circumstances mentioned in subsection (10) of the said section 10 (read with any regulations under subsection (11) thereof), charges under the said subsection (10) are normally to be determined in different cases and circumstances.
4. Where, having furnished a statement under paragraph 3, the licensee (subject to paragraph 7) changes the methods and principles referred to in paragraph 3, the licensee shall as soon as is reasonably practicable furnish the Authority with a revised statement showing the changed methods and principles; and such a revised statement shall supersede previous statements furnished under either paragraph 3 or this paragraph with effect from such date as is specified therein ("the effective date").
5. A statement furnished under paragraph 3 or 4 shall, where practicable, include examples of the charges likely to be made in different classes of case as determined in accordance with the methods and principles shown in the statement.
6. The licensee shall -
- (a) publish any statement furnished under paragraph 3 or 4 in such manner as will secure adequate publicity for it and, in the case of a statement furnished under 4, shall so publish it before the effective date thereof;
  - (b) publish with any such statement so published a further statement that any complaint in respect of a charge to which the statement relates, if not

resolved between the licensee and the complainant, may be referred to the Authority by letter addressed to the Authority at an address specified in the further statement; and

- (c) send a copy of any such statement and further statement so published to any person who asks for one.
7. Where a statement in respect of the determination of such charges as are mentioned in paragraph 3 has been furnished to the Authority under paragraph 3 or 4 then, unless and until it has been superseded by a subsequent statement under paragraph 4, the licensee shall not make such a charge, or agree or offer to make such a charge, as is so mentioned other than one determined in accordance with the methods and principles shown therein, unless the Authority otherwise consents.
  8. The licensee shall establish, and keep up to date, a register (or separate registers for different areas) of pipes which have vested in it and become its property by virtue of section 10(6) of the Act and fall within section 10(13)(b) but have not been declared relevant mains under section 10(13) thereof; and an entry in the register in respect of a particular pipe-
    - (a) shall contain sufficient particulars to enable the pipe to be identified;
    - (b) shall be made within 28 days of the pipe vesting in, and becoming the property of, the licensee; but
    - (c) shall be deleted, as soon as is reasonably practicable, if the pipe in question is subsequently declared a relevant main under the said section 10(13).
  9. The licensee shall make arrangements for a copy of the said register (or of the information contained therein) to be available for inspection at reasonable times, if it has area offices, at those offices or, if it has not, at its principal office; and, for the purposes hereof, "area office" means one which is fixed for an area for the purposes of section 46(3) of the Act.
  10. The licensee shall not show any undue preference towards, or undue discrimination against, any person who operates, or proposes to operate, a pipe-line system in relation to the connection of that system to the licensee's pipe-line system.
  11. The licensee shall comply with any direction given by the Authority to furnish it with a statement showing, so far as is reasonably practicable, the methods by



which and the principles on which the following charges are to be determined, namely -

- (a) charges for making a connection to a pipe comprised in its pipe-line system to enable gas to be introduced into, or taken out of, that system; and
  - (b) charges for works associated with the making of such a connection including, in particular, works to increase the capacity of a high pressure pipe-line and by way of the supply and installation of a pipe-line.
12. Where, having furnished a statement under paragraph 11, the licensee (subject to paragraph 14) changes the methods and principles referred to in that paragraph, the licensee shall as soon as is reasonably practicable furnish the Authority with a revised statement showing the changed methods and principles; and such a statement shall supersede previous statements furnished under either paragraph 11 or this paragraph with effect from such date as is specified therein ("the effective date").
13. A statement furnished under paragraph 11 or 12 shall, where practicable, include examples of the charges likely to be made in respect of different kinds of works falling within paragraph 11, other than works connected with a high pressure pipe-line.
14. The licensee shall -
- (a) publish any statement furnished under paragraph 11 or 12 in such manner as will secure adequate publicity for it and, in the case of a statement furnished under paragraph 12, shall so publish it before the effective date thereof; and
  - (b) send a copy of any such statement so published to any person who asks for one.
15. Where a statement in respect of the determination of charges in respect of a matter has been furnished to the Authority under paragraph 11 or 12 then, unless and until it has been superseded by a subsequent statement under paragraph 12, the licensee shall not make a charge, or agree or offer to make a charge, other than one determined either in accordance with the methods and principles shown therein or in accordance with methods and principles not inconsistent with those so shown unless the Authority otherwise consents.
16. References in this condition to charges -
- (a) include references to the means whereby charges may be ascertained; and

