February 2002

Independent Gas Transporter Charges and Cost of Capital

Consultation

Summary

This document seeks views on the reasonable cost of capital for Independent Gas Transporters (IGTs) and the application of this cost of capital to standard licence condition 4 methodologies and transportation charges.

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 monoply 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.

Standard licence condition 4 charging methodologies have to comply with the relevant objectives set out in the GT licence, including that the GT earns no more than a reasonable profit. The appropriate cost of capital will inform Ofgem's view as to whether a GT's charging methodology meets this objective and complies with the terms of its licence. If a licensee breaches its licence obligations then Ofgem can take enforcement action against the licensee and in future may be able to impose a financial penalty under new powers deriving from the Utilities Act.

Chapter 2 identifies a range of 6.4 to 8.5 per cent for the real pre-tax cost of capital that could apply to IGTs. A small company equity risk premium may apply to the cost of equity finance if an IGT is ring-fenced from its parent company. Without the small company equity premium the range for the cost of capital would be 6.4 to 7.7 per cent.

Chapter 3 discusses how IGT profitability should be measured and the role of the cost of capital and net present value tests. Chapter 4 summarises the main issues for consideration.

Responses to this consultation should arrive no later than 12 April 2002.

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1. Introduction

Purpose of this document

1.1 This document seeks views on the reasonable cost of capital for IGTs and the application of this cost of capital to standard licence condition 4 methodologies and transportation charges.

Rationale and background

1.2 Shippers arrange for the transfer of gas over transportation networks to final consumers. GTs own and operate these networks and levy transportation charges on Shippers. Typically a transportation network is a monoply 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.

1.3 Although transportation charges are levied on gas Shippers they are passed on by Suppliers to 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, particularly for those who find it difficult paying their bills. A Shipper serving a consumer on an IGT network will incur transportation charges from both Transco and the IGT, as the gas has to travel over both networks.

1.4 Condition 4 allows a Gas Transporter (GT) to charge Shippers for transportation services. Charges levied on Shippers must comply with a charging methodology established by the GT. This methodology must comply with the relevant objectives set out in condition 4A. These relevant objectives include a requirement that charges reflect costs, that developments in the transportation business are taken in to account, effective competition is facilitated in Shipping and Supply, and, charges result in no more than a reasonable profit.

1.5 The appropriate cost of capital will inform Ofgem's view as to whether a GT's charging methodology meets the objective of earning no more than a reasonable

profit and so complies with the terms of its licence. If a licensee breaches its licence obligations then Ofgem can take enforcement action against the licensee and in future may be able to impose a financial penalty under new powers deriving from the Utilities Act.

1.6 The standard licence conditions also include 'Condition 4C. Charging of Gas Shippers – Supplemental Connection Charges'. This condition can be used by GTs to charge Shippers for transporting gas where some elements of the costs recovered can be attributed to the laying of gas pipes. These supplemental connection charges can only be applied to designated areas as defined in condition 4C. The duration of these charges is fixed at the time of designation, typically for 25 years.

1.7 Charges levied under condition 4C must conform to a methodology that is site specific, i.e. applying to the designated area in question. Ofgem must accept each condition 4C methodology on a site-by-site basis before the GT can levy charges on Shippers. Currently, there are no explicit objectives within condition 4C but in accepting methodologies it will be important to ensure that the interests of consumers are properly protected.

1.8 Ofgem is presently carrying out a wider review of condition 4 and 4C charging arrangements and a further consultation paper will be published on these matters shortly. As an interim measure further approvals for condition 4C charges will only normally be given where the total transportation charges levied on Shippers will be at or below the level for an equivalent site connected to Transco's network. The results of this consultation exercise will also inform the wider review of charging arrangements.

Structure of the document

1.9 Chapter 2 seeks views on the appropriate cost of capital for IGTs. Chapter 3 discusses how the cost of capital should be applied to condition 4 charging arrangements. Chapter 4 summarises the main issues for consideration. Appendix 1 provides an overview of the commercial and regulatory environments in which IGTs operate and discusses the risks to which they appear to be exposed.

Consultation responses

1.10 Views are invited from all those with an interest in the matters raised in this consultation paper including consumers, consumer representatives, Shippers, Suppliers and those companies holding GT licences.

1.11 Responses should arrive no later than 12 April 2002 and be addressed to:

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2. Cost of Capital for IGTs

Introduction

2.1 The real return required by the financial markets to provide capital to a company is called its cost of capital. The cost of capital is usually calculated as a weighted average of the cost of debt and equity finance. As well as providing a return on debt and equity companies need to pay corporation tax and the cost of capital can be adjusted to take account of this.

