National Grid Transco – Potential sale of network distribution businesses

Consultation document

July 2003

Executive Summary

This document sets out the regulatory issues associated with National Grid Transco plc (NGT)'s proposals to sell one or more of its gas distribution network businesses (DNs), commonly known as local distribution zones (LDZs). The document outlines NGT's proposals and sets out the regulatory issues associated with these proposals. The document focuses on the impacts of the proposals on the present governance arrangements in the gas sector and the impact on the commercial, regulatory and operational arrangements at the interface between Transco's National Transmission System (NTS) and the DNs. The document seeks views on a number of options for addressing these issues.

Ofgem considers that the sale of one or more DNs should result in net benefits for customers. Further, Ofgem has carried out a preliminary Regulatory Impact Assessment (RIA) which supports further development of more detailed proposals.

NGT's proposals

In January 2003, NGT approached Ofgem indicating that it was considering the feasibility of selling one or more DN businesses. Following this, NGT and Ofgem have had a number of discussions regarding the issues and implications associated with any potential sale. NGT and Ofgem separately have also been discussing the implications of a potential sale with the Health and Safety Executive (HSE). On 21 May 2003, NGT formally indicated that it would consider the sale of one or more DNs if this were to maximise shareholder value.

NGT has indicated to Ofgem that as part of any DN sale it will dispose of the relevant network assets, the relevant system control and operations centre, the relevant asset management, maintenance, construction and investment planning resources and the information systems associated with the DN.

Process for selling DNs

In order to be able to sell a DN business, Transco will be required to obtain the consent of the Gas and Electricity Markets Authority and the Secretary of State under the Gas Act and the conditions of Transco's Gas Transporter (GT)'s licence.

In addition, NGT must also obtain the approval of the HSE as to the necessary changes that are required to Transco and the Network Emergency Coordinator's safety cases.

This document therefore commences the process by which NGT will be able to secure Ofgem approval to the sale of relevant assets.

In order to determine whether consent should be granted by Ofgem, NGT will need to agree to a range of changes in its commercial and operational framework.

Impact on regulatory architecture

The possible sale of one or more DN businesses raises significant issues regarding the governance of those DN businesses that have been sold by NGT, those that NGT might choose to retain, the NTS and transportation arrangements more generally. These issues relate to the extent to which Transco's NTS should be separated from any retained distribution businesses in order to ensure non-discrimination and the governance of the licensing and network code arrangements for retained and independent DNs.

In terms of separation, Ofgem has identified a series of options ranging from internal separation and ring fencing to full structural separation of retained DNs from Transco's NTS business.

We have identified two options for the licensing arrangements. One option is to establish a 'transmission' licence for Transco's NTS business and 'distribution' licences for each of the DNs including those that have been retained. A further approach is to continue with the present GT licence, segmented into common, NTS and DN activities.

We have identified three options for Transco's network code arrangements which set out the nature of the transportation arrangements that are established going forward for both Transco as well as retained and independent LDZ businesses. One option is to have separate network codes and associated modification rules and framework agreements for Transco and each DN business. Another approach is a uniform network code (UNC) applying to Transco and each DN specifying the transmission and distribution arrangements for Transco, shippers as well as independent and retained DN businesses. A further option is a common distribution network code for all DNs with a separate transmission code for Transco.

In the event that one or more DNs are to be sold, an effective governance framework will be required to manage the operational and commercial relationship between the NTS and DNs. This interface is currently managed under internal Transco operating rules. In considering these issues, NGT has proposed that the operational and commercial relationship between Transco, as transmission owner/operator, and each of the DNs be defined through an "Offtake Agreement."

Impact and options for exit and interruptions regime

The potential sale of one or more DN businesses raises significant issues for the exit capacity arrangements. One issue is the contractual arrangements for interruption at the NTS/DN interface. We have set out three options to address this issue. One option is to restrict the right to enter into arrangements to interrupt a site to the operator of the system to which the site is connected. Another option is for Transco NTS to effectively determine interruption on both the NTS and each DN. A further option would involve each network contracting directly with the sites on either system for the purposes of interruption management on their system.

Related to the issue of contractual arrangements, a further matter for consideration is the pricing of exit capacity and interruption. Again, we have set out three options to address this issue. One option would be for Transco and DN system operators to develop market related contracting arrangements for interruption for long and shorter term periods. An administered option for pricing interruption would be for Transco and the DN system operators to develop a suite of interruptible contracts of varying quantities and durations with prices from which customers could select the terms that most suited the service they were willing and able to provide. A further approach for arranging interruption would be a combination of the market based contracting and administered options.

Impact and options for gas balancing

Ofgem has identified two options for gas balancing. One is a "single SO model" in which the NTS and DNs would be treated as 'whole' for the purpose of gas balancing. Shippers would have financial incentives to balance across the system as now with the NTS and DNs managing gas transfers through the offtake agreement. The other option is a "multiple SO" model in which shippers are required to balance separately across the NTS and DNs. Transco and separate DN businesses would be responsible for balancing their own networks.

Ofgem is also seeking views on a number of other issues including the impact of a sale on the treatment of linepack, system operator incentives, the treatment of transfers of gas between the NTS and each DN and the extent to which DNs could take on a trading role.

Impact on Supply Point Administration Process

Currently, the GT licence sets out obligations to provide a SPA service. The licence allows GTs to establish or procure this service. Transco's network code covers all contractual issues relating to the provision of SPA including the change of supplier process and various data management functions. Shippers and suppliers have developed their systems and procedures to meet the requirements of Transco's network code. These systems and processes are key to the operation of the market.

The sale of DNs could require changes to how data management, SPA and CoS activities in relation to customers connected to the divested network will be undertaken. This may be achieved in a number of ways:

- transfer the responsibility for the operation of systems and procedures to each of the independent DNs who would develop and provide their own set of business processes to support change of supplier activities or;
- contract the responsibility to a third party, or;
- Transco, as the gas transmission operator, continues to provide services on behalf of DNs.

Other aspects of the NTS/DN interface

The potential sale of one or more DNs raises several other issues at the NTS/DN interface. These include system planning, the management of gas shrinkage, the treatment of gas quality and impacts on the existing safety / emergency frameworks.

In terms of shrinkage, Ofgem anticipates that any sale of a DN will facilitate the unbundling of shrinkage services into the management of DN gas shrinkage and the management of NTS gas shrinkage. Ofgem also anticipates that unbundling may require some renegotiation of existing shrinkage contractual arrangements. An alternative to

unbundling would be to allow Transco to continue to manage DN shrinkage on behalf of each DN.

In terms of gas quality, DNs do not have any control over the quality of gas that is delivered to them. As such, in the event of a sale of any DN businesses, it would seem appropriate that incentives should be placed on Transco as NTS owner and operator to offer gas quality services to users on a non-discriminatory basis.

In terms of safety, the HSE has indicated to Transco that both the Transco and Network Emergency Coordinator safety cases need to be amended in the event of a sale. In amending these safety cases, Transco will need to satisfy the HSE that there will be no reduction in the safe management of the gas system resulting from the potential sale of one or more DNs. Prior to completion of a sale, the buyer will need to have a safety case for that DN which has been accepted by the HSE.

With respect to provision of emergency services, it is intended that Transco will retain the responsibility for providing the national gas emergency number through its call centres. An issue to be considered is ensuring, in the event of a major supply loss incident, arrangements between the DNs to ensure that all customers are reconnected as quickly as possible.

Consideration will also need to be given to the nature of the licence obligations with respect to network planning on both the NTS and DNs. The licence framework will also need to define how the Transco and the DNs will need to interact in order to satisfy their planning obligations.

Related issues

The potential sale of one or more DN businesses may also impact on several areas of related work. These areas include Transco's transmission and distribution price controls, Transco's mains replacement expenditure cap, pension arrangements, metering and the present review of Transco's distribution pricing methodology. Ofgem has invited views on these matters.

Ofgem's initial views and way forward

NGT's proposals represent a fundamental change to the structure of the gas industry and significant work will be required to understand the detailed implications of any DN sale.

A number of important issues have to addressed, including complexity for shippers and customers, as well as the avoidance of discrimination. Nevertheless, it is Ofgem's initial view that if these issues can be resolved satisfactorily, then NGT's proposals should be beneficial for customers

Ofgem has also reached a number of initial views on several of the options outlined above. These views are briefly summarised below.