- (b) exclude references to supplemental charges within the meaning of standard condition 4C (Charging of Gas Shippers – Supplemental Connection Charges).
17. In this condition, any reference to the making of a charge -
- (a) in relation to the supplying or laying of a pipe in pursuance of section 10(2)(a) of the Act, is a reference to requiring that the person requiring the connection defrays the whole or a part of the cost thereof;
  - (b) in relation to the laying of a main used for the purpose of making a connection and in the circumstances mentioned in section 10(7) of the Act, is a reference to requiring, in pursuance of regulations under that provision, that the person requiring the connection pays an amount in respect of the expenses of the laying of the main; and
  - (c) in the circumstances mentioned in subsection (10) of section 10 of the Act (read with any regulations under subsection (11) thereof), is a reference to requiring the person requiring a connection to be made or maintained in pursuance of subsection (2) or (3) of the said section 10 to make such payments as are mentioned in the said subsection (10),
- and cognate expressions shall be construed accordingly.

**Condition 4C. Charging of Gas Shippers – Supplemental Connection Charges**

1. This condition shall apply in relation to an area designated for the purposes hereof by the Authority on the application of the licensee (“a designated area”) as one in the case of which -
  - (a) it appears to the Authority that gas has not previously, or has not within the previous 3 years, been conveyed through pipes to any premises therein other than ones which had been supplied with gas at a rate in excess of 2,196,000 kilowatt hours a year; and
  - (b) it appears to the Authority that, taking into account both any existing premises and probable developments in the area, it is likely that the area will contain premises of which more than a half will not be within 23 metres of a relevant main, whether of the licensee or of any other gas transporter, which was in existence before the designation of the area.
2. The designation of an area shall subsist only for the period specified in the designation on the application of the licensee unless, before the expiry of that period, it is extended by the Authority on such an application.

3. This condition shall apply if, and only if, the charges to be made of gas shippers by the licensee in pursuance of transportation arrangements include an element referable in whole or in part to the laying of pipes for the purpose of conveying gas to premises in a designated area and any such element is hereinafter referred to as a "supplemental charge".
4. The licensee -
  - (a) shall, in the case of each designated area, establish a methodology which has been accepted by the Authority (whether before or after the area becoming designated) setting out the provisions in accordance with which supplemental charges are to be determined, so, however, that, if and to the extent that the methodology so provides, it may be changed from time to time subject to the acceptance by the Authority of the changed methodology; and
  - (b) shall ensure that each supplemental charge made conforms to the methodology as in force immediately before the charge fell due.
5. The licensee shall, in the case of each designated area, prepare a statement of the methodology, or changed methodology, from time to time established under paragraph 4, and shall-
  - (a) publish, in such manner as will secure adequate publicity for it, either the statement or a summary thereof which the licensee is satisfied is sufficient to meet the reasonable interests of gas shippers and gas suppliers in the statement; and
  - (b) send a copy of any such statement or summary so published to anyone who asks for one.
6. If and so long as the charges made by the licensee for the conveyance of gas to premises in a designated area include supplemental charges, the licensee shall prepare and keep up to date a statement in respect of that area which shall specify the period for which supplemental charges will be made, the current amount thereof or the means whereby that amount may be ascertained and the circumstances in which they will be made, and shall -
  - (a) publish that statement at appropriate intervals, in such manner as will secure adequate publicity for it; and
  - (b) send a copy of any statement so published to anyone who asks for one
7. In any other standard condition of this licence which limits, or has the effect of limiting, the charges which may be made in pursuance of transportation

arrangements or the revenue which may be derived therefrom, references to such charges or revenue shall not include supplemental charges or revenue derived from such charges.

8. Where a person has applied for a licence or an extension under section 7 of the Act, any application made by that person in contemplation of the grant of that licence or extension which is conditional on such grant shall, if the licence or extension is granted, be treated, for the purposes of this condition, as an application made by the person to whom the licence or extension has been granted.
9. An acceptance of a methodology by the Authority for the purposes of paragraph 4 may be given subject to such standard conditions, relating to such charges as are mentioned in paragraph 3 of standard condition 4B (Connection Charges etc), as may be agreed between the Authority and the licensee.