2.2 This chapter seeks views on the appropriate level for gearing, the real cost of debt and equity, in order to assess a reasonable real cost of capital for IGTs. It takes into account evidence set out in the Competition Commission's 2000 report on two water only companies (WOCs) and Ofgem's September 2001 Transco price control review final proposals document. The Competition Commission's report is relevant because it considered the cost of capital for two relatively small water companies. Given that IGTs are generally small enterprises it may provide some useful benchmarks for this review. The Transco price control review set out Ofgem's latest views on the market wide parameters that are relevant to assessing the cost of capital. This chapter concludes with a summary of the components of the real pre-tax weighted average cost of capital (WACC) for IGTs.

Gearing

2.3 Companies can be financed by both debt and equity. The proportion of debt to debt plus equity is referred to as gearing. Gearing can influence the cost of both debt and equity finance and debt is usually cheaper than equity finance. There are two main reasons why debt is cheaper: debt holders have a prior claim on the distribution of a company's income ahead of equity holders and so face lower risk; and debt can be a tax efficient form of finance. In calculating a WACC it is necessary to make an assumption about gearing.

2.4 In its 2000 reports on two WOCs the Competition Commission assumed a level of gearing of between 25 per cent and 50 per cent. This is below the 60 to 70 per cent range used for Transco in the 2001 price control review. However Transco and other large network monopolies tend to be able to support a relatively high proportion of debt finance. In light of these factors it appears appropriate to

assume a range for each IGTs' gearing of between 25 per cent and 50 per cent, with an average of 37½per cent.

Cost of debt finance

2.5 The real cost of debt finance can be thought of as having two components, the risk free rate and a debt risk premium.

Risk-free rate

2.6 The risk free rate is not directly observable but can be estimated from the return on UK government bonds and index-linked gilts. The Competition Commission estimated a range of 2.75 per cent to 3.25 per cent for the risk free rate in its 2000 report on the two WOCs. The September 2001 Transco price control review used an estimate of 2.75 per cent, which took into account the fact that yields have remained low since the Competition Commission reports. The yields on short, medium and long-term index-linked gilts are presently around 2½ per cent. Similarly conventional government bonds presently have average real yields of around 2½per cent. However, there is some uncertainty around future yields and the impact of factors such as the proposed abolition of the Minimum Funding Requirement for pension funds. In the light of these factors 2.75 per cent appears to remain an appropriate estimate for the risk free rate.

Debt risk premium

2.7 The debt risk premium is the return on a corporate bond over a government bond of similar maturity and represents the additional return required to hold company rather than government debt. A number of business specific and wider factors will influence the level of the debt risk premium including a company's gearing, its financial position and the commercial environment in which it operates. Specialist credit rating agencies assign credit ratings to reflect these factors. A measure of the debt risk premium is the spread between the yield on corporate bonds and government bonds of similar maturity.

2.8 The September 2001 Transco price control review document assumed that Transco would maintain an investment grade credit rating, consistent with an efficient capital structure, leading to a range of 1.5 to 1.9 per cent for the debt risk

premium. This range is the same as that identified in the Competition Commission's August 2000 review of two WOC's.

2.9 The commercial and regulatory environment in which each IGT operates will influence its credit rating and the risk premia on its debt . Whether a company can maintain an investment grade credit rating is a key factor in determining its cost of debt finance.

2.10 Appendix 1 sets out details of the commercial and regulatory environment in which IGTs operate and includes a discussion of the risk facing IGTs from this environment. Four principle sources of risk are identified: network development and competition, operation and management of networks, charging structures and cost recovery, and, financial structure and ownership. Consideration of these factors suggests the risks facing IGTs are no greater than for other monopoly network companies, which in general retain an investment grade credit rating for debt. Assuming debt retains an investment grade credit rating in the range BBB+ to BBB- suggests a range of 2 to 3 per cent for debt risk premia, given the present pattern of yields on government and corporate debt.

Cost of equity finance

2.11 The principal method used to estimate the real cost of equity finance is the Capital Asset Pricing Model (CAPM). This estimates the cost of equity as the risk free rate (discussed above) plus an equity risk premium (ERP). The ERP is composed of two parts, an estimate of risk for the market as a whole and a company specific risk relative to the market as a whole (known as its beta). It is also appropriate to consider whether there should be an adjustment for a small business risk premium. These are discussed below.