Licence and network code governance

Ofgem's initial view is that it would be preferable to create separate transmission and distribution licences as a clear delineation of transmission and distribution activities will assist in preventing the potential for discrimination by Transco in its treatment of DN businesses.

In terms of network code arrangements, Ofgem's initial view is that uniform network code arrangements would be an appropriate starting point for network code governance as it would minimise disruption for shippers and therefore facilitate competition. Ofgem would also note however that in the future it may be desirable for the regime to evolve towards separate transmission and distribution network codes. As such, any uniform network code arrangements should not preclude these developments.

Gas balancing arrangements

Ofgem's initial view is that a single SO model is to be preferred over a multiple SO model for the purposes of gas balancing. In particular, Ofgem considers that a single SO model would preserve the competitive benefits of retaining liquidity at the NBP.

Way forward

This consultation document starts the process by which NGT will be able to secure Ofgem approval to the disposal of relevant assets. Following this consultation, Ofgem intends to release a final proposals document in November 2003 with Transco conducting more detailed workstreams with industry participants in 2003/04. A possible timetable for consent would be September 2004, although we consider this to be somewhat ambitious.

Ofgem recognises the potentially significant nature of the NGT's proposals. To this end, we are intending to hold a workshop at which interested parties can explore the issues raised in this document in more detail.

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1. Introduction

Purpose of this document

1.1. The purpose of this document is to consult upon the regulatory issues associated with National Grid Transco plc (NGT)'s proposals to consider the sale of one or more of its gas distribution network businesses (DNs).

1.2. The document outlines NGT's proposals and sets out the regulatory issues associated with these proposals. The document focuses on the impacts of the proposals on the present governance arrangements in the gas sector and the impact on the commercial, regulatory and operational arrangements at the interface between Transco's National Transmission System (NTS) and the DNs. The document seeks views on a number of options for addressing these issues.

1.3. The document also sets out a preliminary regulatory impact assessment of the NGT proposals and seeks views on this assessment.

Outline of the document

1.4. Chapter 2 sets out a summary of the regulatory decision making framework in the gas industry and compares this to the electricity industry. Chapter 3 outlines NGT's proposals for the sale of one or more DNs. Chapter 4 summarises the main regulatory impacts of the NGT proposals in terms of regulatory architecture including licence and network code governance. Chapter 5 describes the impacts of a potential DN sale on the present exit capacity and interruptions regime. Chapter 6 outlines the impacts of the proposals on the present gas balancing regime. Chapter 7 sets out the impacts of the proposals on the supply point administration (SPA) process. Chapter 8 outlines the impacts of the proposals on a number of other aspects of the NTS/DN interface. Chapter 9 sets out a number of related issues and chapter 10 sets out Ofgem's initial views and a proposed way forward.

Views invited

1.5. Ofgem would welcome views on the issues raised in this consultation document. It would be helpful if responses could be received by 26 September 2003. Responses should be addressed to:

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1.6. Electronic responses may be sent to kyran.hanks@ofgem.gov.uk

1.7. Respondents are free to mark their reply as confidential, although we would prefer, as far as possible, open responses that can be placed in the Ofgem library. Ofgem would also prefer that non-confidential responses are sent electronically so that they can be placed on the Ofgem website.

1.8. If you wish to discuss any aspect of this paper, Mark Feather (telephone 020 7901 7437) or Charlette Holt-Taylor (telephone 020 7901 7493) would be pleased to help.

Workshop

1.9. In order to inform respondents' comments on this document, Ofgem intends to conduct an industry workshop on the NGT proposals in early September. Further details of this seminar will be published shortly on Ofgem's website at www.ofgem.gov.uk. In the meantime, you are welcome to express interest in attending by emailing details to becky.neale@ofgem.gov.uk whose telephone number is 020-7901-7327.

2. Regulatory Decision Making Framework

2.1. In this chapter, we describe the framework under which any sale of a DN business by NGT will be assessed. In this context, the existing regulatory framework needs consideration. We have prepared appendix 1 which outlines this framework.

Regulatory approval process

2.2. In order formally to dispose of a DN asset, Transco will require the consent of the Authority. This consent must be obtained under amended standard condition 29 of Transco's Gas Transporter's (GT) licence. This condition also provides the Secretary of State with a power of veto over any proposal on the part of Transco to dispose of a transportation asset to the extent that it comprises a significant part of the gas conveyance system in Great Britain.

2.3. Further, under Section 8AA of the Gas Act 1986 (the Gas Act) and Special Condition 25A of its GT licence, Transco must also obtain consent from the Gas and Electricity Markets Authority (the Authority) and the Secretary of State for Trade and Industry to the extent that it wishes to transfer any part of its licence to another entity.

2.4. In addition to obtaining the approval of the Authority, NGT must also obtain the approval of the Health and Safety Executive (HSE) as to the necessary changes that are required to Transco and the Network Emergency Coordinator's safety cases.

The gateway concept

2.5. This document commences the process by which Transco will be able to secure Ofgem approval to the sale of relevant assets. However, there are many matters to be addressed and resolved before any sale can occur. In this respect, Ofgem has created a 'gateway concept' in order to define those matters that will need to be resolved or the changes that will need to be delivered for Ofgem consent to any sale.

2.6. Under this approach, Ofgem considers that a distinction can be drawn between changes that must be delivered before a sale can occur and those matters where it is more appropriate for Transco to commit to broadly identified milestones and objectives prior

to Ofgem providing approval for a sale of assets. In general terms, Ofgem considers that, as a minimum, changes that are required to the general regulatory architecture in terms of licence and network arrangements must be completed prior to any consent being given to a disposal of DN assets.

2.7. Ofgem notes that there are several other issues relating to the sale where Transco may be required to have completed changes or agreed to changes prior to any consent being given. These issues include the development of arrangements with respect to exit capacity, gas balancing and supply point administration.

Regulatory principles and objectives

2.8. Ofgem does not seek to promote any particular industry structure over another. As such, we do not, in principle, oppose NGT in pursuing the sale of the DNs. However, in determining whether or not to consent to the disposal of an DN asset, Ofgem will have regard to its statutory objectives and duties as set out in the Gas Act including its principle objective 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.

2.9. With this background in mind, it is important to set out a number of broad principles and objectives that would need to be addressed in developing the regulatory arrangements that would apply in the event that Transco was to sell a DN business. These objectives and principles are set out below:

- the arrangements should ensure that Transco does not discriminate between DN businesses and/or shippers in its operation of the transmission system;
- the arrangements should ensure the economic and efficient operation of the NTS and DN systems;
- the arrangements should not distort competition between shippers and suppliers;

- the arrangements should not preclude future reforms that may improve the economic and efficient operation of the gas pipeline system or that facilitate competition between shippers and suppliers; and

- the arrangements should ensure security of supply and the effective management of emergencies.

2.10. In addition to these factors, Ofgem also considers that new arrangements, where appropriate, should be consistent with those applying to the electricity sector. A discussion of the relevant electricity arrangements appears below.

2.11. Ofgem would also note that any sale is subject to the provisions of the Competition Act 1998 (the Competition Act).

The electricity industry

2.12. Separation of the high pressure transportation system from the lower pressure transportation systems will result in the gas industry structure beginning to resemble the electricity industry structure in England and Wales. This comparison is also appropriate since potential purchasers of DNs could be existing electricity distribution companies. As such, an obvious starting point for consideration of issues arising from structural changes in the gas industry is the existing electricity model.

2.13. In the electricity industry in England and Wales, the high and low voltage grids are in separate ownership. The high voltage grid is owned by NGT's subsidiary, the National Grid Company (NGC). The low voltage grids are owned by the distribution network operators (DNOs).

2.14. Use of, and connection to, NGC's electricity network is governed by the Connection and Use of System Code (CUSC) and the Grid Code. The CUSC lays out the general principles relating to connections and the use of NGC's transmission system. These principles are then reflected in bilateral Connection and Use of System Agreements between NGT and individual system users. As there is no concept of a 'shipper' in the electricity industry, there need to be arrangements with suppliers as well as generators. The Grid Code is largely restricted to technical issues whereas the CUSC concentrates on commercial issues.

2.15. Suppliers have to enter into Use of System Agreements but not generally Connection Agreements, as these are signed between the DNO and NGC except in the case of large consumers directly connected to the transmission system. Consequently, suppliers pay Transmission Network Use of System Charges (TNUOS) and Balancing Services Use of System (BSUOS) charges.