Equity risk premium for the market as a whole

2.12 The appropriate method of estimating the ERP for the market as a whole has been the subject of considerable debate. This has mainly focussed on whether the ERP should be based on observing past returns, surveying investors' expectations or combining estimates of dividend yields and real dividend growth.

2.13 The Competition Commission estimated an ERP of 4 per cent in its August 2000 review of the two WOCs, based on a range of 3.5 per cent to 5 per cent. The Transco price control review considered this and a range of evidence on historical and future returns. The price control review highlighted that further information had emerged since the Competition Commission reports on the expected level of future returns. Two recent studies[1] reconciled forward-looking expectations of returns with historical returns, supporting an estimate of the ERP of around 3.5 per cent.

Company specific risk premium (beta values)

2.14 Within CAPM the company specific risk premium is measured by the volatility of a company's share price relative to movements in the overall market and is expressed as an equity beta value. IGT activities are not separate companies quoted on the stock market, but are either subsidiaries of large companies or non-quoted independent companies, and therefore a beta value cannot be directly calculated for their transportation activities. A number of methods exist to estimate beta in these circumstances:

- beta decomposition – identifying the contribution of businesses within a group towards its overall beta value, and separating these influences to estimate an IGT beta value; and
- comparator companies – using estimates of beta for similar companies to estimate an IGT beta value.

2.15 These methods were used to estimate a beta value for Transco during the 2001 price control review. It was determined that an equity beta of 1 was applicable to Transco, consistent with the average risk for the market as a whole. Some evidence was presented to Ofgem that the equity beta for Transco should be higher, indicating greater risk than the market as a whole, based on the effect of

[1] Millennium Book II, 101 Years of Investment Returns, Elroy Dimson, Paul Marsh and Mike Staunton, ABR-AMRO and London Business School, 2001. Still puzzling over the equity risk premium, Adrian FitzGerald, Professional Investor, February 2001.

increased gearing on equity risk. However, other approaches[2] to estimating beta suggested a lower value. The Competition Commission in its August 2000 reports identified an equity beta range of 0.7 to 1 for small WOCs (on the basis of gearing between 25 and 50 percent).

2.16 Overall, monopoly network businesses have been viewed as low risk undertakings. For IGTs the precedents considered above indicate that an equity beta in the range of 0.7 to 1 is appropriate. Given that the equity beta is not directly observable for IGTs it is important to consider whether the risk arising from IGTs' commercial and regulatory environment supports this estimate. The evidence set out in appendix 1 supports the view that IGTs are relatively low risk businesses.

Small business risk premium

2.17 In its August 2000 reports the Competition Commission identified a small business equity risk premium of around 0.8 per cent applicable to WOCs. This related to the higher transaction costs from dealing in the shares of smaller companies, where market liquidity tends to be relatively low. This small company premium was granted only if WOCs had an arms-length relationship with any parent company.

2.18 The IGTs are relatively small enterprises. Where an IGT is financially and operationally ring-fenced from a parent company a small company premium could apply to the cost of equity. Where IGTs continue to operate without such restrictions as a part of a large company it is not clear that it would be appropriate to apply such a premium.

Taxation

2.19 It is necessary to adjust the cost of equity finance for corporation tax in order to determine the real pre-tax WACC. This can be achieved by applying a tax wedge of 30 per cent, consistent with the mainstream rate of corporation tax. This gives a multiplier to the cost of equity of 1/(1-0.3) or 1.429.

[2] 2001 Electricicty Distribution Price Review – Issues Paper, pp140 – 142, Office of the Regulator-General, Victoria, February 2000. A few things transport regulators should know about risk and the cost of capital, I. Alexander, A. Estache and A. Oliveri, Utilities Policy 9 (2000).

Summary

2.20 From the analysis above the range of real pre-tax WACC applicable to IGTs can be summarised below.

Table 1: Real Weighted Average Cost of Capital for IGTs

Component	Low	High
Cost of debt:		
Risk free rate	2.75	2.75
Debt risk premium	2.0	3.0
Cost of debt	**4.75**	**5.75**
Cost of equity:		
Risk free rate	2.75	2.75
Equity risk premium for the mkt	3.5	3.5
Gearing	37½	37½
Equity Beta	0.7	1
Small company premium	0.0	0.8
Post tax cost of equity	5.2	7.05
Taxation adjustment (multiplier)	1.43	1.43
Pre-tax cost of equity	**7.4**	**10.1**
Real pre-tax WACC	**6.4**	**8.5**

2.21 The above table identifies a range of 6.4 to 8.5 per cent for the cost of capital that could apply to IGTs. The small company equity risk premium may apply to the cost of equity finance if an IGT is ring-fenced from its parent company. Without the small company equity premium the range for the cost of capital would be 6.4 to 7.7 per cent.

3. The Application of the Cost of Capital to IGT Charging

Introduction

3.1 As noted in chapter 1 each GT's condition 4 charging methodologies should conform to certain objectives, including that the charges result in no more than a reasonable profit for the GT. At present condition 4 charging methodologies vary in form and content. The extent to which there would be advantages in more uniform and transparent arrangements will be considered as part of a wider review of IGT charging. A further consultation paper will be published on these matters shortly. This further consultation will also consider whether charges made pursuant to licence condition 4C should be constrained by a reasonable profits obligation.

3.2 This chapter discusses how IGT profitability should be measured and the role of the cost of capital and Net Present Value (NPV) tests.

Measuring reasonable profits

3.3 There are a variety of approaches to assessing whether profits are reasonable. These include accounting measures of return on capital employed (ROCE), and, cash based measures of internal rates of return and NPV. Finance theory suggests that NPV tests tend to give the most reliable and unbiased estimate of returns. In essence these tests involve discounting the cash flows associated with a project or enterprise back to a base year. If the relevant cost of capital is used as the discount rate then a positive NPV might indicate excess returns or profits.

3.4 It would also be possible to consider a combination of accounting measures and an NPV test. However there would be a number of difficulties in making robust comparisons of accounting ROCE with the returns earned in other sectors, the cost of capital or other benchmarks. This is because ROCE tends to be distorted by the interaction between the historical patterns of capital expenditure and inflation.

3.5 There are other accounting measures that can be used to assess financial performance. For instance credit rating agencies place particular emphasis on levels of debt and cash flow coverage of debt financing costs, in view of the difficulties in comparing reported earnings and balance sheet data between

companies operating under different regulatory regimes, commercial environments or following different accounting conventions. Therefore measures such as the coverage of interest charges by funds from operations (FFO) and the ratio of FFO to total debt are considered more relevant and reliable than earnings coverage or balance sheet gearing. However these ratios tend to be measured at a company or group level in order to match the financing arrangements of the companies concerned. Where IGTs are concerned gas transportation tends to be one activity within the group and there are presently no ring fencing provisions applying to their licensed activities. In order to calculate these ratios it would be necessary to hypothecate financing costs to GT activities. It is not clear that this would produce meaningful comparisons.

Applying an NPV test

3.6 As well as establishing the cost of capital it would be necessary to determine a number of other factors in order to specify an NPV test. These could include:

- whether to look at individual projects or consider returns across each GT's portfolio of projects;
- the time period over which cash flows would be discounted. Gas transportation assets tend to have relatively long economic lives suggesting a relatively long period for an NPV test, particularly if the test were to applied to individual projects. This is in contrast to setting price controls where it is usual to consider returns over a five year period;
- whether the test would be applied on an ex ante or ex post basis. An ex ante test would be carried out at the start of a particular project. This might provide strong incentives for efficiency as the GT could then seek to minimise out-turn costs compared to the initial projections used in the NPV calculation. A difficulty with this approach might be in ensuring the robustness of the initial projections. An ex post test, based on out-turn costs and revenues, might better deal with these difficulties;
- the definitions of the costs and revenues that would form the cash flows. For instance actual or projected levels of costs could be used or benchmarks representing the costs that might be incurred by a reasonably

efficient enterprise. While benchmarking costs might encourage efficiency it is less clear that this would be consistent with the present drafting of licence condition 4 and 4A;

- the treatment of asset values and the terminal values of assets at the end of the time period over which cash flows have been discounted; and

- whether it would be necessary to audit or verify any data provided by IGTs as part of the process for assessing reasonable profits or returns.

3.7 In reaching a judgement on the factors set out in paragraph 3.6 it will be appropriate to balance the advantages of protecting the interests of consumers with ensuring licence holders can finance their activities and encouraging efficiency, while bearing in mind the constraints provided by the present drafting of licence conditions 4 and 4A. Wider questions as to the future regulation of IGTs will be dealt with in a further consultation paper to be published shortly.