2.16. TNUOS charges are used to recover the costs that NGC incurs in developing and maintaining the transmission network. For suppliers, they are based on peak demand. For large customers with half-hourly meters, this peak demand is measured over the three peak half hours with the highest system demand in the year, the "triad". This method of charging gives a strong incentive on customers to avoid consuming electricity during the peak half hours. For customers without half hourly meters, NGC estimates what their demand will be during the triad and hence what charges they would have incurred if they had been customers with half hourly meters. This cost is then translated into a commodity charge and recovered uniformly from suppliers on the basis of their customer's demand between 16:00 and 19:00 each day. Consequently, smaller customers have much less of an incentive to avoid the peak hours. Both types of TNUOS charges vary by location. For generators, use of system charges are based on each generator's maximum transmission entry capacity.

2.17. BSUOS charges are used by NGC to recover the costs it incurs in operating the transmission system. They vary every half-hour but are recovered uniformly from all users of the system on the basis of their consumption or generation in that half-hour.

2.18. In order to balance generation and demand on the transmission system NGC can either enter into contracts for system support services or accept bids and offers in the Balancing Mechanism. System support services contracts are typically with generators although such contracts can also be with customers on the demand side.

2.19. Demand side connections to the distribution networks are governed by connection agreements between the relevant DNO and its customers. Connection charges govern the assets attributed to the connecting party.

2.20. Suppliers using a DNO's system have to enter into a Distribution Use of System Agreement with the DNO and sign up to the Distribution Code. Whilst DNUOS charges generally reflect the long run incremental costs associated with transporting

electricity to customers connected at different voltages, there is no uniformity in the way that each DNO translates these costs into charges. A significant difference between the gas and electricity regimes is that DNOs tend not to put in place interruption arrangements with customers.

2.21. The CUSC sets out generic connection rights and obligations between NGC and users of the system (generators, suppliers and DNOs) and defines part of the relationship between NGC and the DNOs. Other relevant documents include:

- connection agreements which are supplemental to the CUSC and which define the site specific details for each connection between NGC and the DNOs;
- the Grid Code which defines the technical relationship between NGC and system users (DNOs and generators);
- the Balancing and Settlement Code (BSC) which governs the balancing rules for the electricity industry and hence covers some aspects of the commercial relationship between NGC and the DNOs. The BSC is administered by Elexon, a company owned by, but separate from NGT;
- distribution licences which require the DNOs to enter into the above agreements and which place obligations upon DNOs to provide information to NGC; and
- the Distribution Code which defines the technical relationship between DNOs and their users.

2.22. The systems for SPA are owned by the DNOs. The governance of SPA lies in the Master Registration Agreement (MRA) which is administered by MRA Service Company Ltd, a 'not for profit' company funded by MRA parties and established under the MRA.

2.23. A comparison of the present structure of the two industries is given in table 2.1 below:

Table 2.1: Comparison of regulatory frameworks in the gas and electricity sectors

	Gas	Electricity
Transmission use of system	Transco's network code	CUSC and Grid Code and Use of System Agreements
TUOS charges	Paid by shippers. Entry charges based on long and short term auctions. Exit charges based on expected peak day throughput. A throughput based system operator commodity charge also applies	Paid by suppliers, based on peak half hour throughput or half hourly estimates and by generators based on each generator's maximum transmission entry capacity
Interruptions	Called by Transco under its network code. Shippers do not pay exit charges for the interruptible load they supply	Self interruption of large customers at times of peak demand to avoid TNUOS charges
Transmission connection	Transco's network code, Network Exit Agreements, Network Entry Agreements, storage and interconnector connection agreements	CUSC and Grid Code and connection agreements with DNOs and directly connected customers
Transmission connection charges	Connection agreement with charges for connection	Based on connection assets, paid via connection agreement
Energy balancing	Transco's network code	BSC as administered by Elexon
Distribution use of system	Transco's network code	Distribution use of system agreements and Distribution Code
DUOS charges	Based on peak day capacity and commodity charges	Various
Distribution interruptions	Called by Transco in accordance with its network code. Shippers do not pay exit capacity charges in respect of interruptible loads that they supply	None
Distribution connection	None	Connection agreements cover connection assets
Supply point administration	Transco's network code	MRA
T / D interface	No contractual basis	CUSC, BSC, connection agreements and Grid Code
Network planning	Internal Transco discussions	DNOs must contract with NGC for extra capacity

Emergencies	Internal Transco procedures	NGC has power to instruct emergency load shedding by DNOs
Balancing charges	System operator commodity charge, capacity and balancing neutrality charges	Balancing Services Use of System Charge, a half-hourly varying commodity charge

3. NGT's proposals

3.1. This chapter sets out NGT's preliminary proposals for the sale of one or more DNs.

Background

3.2. In January 2003, NGT approached Ofgem indicating that it was considering the feasibility of selling one or more DNs. Following this, a number of discussions have been held between NGT and Ofgem regarding the issues and implications associated with any potential sale. Separately, NGT has also been discussing the implications of a potential sale with the HSE. Ofgem has also been discussing the proposals with the HSE.

3.3. On 21 May 2003, NGT formally indicated in its Preliminary Statement of Results for the year ended 31 March 2003 that it was involved in discussions with Ofgem on the regulatory issues associated with the separation and potential sale of individual DNs. In this statement, NGT said that it would consider the sale of one or more individual networks if this were to maximise shareholder value.

Scope of any network sale

3.4. NGT has indicated to Ofgem that the following assets/resources would be sold as part of any DN sale:

- the network assets falling into the authorised area of the relevant DN including all assets from and including the NTS offtake to the emergency control valve (excluding meters); assets include fixtures, fittings, and operational land and property;
- the system control responsibility for that DN;
- the asset management, maintenance, construction and investment planning resources associated with that DN;
- the information systems associated with the DN; and

- policies and procedures required to operate the network.

3.5. NGT is also considering including the first response workforce associated with a DN in any proposals for the sale of that DN.

3.6. Under the proposals, NGT envisages that Transco would offer a number of services to any purchaser of a DN including:

- the establishment of an agency to maintain a common interface for shippers. The agent would provide management and processing of supply point data, transportation and energy balancing invoicing, and credit risk management for energy;
- emergency call handling, maintaining the single gas emergency number – 0800 111 999;
- high pressure pipeline maintenance services;
- interim business services (principally IS services); and
- interim network system control.

4. Regulatory architecture

Introduction

4.1. The sale of one or more DN businesses raises significant issues regarding the governance of those DN businesses that have been sold by Transco and those that Transco might choose to retain.

4.2. In this chapter, we discuss some of the legal, governance or "regulatory architecture" issues arising from the potential sale of a DN business. We discuss some of the Transco/DN separation issues that need to be considered in determining the regulatory architecture. We set out a number of options for the licensing and network code arrangements that would need to be established in the event of a DN sale. We also discuss the governance arrangements that could apply at the NTS/DN interface. Each of these issues has been informed by initial work carried out by Transco and which are referenced accordingly, and attached as appendices.

Application of the gateway concept

4.3. As noted in chapter 2, Ofgem has created a 'gateway concept' in order to define those matters that will need to be resolved or the changes that will need to be delivered for Ofgem consent to any disposal.

4.4. In general terms, Ofgem considers that any changes that are required to the general regulatory architecture in terms of licence and network arrangements must be completed prior to any consent being given to a disposal of DN assets.

4.5. Ofgem would note that the changes to the regulatory architecture arising from the sale of a DN will need to be informed by any proposals and objectives that Transco commits to with respect to the exit capacity, gas balancing and SPA arrangements.

4.6. As with the development of the original network code arrangements for Transco, we would expect there to be significant iterations between policy objectives and legal objectives.

Regulatory Architecture – separation issues

4.7. In chapter 2, Ofgem outlined a number of principles and objectives against which any sale of a DN business would need to be assessed. These principles include the need to ensure non-discrimination by Transco in its treatment of DN businesses and the need to ensure that any new regulatory arrangements promote efficient system operation and do not distort competition between shippers and suppliers.

4.8. An important factor to consider in addressing these objectives are the separation arrangements governing the ownership and operation of Transco, and any retained distribution networks (RDNs). In this respect, Ofgem considers that effective separation arrangements need to be put in place to ensure that Transco does not discriminate in favour of its RDNs in its operation of the NTS.