4. Main Issues for Consideration

4.1 Views are invited on any aspect of the issues raised in this paper and in particular on:

- the overall approach to establishing the cost of capital described in chapter 2;
- whether the assumption of a 25 to 50 per cent range for gearing is reasonable;
- the cost of debt finance and in particular the 2 to 3 percentage point range for the debt risk premium;
- the range for equity beta;
- whether it is appropriate allow a small company equity premium to IGTs and if so under what circumstances or conditions;
- whether the allowance for corporation tax in the cost of capital calculations is reasonable;
- the calculations of real pre-tax WACC set out in table 1;
- whether an NPV test would provide the most appropriate basis for assessing if profits or returns are reasonable;
- the factors set out in paragraph 3.6 relating to the specification of NPV tests; and
- the assessment of the risks facing IGTs from commercial and regulatory arrangements, as set out in appendix 1.

Appendix 1 Commercial and regulatory environment

1.1 The commercial and regulatory environment in which each IGT operates will influence its cost of finance. Four factors are considered below:

- network development and competition;
- operation and management of networks;
- charging structures and cost recovery; and
- financial structure and ownership.

Network development and competition

IGTs

1.2 An IGT does not necessarily own a pre-existing gas pipeline network, instead it may need to win contracts to construct or adopt and subsequently operate new networks. The networks are connected to Transco's network or other GTs' systems. For any individual IGT this may lead to ownership of networks on multiple sites, which can be widely dispersed across Great Britain. Once a network has been constructed or acquired the IGT tends to have a local monopoly over gas distribution.

1.3 IGTs have developed two roles within the connections market. First IGTs offer construction and operation services directly to property developers, typically contracting-out the construction work, and then adopting and operating the network. Second IGTs purchase and adopt networks constructed by others. In this case IGTs may deal with property developers or pipeline construction businesses. An IGT may adopt either role on a case-by-case basis. The costs incurred can be recovered from up-front connection charges, via standard licence condition 4B, or through on-going transportation charges (either condition 4 or 4C supplemental connection charges). It is also possible for an IGT to use a combination of these methods to recover network development and transportation costs.

1.4 An IGT also has obligations to offer terms for the connection of new premises to its networks. This may result in additional reinforcement costs if significant extra load is added to the system.

Other regulated networks

1.5 All other regulated network businesses own and maintain extensive transportation or distribution networks regionally or across GB. These networks were established before privatisation and guarantee the business a large established consumer base. The networks are reinforced over time to meet load growth, including that associated with new connections.

Discussion

1.6 For each IGT the potential sources of risk include its relatively small consumer base. This may increase its vulnerability to unexpected economic shocks. However, its risks appear to be limited by the following factors:

- once constructed an IGT network tends to be a monopoly;
- initial capital costs are only incurred if an IGT bids for and wins a construction or adoption contract for a specific network;
- IGTs are able to select which networks they bid for; and
- IGTs may offer a fixed price to adopt a network and so avoid risks associated with construction cost overruns.

1.7 Overall, the flexibility available to IGTs allows them to avoid or manage much of the risk that would be associated with a normal competitive process.

Operation and management of networks

IGTs

1.8 The operational and management obligations of IGTs include establishing a safety case with the Health Safety Executive and managing the supplier transfer process. All IGTs presently contract with Transco for the provision of emergency services.

1.9 Each IGT has established its own method of dealing with supplier transfers – this can be as basic as a simple fax-based system. The industry and Ofgem are encouraging all IGTs to adopt an IT system compatible with UK Link (Transco's supply point administration system).

1.10 Ofgem has proposed that guaranteed standards (GS) and overall standards (OS) of performance for consumer services should apply to IGTs. These standards will apply to a range of consumer services. Failing to meet the standards might result in a financial penalty.

1.11 Other operating risks arise from damage to pipes, usually when third parties are carrying out excavation work. All GTs are required to plan for demand arising from a severe winter. IGTs are also able to use the latest pipe materials. These materials are low maintenance and have relatively long economic lives.

Other regulated networks

1.12 Transco, and other regulated network businesses, have much greater responsibility for managing the networks that they operate to ensure security of supply. Transco's operating responsibilities include supplier transfers, establishing a safety case, balancing the NTS and LTS pipeline systems, operating the emergency service call centre and measuring calorific values. Failure to deliver these services could expose Transco to additional costs or risk of a licence breach. In addition, the age and materials of some parts of Transco's system make supply failures and loss of gas more likely. Transco has established a capital replacement programme for ductile and cast-iron pipes – failure to successfully replace these would impact upon Transco's safety record. Transco will also be required to meet guaranteed and overall standards of service with financial penalties for failure.