4.9. There are a number of possible options that could be applied to facilitate the achievement of the above objectives including, importantly, ensuring non-discrimination. These include internal separation between Transco and any RDNs. This could be achieved through ring-fencing and staff separation obligations. Alternatively, Ofgem could require full structural separation of the Transco and RDN businesses. Under this option any RDN would take the form of a separate corporate entity to Transco. There are a range of separation options between these two extremes.

4.10. Ultimately, the nature of the structural arrangements that are implemented for Transco and any RDNs will have important implications for the governance arrangements that are ultimately adopted in the event of a DN sale. These governance arrangements are discussed further below.

Current licence arrangements

4.11. Transco is currently the holder of a GT licence under the provisions of the Gas Act. This covers its operation of the NTS and the DNs. Transco's licence covers many aspects, some related to its NTS operations, some related to DN operations and some related to both.

4.12. Under the requirements of the Gas Act, any independent DN (IDN) will need to hold a GT licence in order to be able to convey gas. There are a range of options and issues to

consider in determining the nature of these licence arrangements. In addition, consideration needs to be given as to whether the licensing arrangements established for IDNs also apply to RDNs.

Future licence arrangements

4.13. Following discussions with Ofgem, NGT prepared a paper outlining some options with respect to licensing as well as its assessment of which of Transco's licence conditions can be considered to be NTS related, which can be considered as DN related and those which might apply to both the NTS and the DNs. This is attached as appendix 2. The options for the licensing of a DN and the issues associated with each of these options are however summarised below. In its appendix, Transco has identified three options for licensing. Ofgem is pursuing only two at this stage.

Option 1: Separate transmission and distribution licences

4.14. One option is to establish a 'transmission' licence for Transco's NTS business and 'distribution' licences for each of the DNs including those that have been retained by Transco. In legal terms, both types of licences would be "GT" licences for the purposes of the Gas Act.

4.15. This option has a number of potential advantages. First, it ensures that the roles and obligations of transmission and distribution licence holders are clearly distinguished and identified. This makes regulatory accountability clearer and would assist in creating a clear arm's length relationship between transmission and distribution entities. This is likely to be an important consideration in ensuring that Transco, as NTS owner and operator, does not discriminate in favour of any RDNs.

4.16. Second, creation of separate licences would also allow for the separate development of transmission and distribution licences. This may be important to the extent that distribution networks have different characteristics and regulatory requirements from transmission networks. Further, separation into transmission and distribution licences would also increase consistency between the gas and electricity arrangements.

4.17. There are, however, a number of other issues to consider in addressing this option. These issues include whether the creation of two separate categories of transportation

licence would, as Transco suggests, require any form of legislative change thereby delaying any proposal for Transco to sell DN businesses.

4.18. The creation of two separate transmission and distribution licences may also result in unnecessary duplication of licence obligations as between Transco and the DNs. Also, there is the possibility that any existing Transco synergies across its NTS and RDNs will be lost with forced separation.

4.19. Further, consideration would also need to be given to the treatment of existing Independent Gas Transporters (IGTs) and whether these entities would become licensed transmission or distribution GTs. Such a process may also impact upon the timing of any sale of DNs by Transco.

Option 2: Transmission and distribution functions within GT licence

4.20. A further approach is to continue with the present GT licence, segmenting it into NTS, DN and common (NTS and DN) activities. In this instance, the GT licence would include certain conditions that apply only to distribution activities, certain conditions that apply to transmission activities as well as conditions that would apply to both. As such, specific obligations would only apply to the relevant entity (transmission company or DN) depending upon which licensed activity was being carried out by the licence holder.

4.21. This approach is unlikely to require any legislative change. However, the separate identification of licence obligations will impact upon any timetable Transco may have for selling DN businesses.

4.22. The approach has benefits to the extent that it facilitates the arm's length and non-discriminatory conduct of business as between Transco and RDNs. The creation of separate distribution and transmission obligations would facilitate the creation of any necessary ring-fencing provisions. Option 2 differs from Option 1 in so far as Option 1 automatically provides for the separate identification of transmission and distribution licence obligations within the GT licence.

4.23. The approach may have implications for IGTs to the extent that these might need to be allocated distribution or transmission obligations depending upon the nature of their network and the definition allocated to these activities

Potential new licence conditions

4.24. It is likely that several new licence conditions would have to be introduced into whichever form of licence was considered appropriate. These might include:

- uniform network code arrangements (see later discussion);
- obligations to ensure the efficient management of the gas system across the NTS/DN interface (see later discussion);
- obligations on DNs to operate in an efficient, economic and co-ordinated manner;
- system security standards to be redefined to include the requirements of the DNs;
- obligations to produce an offtake agreement at the NTS/DN interface (see later); and;
- non-discrimination placed upon Transco as owner and operator of the NTS with respect to IDNs and RDNs.

Process for licence amendment

4.25. There are different options under the present statutory and licence framework for licences to be disaggregated. For example, under section 8AA of the Gas Act it is possible for a licence holder to transfer a licence with the consent of the Authority. Under this process, it is possible to undertake a general or a partial transfer of licence conditions. In addition it is also possible for the Authority to modify certain licence conditions as part of the transfer.

4.26. An alternative to this approach would be for each DN to make its own application for a GT licence under section 7B of the Gas Act. It is also noted that the Gas Act sets out

processes by which the conditions of the GT licence can be amended. These processes are outlined in detail in section 23 of the Gas Act.

4.27. More detail on the possible licence amendment and transfer processes can be found in appendix 2.

Current network code arrangements

4.28. Under amended standard condition 9 of the GT licence, a GT is required to establish transportation arrangements that should achieve a number of objectives related, amongst other things, to ensuring the efficient and economic operation of its pipeline system, the efficient discharge of licence obligations and the securing of effective competition between relevant shippers and relevant suppliers.

4.29. In addition, a GT is required to prepare a network code setting out the terms of its transportation arrangements as well as procedures, known as modification rules, for the modification of its network code. In the case of Transco, its network code is given contractual force between Transco and each shipper through the Network Code Framework Agreement. This agreement is signed by Transco and each shipper that is a party to Transco's network code.

Future network code arrangements

4.30. The potential separation and sale of a DN business raises issues as to the nature of the transportation arrangements that are established for both Transco as well as RDN and IDN businesses. Following meetings with Ofgem, NGT prepared a paper outlining some options as to future network code arrangements. This paper is attached as appendix 3 and is summarised below.

4.31. In considering these options, there a number of important general policy principles to address including the extent to which NTS and DN network codes should be allowed to develop separately to address unique network characteristics and the extent to which they should remain common to facilitate competition between shippers and suppliers. These issues are discussed further below.

Option 1- Separate network codes for NTS and each DN business

4.32. Under this option, each RDN and IDN would have its own network code arrangements, modification rules and framework agreement which each relevant shipper would sign. The form and content of each DN network code could initially be based on Transco's present network code and modification rules. However, each DN network code would be sufficiently flexible to enable it to develop and evolve as an independent document.

4.33. There are, however, consequences associated with creating individual DN network codes. The creation of separate network code arrangements for transmission and distribution businesses would potentially require shippers to be a party to two or more separate commercial regimes for balancing and network access. In particular, under this approach each shipper will have separate commercial arrangements with each DN and the NTS. This may create additional administrative and commercial complexity for shippers.

4.34. On the other hand, the creation of separate network codes would create greater consistency with the existing electricity arrangements.

Option 2 - Uniform network code arrangements

4.35. Under this option, Transco's present network code would be converted into a uniform network code (UNC) governing transportation arrangements for Transco and shippers as well as RDN and IDN businesses. The provisions of the UNC would be similar to those in Transco's current network code but would identify separately transmission and distribution related obligations.

4.36. Under this option, an additional licence obligation could be established within amended Standard Condition 9 requiring the establishment of the UNC arrangements as well as obligations on Transco and each DN to co-operate through the UNC to achieve coordinated and efficient operation across the gas system. In addition, Transco and DNs could retain a licence obligation to establish a network code in short form referencing the rules of the UNC as their substantive code provisions.

4.37. Each DN would then be able to satisfy its own licence obligations to establish a network code and code modification rules by effectively establishing network codes and

modification rules that adopted the UNC and associated modifications rules. Under these arrangements each DN would have a framework agreement prepared for shippers to sign onto that DNs network code.

4.38. This approach would minimise the potential for different DN businesses to develop their own separate transportation arrangements and code modification rules. This may have certain benefits to the extent that consistent transportation arrangements reduce barriers to entry for shippers and market distortions across different zones. Conversely, it may restrict in the short term the ability of different DNs to develop transportation arrangements that address unique network characteristics. However, the UNC approach could be developed so as not to preclude the establishment of differentiated arrangements in the longer term through the modification of individual DN network codes.