Discussion

1.13 The operating and management responsibilities of IGTs appear less onerous than those facing Transco. In addition, IGTs have been able to use new pipeline materials – avoiding ductile or cast-iron mains that now require replacement. Overall, simpler operating responsibilities suggest that IGTs are exposed to less risk than other monopoly network operators.

Charging structures and cost recovery

IGTs

1.14 At present IGTs transportation charges are not explicitly price controlled. However, condition 4 charges are limited to earning no more than a reasonable profit and condition 4C methodologies require acceptance by the Authority.

1.15 The majority of IGT networks serve domestic housing. Domestic connections tend to have a long-term and stable demand for gas – providing a stable basis for use of system charges. The majority of costs incurred by IGTs are capital costs i.e. the initial expenditure required to build or adopt a gas network. Each IGT has some flexibility to structure its charges, through the design of its charging methodologies, to allow recovery of costs either from initial connection charges or on-going use of system charges.

Other regulated networks

1.16 Transco (and other monopoly network operators) are explicitly price controlled – with a limit on the revenue that may be recovered through use of system charges. The price control and the existing charging methodologies generate historical patterns of charging. This may leave Transco with less flexibility in structuring its charges. The price control also establishes a boundary between costs recovered through transportation charges and connection charges. This results in transportation charges which recover operating costs and network capital costs (arising from statutory allowances or reinforcement) not recovered directly from consumers. Remaining network costs are recovered directly from the consumers through an initial connection charge.

Discussion

1.17 IGTs incur costs when they construct or adopt a network. These costs present a risk if they are not immediately recovered. IGTs may seek to adopt methodologies designed to limit these risks. They may also choose to compete for sites where the demand for gas is likely to be relatively stable. Nevertheless the commercial environment in which IGTs bid to win networks (see network development above) provides an incentive to recover costs through on-going transportation charges – in

order to reduce up-front charges to developers. This may expose IGTs to higher risk from revenue volatility.

1.18 There are certain risks to IGTs arising from the present charging arrangements. To some extent these appear to relate to the incentives on IGTs to minimise up-front connection charges and maximise transportation charges. However IGTs can manage these risks. It is not clear the risks that a well managed IGT would face are significantly greater than those facing other monopoly network operators.

Financial structure and ownership

IGTs

1.19 The ownership structure of IGTs varies across businesses. Typically IGTs are either subsidiaries of large groups, often energy sector groups, or small independent companies. A number of related companies may exist within the same group often undertaking pipe-line construction work, gas shipping, supply or other related services.

1.20 Financing for IGTs is typically provided directly from the parent business or through debt. Standard licence conditions do not presently require an IGT to be operationally or financially independent of its parent company.

Other regulated networks

1.21 Other regulated network businesses are also part of large groups, however, in contrast to the IGTs, Transco, NGC and electricity distribution companies are required to maintain a ring-fence. The ring-fence requires the regulated company to maintain an arms-length relationship with related companies, limits the activities the regulated company may be involved in and is designed to protect it from adverse financial consequences that might arise elsewhere in the group. The ring-fenced company must also maintain an investment grade credit rating on its debt. Many regulated companies have a significant proportion of debt finance.

Discussion

1.22 Many IGTs are relatively small businesses in terms of turnover, assets and scale of operation. Small businesses are typically identified as higher risk because there is less information available about them for investors, they may be unable to bear economic shocks as easily as large companies and share dealings have higher transaction costs due to infrequent trading. In these cases equity investors may require an additional premium to compensate for this greater risk. However, IGTs that are part of larger groups of companies are unlikely to be considered a small company and should be able to raise finance through the parent business at competitive rates. In these cases a small company premium would not apply. An exception might be where an IGT was financially and operationally ring-fenced from its parent company.

1.23 There may be differences in the cost of debt typically available to IGTs compared to other large regulated companies, which are particularly attractive to investors providing debt finance. However, these are most easily dealt with by making appropriate assumptions with respect to debt levels and premia when estimating the cost of capital.

Summary

1.24 With respect to network development, the operation and management of networks, charging structure and cost recovery it appears that a well managed IGT would face similar or lower risks when compared to other network monopoly companies. While different financial structures may lead to some differences in the cost of capital these have been dealt with in Chapter 2.