4.39. The UNC approach is also potentially less costly from an administrative perspective although shippers, DNs and Transco may still need to establish some form of amended framework agreement. Consideration would need to be given as to whether distribution and transmission obligations are to be separately classified within the present network code.

4.40. In addition, careful consideration would need to be given to the nature of the code modification rules and the roles of the DNs in the modification processes. For example, it might be appropriate to replicate the electricity type arrangements, in that a modification body could be created to oversee the modification process. In electricity, this body is known as Elexon. Some feel that this modification process is more preferable to the gas modification process. Others, having seen how the electricity modification process has worked since it was introduced in 2001 may prefer to retain the existing gas modification process.

Option 3 - A transmission network code and uniform distribution code

4.41. A third option would involve the creation of a Transco transmission based network code and a separate common code for all DNs. Such an approach would involve classifying existing network code obligations into transmission and distribution related obligations

and locating these obligations in the relevant network code document. Separate framework agreements and modification processes would also be required for the transmission and distribution codes making this approach potentially more complex and costly in administration terms than Option 2.

4.42. Under this approach, distribution businesses could have their own short form codes which effectively adopt the uniform distribution code. Alternatively, standard condition 9 of the GT licence could be amended to require distribution business to become parties to a common distribution code.

4.43. As with Option 1, an additional factor to consider is that under this approach each shipper will have separate commercial arrangements with the DNs and the NTS. This may create additional administrative and commercial complexity for shippers.

The NTS / DN interface

4.44. The potential sale of DN businesses by Transco will create a number of important operational and commercial issues at the interface between Transco's NTS and each DN that will need to be addressed.

4.45. Currently, the interface between the NTS and each DN (being the same legal entity) is managed internally under internal Transco operating rules. However, once one or more DNs are sold , an effective governance framework will be required to manage the operational and commercial relationship between the NTS and DNs. These issues include:

- co-ordination of NTS and DN investment;
- operational arrangements to manage flows between the respective systems;
- ownership specification and operation of the offtake points;
- co-ordination of maintenance and engineering;
- co-ordination of network safety;
- defining services to be provided by the NTS to the DNs;

- defining services to be provided by the DNs to the NTS; and
- developing methodologies to govern network charging for services provided by each party.

Offtake agreement

4.46. In considering these issues, NGT has proposed that the operational and commercial relationship between Transco, as transmission owner/operator, and each of the DNs be defined through an "offtake agreement." NGT has provided some preliminary thinking on the scope of such an offtake agreement and this is attached as appendix 4, and summarised below.

4.47. NGT has proposed that Transco's licence be changed to introduce an obligation on it, as NTS owner and operator, to prepare the offtake agreement. The offtake agreement would then be given effect by a framework agreement between Transco and the DNs. Under these arrangements, Ofgem would be required to approve the agreement as well as any proposed modifications.

4.48. NGT also considers that the offtake agreement could also potentially act as a mechanism governing the relationship between Transco and NTS connected supply points potentially replacing the present network exit agreements. In this context, the concept of the offtake agreement could be extended to other NTS offtakes such as generators thereby governing matters such as offtake rates.

4.49. NGT's initial view of scope of the offtake agreement is as follows:

- charges for services;
- planning;
- connected facilities;
- offtake flow monitoring;
- maintenance and engineering works;
- safety and emergency coordination;

- gas quality and pressure;
- calorific value management;
- offtake capacity;
- diurnal storage;
- operational flows; and
- balancing.

NGT's views

4.50. NGT has set out its preferred governance and regulatory arrangements for the NTS and the DNs in the event of the sale of one or more of these businesses. These proposed arrangements are summarised below.

4.51. The potential sale of a DN raises a number of issues relating to the governance of Transco, the DN that is to be sold and any RDNs. In particular, consideration will need to be given to both the licensing and network code arrangements that apply to these businesses, and to Transco, following any DN sales.

4.52. During discussions with Ofgem, NGT has outlined governance arrangements that are intended to meet the following objectives:

- minimal changes where possible to the current commercial regime;
- minimal disruption for shippers;
- no changes required to primary legislation;
- any changes at a licence level being limited to changes to the GT licence; and
- any changes should not preclude further development or reform of matters such as network pricing.

4.53. In order to meet these objectives, NGT has indicated that its preferred option is to separately identify transmission and distribution activities under the GT licence (ie

option 2 above). Under this arrangement, each DN that has been sold would become a separately licensed entity, but would effectively hold a similar licence to that currently held by Transco. In general terms, the licence would make no distinctions between distribution and transmission activities. NGT has indicated that this option is simple and would require minimal change.

4.54. NGT has also proposed the adoption of uniform network code arrangements as described in option 2 outlined above.

4.55. The potential sale of one or more DNs raises a number of commercial and operational and issues at the interface between the Transco NTS and each DN network. NGT proposes that these are covered in the offtake agreement as outlined above.

4.56. In this context, NGT has proposed that the initial form of the offtake agreement should, to facilitate a network sale, be consistent with the present exit capacity and balancing regime arrangements. Thereafter, the governance arrangements for the offtake agreement would enable evolution consistent with changes (for example, exit capacity regime developments) to other industry documents such as the proposed UNC.

4.57. In addition, NGT has proposed the establishment of an agency which would, on behalf of all GTs operating under the UNC, undertake the management of a large range of functions relating to the network and shipper interface. These functions would include management and processing of supply point data and shipper invoicing.

Questions for consultation

4.58. In this chapter we have set out a number of options regarding the regulatory structure that could apply to Transco and any RDNs, the licensing and network code arrangements that could apply to Transco and the DNs in the event that one or more DNs are sold by Transco. We have also outlined Transco's proposal for the establishment of an offtake agreement at the NTS/DN interface.

4.59. Ofgem invites views from respondents on the matters raised in this chapter, including the following issues:

- the degree to which Transco and RDN businesses should be subject to internal separation or full structural separation requirements;
- whether separate licensing arrangements should apply to both RDNs and IDNs;
- whether separate transmission and distribution licences should be established; and
- whether transmission and distribution functions should be separately identified within the existing GT licence structure.

4.60. In terms of network code arrangements, Ofgem would invite views from respondents on the following issues:

- whether each RDN and IDN business should have its own network code arrangements and modification rules;
- whether UNC arrangements should apply to Transco and each DN;
- whether the UNC should separately identify transmission and distribution related obligations; and
- whether a common code for all distribution networks should be created with a separate transmission code for the NTS.

4.61. Ofgem also invites views on the concept and, if appropriate, scope of an offtake agreement.

5. Impact and options for exit and interruptions regime

Introduction

5.1. In this chapter, we set out the current Transco exit capacity and interruption arrangements and discuss their weaknesses. We then set out the issues for the exit capacity regime arising from any sale of a DN business and the options for the development of the exit capacity arrangements. Ofgem considers that any reformed exit capacity arrangements must address any issues that arise from the sale of a DN business by Transco.

Application of the gateway concept

5.2. The exit capacity arrangements 'gateway' for Ofgem to consent to any sale is Ofgem's approval of the proposed exit capacity arrangements. In particular, NGT will need to develop and gain Ofgem's approval as to:

- the contractual arrangements for interruption at NTS/DN interface; and
- the pricing of exit capacity and interruption.

5.3. The mechanisms for establishing these arrangements must be in place although the arrangements themselves need not be in use prior to Ofgem approval of the sale of a DN.

The existing exit capacity, interruption and LNG arrangements

Exit capacity arrangements

5.4. Under section 9 of the Gas Act, Transco as a GT has a duty to develop and maintain an efficient and economical pipe-line system, and so far as it is economical to do so, to

comply with any reasonable request to connect any premises to that system and convey gas by means of that system.

5.5. In addition, standard condition 16 of Transco's GT licence requires it to develop and maintain its pipeline system so as to enable it to meet the peak aggregate daily demand for the conveyance of gas which having regard to historical weather data derived from at least the previous 50 years and other relevant factors, is likely to be exceeded (whether on one or more days) only in 1 year out of 20 years.

5.6. Transco is provided with funding under its NTS price control for 1 April 2002 to 31 March 2007 for the provision of NTS capacity and recovers the revenues associated with the provision of this capacity through NTS exit and entry charges.

5.7. NTS exit capacity is both charged for and allocated on an administrative basis. Transco administers the allocation of exit capacity using separate methods for Daily Metered sites, Non-Daily Metered sites and Connected System Exit Points such as the Bacton Interconnector.

5.8. In addition to the exit capacity arrangements specified in the network code, Transco also enters into other exit related agreements including Network Exit Agreements (NExAs) [1], Advanced Reservation Capacity Agreements (ARCAs)[2], Storage Connection Agreements (SCAs)[3] and Interconnector Agreements[4].

[1] NExAs are contractual arrangements between Transco and a shipper or end customer setting out a number of provisions relating to the flow of gas at the offtake. NExAs also specify the maximum rate at which the supply point can increase or decrease its offtake of gas from the system within-day.
[2] ARCAs are designed to provide Transco with additional protection from the risks associated with reinforcing its system to supply new loads. Transco commits that the appropriate capacity will be available on the stated first day of the delivery of gas and the other signatory guarantees to pay, typically, one year's exit capacity charges and weighted average entry charges.
[3] A SCA between Transco and a storage facility operator governs the way in which gas flows in both directions between Transco's system and a storage facility covering both system exit and system entry obligations.
[4] Interconnector agreements can in effect be a combined exit and entry agreement or only a NExA depending on the flow of gas through the pipe.

Interruption arrangements

5.9. Transco may call interruption to address network capacity constraints, high system demand and system emergencies[5]. Transco may also constrain the use of its storage capacity that is located close to the extremities of the NTS to address these situations.

5.10. NTS network constraints can be addressed by interrupting both NTS connected supply points and/or DN connected supply points. DN constraints are managed by interrupting supply points connected to that DN. The majority of interruption occurs on the DNs and the majority of interruptible sites are located on the DNs.

5.11. Transco currently enters into interruption arrangements with shippers. Shippers then contract with suppliers who contract with customers to meet their interruption obligations.

Transco SO incentives

5.12. Under its SO price control, Transco has incentives to keep the costs it incurs as a result of interruption below pre-set target allowances. In addition, Transco has a transitional incentive under which it is required to make additional payments to shippers in respect of interruptible sites that are interrupted by Transco for more than 15 days each formula year. Transco receives a pre-set allowance for these payments.

5.13. Transco is also required under its GT licence to use "all reasonable endeavours" to ensure universal firm registration of NTS exit capacity with effect from 1 April 2004. This requirement does not currently extend to DN capacity.

5.14. The exit capacity incentive arrangements are intended to facilitate efficient investment in the NTS and the efficient management of exit constraints. In particular, Ofgem considered that the incentives (and the introduction of universal firm registration of exit capacity) would enable Transco to discover the true value of interruption at exit and facilitate efficient trade offs between interruption, the use of LNG and pipeline investment. Ofgem considered that customers would benefit from these arrangements

[5] Transco can also call interruption for 'test purposes'.

through more efficient system operation and better signals and incentives for investment thereby facilitating security of supply.

5.15. Ofgem would also note that the SO incentive arrangements in combination with the proposals for the introduction of universal firm registration of exit capacity were also intended to introduce more flexible contracting arrangements for interruption. Also, the arrangements would have addressed the potential discriminatory treatment between different types of interruptible customers and also between firm and interruptible customers.

Developments since April 2002

5.16. Following NGT's announcement that it would consider selling off one or more DN, Ofgem wrote to the industry[6] setting out its intention to take exit capacity reform forward as part of its consideration as to the potential sale of DNs.

5.17. Ofgem has recognised that taking exit capacity reform forward as part of the project to facilitate the potential sale of a DN business by NGT means that it is no longer possible for a reformed exit regime incorporating NTS and DN arrangements to be in place by 1 April 2004.

5.18. On this basis, it does not seem appropriate to enforce the universal firm exit registration requirement against Transco for 1 April 2004. Ofgem would, however, note that Transco will continue to have a reasonable endeavours requirement to ensure universal firm registration of NTS exit capacity "as soon as is reasonably practicable" after 1 April 2004 in the event it is unable to introduce it by 1 April 2004.

5.19. Ofgem considers that the outcome of this consultation would be to determine the direction of any future exit capacity arrangements given the potential sale of a DN and the timing of the implementation of these arrangements.

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[6] *'Universal Firm Registration of Exit Capacity: Further Developments'*, Ofgem letter to industry participants, 27 May 2003.

Objectives of reform

5.20. In order to develop options for reforming the exit capacity regime in the context of a DN sale, it is important to set out the objectives of reform. In this respect, we can restate the objectives of reform that set out in Ofgem's letter to industry participants of 27 May 2003.

Cost reflective pricing, non-discrimination and removal of cross-subsidies

5.21. Ofgem continues to be concerned that the present exit and interruption arrangements may be causing undue discrimination between some firm and interruptible customers and between different types of interruptible customers. In particular, Ofgem is concerned that the discounts provided to interruptible customers do not reflect the true value of the interruptible services being provided. For example, Transco may in some cases be over contracting for interruption. This may result in some customers receiving excessive discounts and firm customers potentially being exposed to a disproportionate level of exit capacity costs. Conversely, some interruptible customers may not be sufficiently compensated for the interruption services they are providing to Transco.

5.22. Ofgem intends to undertake further analysis of this issue in coming months to further inform industry debate over the nature of any reformed exit capacity arrangements.

Transco determined interruption

5.23. Ofgem considers that under any new exit regime Transco should not have to offer interruption services that it does not actually need. In this respect, Ofgem is concerned that some customers may be receiving discounts from exit capacity charges for interruption services when those customers are and will continue, in practice, to be firm.

5.24. Ofgem notes that Transco has previously stated that NTS investment planning assumes that in the event of a 1-in-20 year peak day it will need to interrupt all the interruptible sites that currently have interruptible status to ensure the safe operation of the system. However, even if this is the case, Ofgem does not consider that this necessarily means that all interruptible customers should receive equivalent discounts since during milder conditions, the scale of interruption could be significantly different between customers.

5.25. In this context, Ofgem believes that SOs should develop a range of interruptible contracts to ensure that while meeting safety case obligations, they do not need to have arrangements in place for the provision of more interruption than they need for the safe and efficient operation of the system.

Increased customer choice

5.26. The current interruption arrangements present customers with little choice regarding the nature and length of interruption contracts. In particular, customers have been concerned that the arrangements are largely inflexible in terms of pricing and in terms of the number of days of contracted interruption. Ofgem considers that any future arrangements need to address these concerns and incorporate more flexibility.

5.27. Ofgem also considers that, with effective incentives in place, Transco should be able to generate innovative contracting solutions that minimise the costs of interruption and which provide shippers and their customers with sufficient flexibility.

Investment signals

5.28. Ofgem considers that the exit capacity arrangements that are introduced to enable the separation and/or sale of a DN should provide NTS and DN SOs with efficient signals of the value of interruption on their respective networks. With appropriate incentives each SO would then be able to respond to these signals by making efficient trade-offs between investment in pipeline capacity and the use of interruption and LNG.

Safe and secure pipeline system

5.29. Any reforms of the exit regime should ensure that a safe and secure pipeline system is maintained and will therefore need to be discussed with the HSE. It is likely that any changes to the exit capacity arrangements will require the amendment of Transco's safety case. The arrangements will therefore have to be agreed by the HSE.

Preventing discrimination between DNs

5.30. In chapter 2, Ofgem indicated that any regulatory arrangements that are developed needed to ensure that there is no potential for discrimination between RDN and IDN

businesses. Ofgem would reiterate the importance of this objective in considering the development of a future exit capacity and interruption regime.

Impact of the sale of a DN

5.31. The potential sale of one or more DNs raises significant issues for the exit capacity arrangements. These issues include:

- determining the contractual arrangements by which interruption is managed across the NTS and DN networks; and
- determining the charging arrangements associated with the management of NTS and DN exit capacity and interruption.

Contractual arrangements for interruption at NTS/DN interface

5.32. In the following section we set out a number of options for determining the operational arrangements by which interruption could be managed across the NTS and DNs having regard to the principles outlined above. Ofgem notes that these options are not intended to be exhaustive and that industry workstreams may develop variations on these options. In discussing these options, the following additional issues are addressed:

- assessing the revenue and price control implications associated with different charging and contracting frameworks; and
- considering the impact of a sale on Transco's present SO incentives and whether each DN should also be provided with financial incentives to manage DN interruption for DN purposes.

5.33. A key issue that is addressed in this section is determining how interruption is to be managed at the NTS/DN interface and the extent to which NTS and DN SOs contract with each other for constraint management purposes or through individual shippers and customers.

Option 1: Each network contracts with its own connected offtakes

5.34. One option for the exit capacity and interruption arrangements is to restrict the right to enter into arrangements to interrupt a site to the operator of the system to which the site is connected. This would mean that each SO would determine the level of interruption that it required to operate its system safely and efficiently. Each SO would have financial incentives to trade off the cost of pipeline investment, interruption and any other services available to it and enter into appropriate arrangements for interruption.

5.35. Under this model, Transco as the SO of the NTS would determine the level of interruption (both full and partial) it requires from each directly connected site and its DN offtakes. To the extent that the NTS requires interruption from a DN (in other words to reduce the flow of gas from the NTS to that DN), the NTS SO would enter into appropriate interruption arrangements with the DN SO.

5.36. DN SOs will determine the level of interruption required and enter into arrangements for it accordingly based on its safe and efficient operation of the system and its interruption obligations to the NTS SO.

5.37. Similarly, individual DN SOs (both retained and independent) would determine the level of interruption they require and enter into interruption arrangements with shippers and/or customers on this basis.

5.38. This option would potentially minimise any possibility of discrimination by Transco in its treatment of individual DN businesses that have been sold by ensuring a clear separation in the management of interruption as between the NTS and the DNs.

5.39. Under this option, the proposed offtake agreement could set out the framework by which the NTS and DNs contract with each other for the provision of capacity and interruption services as well as the nature of the operational arrangements relating to the management of interruption across each network.

5.40. In addition to creating SO incentives for each DN, this option is also likely to have implications for the DN price controls to the extent that the DNs are providing interruption services to Transco for which they receive revenue.

Option 2: The present method of determining interruption is retained

5.41. Another option is for the NTS SO to effectively determine interruption on both the NTS and each DN. Under this option, Transco's NTS SO would seek reduced flows at DN offtakes through direct instructions provided to the relevant shipper.

5.42. This option would effectively involve retaining the existing interruption arrangements across NTS and DN networks and would therefore involve minimal changes to present operational procedures. Under this option, the operational arrangements for interruption across the NTS/DN interface would be set out within the proposed offtake agreement. Further, it is envisaged that the commercial arrangements for interruption at the interface of the NTS and DN would be largely administrative in nature and less complex than option 1.

5.43. However, whilst simple in nature, this model could lead to discrimination by Transco in its treatment of DN interruption as between RDNs and IDNs and may not be favoured by buyers of a DN business seeking to offer interruption services to Transco's NTS. Further, this model is unlikely to address the weaknesses that have already been identified with the current regime or meet the objectives outlined above.

Option 3: SO contracts directly with customers

5.44. A further option would involve each network contracting directly with customers on either system for the purposes of interruption management. Under this option, Transco as NTS SO would be able to contract directly with DN connected sites for the management of constraints on the NTS. Similarly, each DN SO would also have incentives to enter into interruption arrangements with its own DN sites with respect to efficiently managing constraints on the DN.

5.45. As with option 1, this model would enable the NTS and DN SOs to enter into market based interruption arrangements thereby assisting in revealing the true value of interruption at exit points and facilitating efficient investment decisions.

5.46. The offtake agreement would need to set out the operational and communication arrangements that need to be established between the NTS and DNs to enable the NTS to enter into interruptions contracts directly with DN supply points.

5.47. This option may have fewer revenue implications for the DNs to the extent that each DN would not contract with the NTS for interruption services. This option also reflects electricity arrangements to the extent that NGC can enter ancillary services contracts with customers not connected to its system.

Pricing of exit capacity and interruption

5.48. In addition to determining the framework for the future exit capacity and interruption arrangements following a DN sale, consideration will also need to be given as to how to determine the pricing of exit capacity and interruption. Ofgem sets out below three possible options for the manner in which interruption services could be provided.

Option 1: Market based arrangements

5.49. One option would be for Transco and DN SOs to develop interruptible flexible contracting arrangements for long and shorter term periods. The SO would then issue tenders for these interruption services. Such flexible contracting arrangements could include forward contracts as well contracts that have both an option and an exercise price for interruption of varying quantities and durations. Given the locational nature of constraints, consideration should also be given to conducting tenders within particular zones, thereby improving the signals faced by the SO in determining its investment strategy.

Option 2: Administered arrangements

5.50. Another option for arranging interruption would be for Transco and DN SOs to develop a suite of interruptible contracts of varying quantities, durations and prices from which customers could select the terms that most suited the service they were willing and able to provide.

5.51. This option would be similar to the current administered arrangements but would provide more choice to shippers and customers. In addition, the level of compensation would be more related to the level of service provided than is the case under the current arrangements. However, these arrangements would not enable the SO to fully discover the true value of interruption.

Option 3: Combined arrangements

5.52. A further option for arranging interruption would be a combination of the flexible contracting and administered options. For example, more administered pricing arrangements could be established for smaller supply points with larger supply points being able to participate in tender processes.

Other issues

'Pan-caking' of transportation charges

5.53. A further issue that arises from the possible sale of one or more DN business relates to the possible pan-caking of charges that could result from the application of separate DN and Transco pricing methodologies at the NTS and DN interface. For example, depending on the nature of these pricing methodologies shippers at DN supply points could effectively be charged twice for the utilisation of capacity across the NTS/DN interface. Methodologies of this nature could create barriers to entry and would need to be considered carefully.

Treatment of NExAs and other transportation related agreements

5.54. The interface between the NTS and DNs is likely to result in the creation of an offtake agreement. The creation of an offtake agreement of this nature appears to be similar in nature to many of the other connection arrangements entered into by Transco.

5.55. In creating rights and obligations in an offtake agreement, consideration will need to be given to which rights and obligations are already contained in Transco's other connection arrangements such as NExAs. In addition, any changes to the exit arrangements of customers connected to the DNs could also result in further consideration of the existing connection based arrangements.

Summary of views invited

5.56. In this chapter, we have outlined a number of options regarding the arrangements for exit capacity and interruption across the NTS and DN networks.

5.57. Ofgem invites shippers, Transco and other interested parties to provide comments on the options outlined above and the implications of the sale of one or more DNs by Transco with respect to the exit capacity and interruption arrangements.

5.58. In particular, Ofgem would like respondents to provide comments on the following issues:

- what arrangements should be in place for the management of interruption across the NTS and DN networks;
- the nature of the interruption contracting framework at the NTS/DN interface and the extent to which Transco as NTS SO should be able to contract directly with shippers (and customers) at DN supply points;
- the extent to which interruption arrangements should be market based, administrative in nature or a combination of the two;
- the role of the offtake agreement in the management of interruption at the NTS/DN interface;
- the impact of the sale of a DN on Transco's NTS SO incentives and the extent to which the DN SOs should also be provided with financial incentives to efficiently manage interruption and trade off the costs of interruption with pipeline investment; and
- whether there are other viable options to address the weaknesses of the current exit capacity arrangements and the issues raised by the separation and/or sale of a DN other than those listed in this chapter.

6. Impact and options for gas balancing

Introduction

6.1. The potential sale of one or more DNs by Transco raises several issues associated with the balancing of gas inputs and offtakes on the NTS and the potential implications for Transco's and shippers' commercial incentives. In this chapter we summarise the main elements of the gas balancing regime, set out the principal issues arising from NGT's proposals and outline possible options for addressing these issues.

Application of the gateway concept

6.2. As regards the gateway requirements to the actual sale of one or more DNs by Transco, Ofgem intends to require NGT to secure appropriate changes to the existing regulatory framework or agree to make appropriate changes to the existing regulatory framework with respect to the following issues:

- the redesign of the gas balancing regime as governed by a single SO or by multiple SO;
- the introduction of commercial and/or charging arrangements to account for transfers of diurnal storage, known as linepack, between Transco and DNs; and
- the introduction of commercial and/or charging arrangements to account for transfers of gas between Transco and DNs.

Gas balancing arrangements

6.3. Under the present gas balancing arrangements, shippers have commercial incentives to balance their inputs and offtakes each day. The commercial incentives on shippers to balance are created through the application of the 'cash-out mechanism'. Shippers' inputs into and offtakes from the system are metered or allocated each day. Any difference between these inputs and offtakes (an 'imbalance') is 'cashed-out'.

6.4. Shippers face different cash-out prices depending on whether they end the day long on gas (their inputs exceed their offtakes) or short on gas (their offtakes exceed their inputs). The cash-out prices provide an incentive for companies to balance over the gas day and target the costs associated with any imbalances back to the companies causing them to be incurred.

6.5. Under the gas balancing regime, Transco is responsible for residual gas balancing on the NTS. As residual gas balancer, Transco ensures that NTS pressures remain within safe parameters by trading on the on-the-day-commodity-market (OCM) and by managing stock changes and flows to the DNs. There is some flexibility in the system, through storage in the pipes, to accommodate imbalances within the day and from day to day. This flexibility is known as system linepack. NTS linepack is used to meet within-day fluctuations in supply and demand and, in particular, within-day input and output profiling on the NTS.

6.6. At a local level, physical balancing is conducted across the DNs by regional control centres, using stock changes and changes in the rate of offtake from the NTS to ensure that demands are met.

6.7. Diurnal storage within the DNs is used to meet the within-day profile of demand. To the extent that there is a shortfall of gas relative to demand on the DNs, then the DN can draw down on NTS or its own diurnal storage. To the extent that this causes a change in pressure, Transco as NTS SO is able to manage such change through the use of its balancing tools, which include gas trades on the OCM and the running down of NTS linepack. These arrangements effectively ensure that balancing is undertaken across the gas system as a whole.

6.8. Transco has indicated to Ofgem that certain DNs have insufficient diurnal storage within their own systems and rely more upon the linepack contained within the NTS than other DNs. An initial estimate of the expected use of NTS linepack by each DN under 1 in 20 peak day conditions is contained in the table 6.1.

Table 6.1 Planned diurnal storage provision from NTS to DNs under the 1 in 20 peak day provision in GWh/day

Network	2002/03	2003/04	2004/5	2005/6	2006/07
East of England	17	11	14	15	18
London	0	11	11	0	0
North of England	8	5	6	8	6
North West	5	6	6	7	8
Scotland	30	36	37	22	24
South of England	12	14	10	13	14
Wales and the	8	9	10	9	8
West Midlands	14	9	9	10	5
Totals	94	101	103	84	83

6.9. Transco has been provided with financial incentives in its GT licence to manage its residual gas balancing role in an efficient manner. These incentives include a price and linepack based incentive. These incentives are intended to minimise the costs of Transco's gas balancing actions as well as day-on-day changes in NTS linepack levels.

Impact of DN sale

6.10. Ofgem considers that there are a number of issues relating to the gas balancing arrangements that would need to be considered in relation to the sale of a DN that are discussed in the following section. These issues are:

- whether gas balancing should be kept whole across the system and managed centrally by the NTS (single SO) or whether the NTS and each DN have different regimes (multiple SO);
- the transfer of gas between the DNs and the NTS for balancing purposes and associated pricing arrangements; and
- the nature of the balancing role undertaken by each DN and the extent to which a DN is permitted to trade in gas; and
- the incentives that are placed on Transco and DNs with respect to gas balancing and the provision of linepack.

Options for gas balancing arrangements

6.11. In this section, we discuss two alternative approaches to addressing gas balancing: a "single SO" model and a "multiple SO" model.

The single SO model

6.12. Under a single SO model, Transco's NTS and the DNs would be treated as whole for the purposes of gas balancing. Shippers would still have financial incentives to balance their gas positions as they currently do, while Transco would retain its role as the residual balancer of demand and supply of gas across the whole system.

6.13. Under this model, a set of operational and charging arrangements would be required to govern the transfer of gas between systems (the NTS and the DNs), for residual gas balancing purposes. These arrangements would initially be covered by the proposed offtake agreement. These arrangements would also govern the use of DNs linepack by Transco and the use of NTS linepack by DNs.

6.14. In its simplest form a single SO model would, with respect to shippers, require minimal changes to the existing balancing arrangements and incentives. Changes could be limited to the design of the charging and operational rules that would govern the interface between Transco and the DNs. NGT has proposed that these operational and commercial arrangements could be included within the proposed Offtake Agreement.

Advantages of the single SO model

6.15. The single SO model in its simplest form would not require any complex changes to the current arrangements. Under this model, it appears unlikely that there would be a need to change any of the existing commercial incentives on shippers to balance. On this basis therefore, shippers would face minimal disruptions in the operation of their businesses.

6.16. Further, it is possible that limited amendments to Transco's residual gas balancing incentive (set out in its licence) and network code would need to be introduced to take account of the interactions between the NTS and the DNs and their new obligations

and/or incentives for gas balancing purposes. The most significant change would be the possible introduction of the proposed offtake agreement.

6.17. The single SO model could be extended to allow for more commercial arrangements, such as market based linepack services, if they were considered beneficial to the efficient balancing of the NTS.

6.18. Finally, adopting this framework in its simplest form, with Transco balancing the system (on a residual basis) as a whole through agreed charging and operational arrangements with the DNs, would have the advantage of allowing some time to gather more information about the interface between Transco and the DNs including knowledge of the actual availability and use of diurnal storage[7].

6.19. Finally, retention of the existing arrangements would be consistent with the concept of trading at the National Balancing Point (NBP).

Disadvantages of the single SO model

6.20. Since the simplest form of the single SO model would mainly involve a set of operational rules and at most administrative charges, Ofgem considers that there could be potential for Transco to discriminate between IDNs and RDNs, especially in its use and provision of diurnal storage services.

6.21. As mentioned above, a way to partly address this concern would be to introduce the same set of arrangements for both IDNs and RDNs and maintain full transparency over all transactions between Transco and each DN.[8] In addition, appropriate licence conditions should be placed on Transco not to discriminate between different DNs.

6.22. The establishment of administered charging arrangements for the allocation of linepack services (eg within Transco's proposed offtake agreement) could lead to discrimination between IDNs and RDNs to the extent that these arrangements do not reflect the true value of linepack services. As such, a risk associated with the single SO model is its

[7] To the extent that the DNs and Transco were to book linepack services from each other, there could be the need for some transitional period during which the interaction between Transco and DNs would be disclosed through price discovery.

[8] Transco's NTS currently provides some linepack service to DNs although not on a non-discriminatory basis. This is mostly a locational linepack service rather than an NBP one.

potential to introduce discriminatory administered arrangements that may prove difficult to unwind in the future.

6.23. Some of these concerns could be addressed by parallel developments. These are outlined after we discuss the alternative to the single SO model.

The multiple SO model

6.24. Under this model, Transco, as operator of the NTS, and the DNs would be separately responsible for balancing their own systems. Shippers would hold multiple balancing accounts, on the NTS and DNs respectively, and would have financial incentives through cash-out to balance their positions on each network.

6.25. Under the multiple SO model, a new set of commercial incentives would need to be designed to ensure that the DNs:

- provide the most efficient residual balancing service on their networks; and
- invest efficiently in the provision of flexibility within their distribution systems.

6.26. As mentioned above, the same set of commercial and physical arrangements should be applied to both IDNs and RDNs to ensure transparency and non-discrimination by Transco in the way it operates the RDNs compared to its commercial relations with the IDNs.

Advantages of the multiple SO model

6.27. A multiple SO model would result in the provision of more localised balancing, potentially creating zonal gas prices within Great Britain reflecting localised supply and demand fundamentals. In particular, the individual balancing of the transmission and distributions networks could improve locational signals for market participants thereby facilitating efficiency in the provision of gas services as well as facilitating operational efficiency on each network.

6.28. Further, since Transco and the DNs would have fully separated balancing arrangements, Ofgem considers that there would be fewer concerns with respect to Transco's ability to discriminate between IDNs and RDNs.

Disadvantages of the multiple SO model

6.29. The multiple SO model would introduce significantly more complexities for shippers as they would be required to interact with multiple entities when balancing their positions. This framework may also increase their exposure to imbalance risk, depending on the specific design of the new balancing arrangements at the DN level. In addition, the creation of a multiple SO model would effectively fragment the present NBP pricing arrangements, thereby potentially reducing market liquidity and increasing the potential for market abuse.

6.30. Under this option, the need for a significant re-design of Transco's licence and network code as well as shippers' licences would be more likely.

Options for development

6.31. We have presented two fairly simple models of gas balancing. One retains gas balancing incentives across the system, the other sets up multiple balancing regimes. Each, however, could be augmented by taking the opportunity of system reform to introduce more market related balancing arrangements.

6.32. In the following sections, we discuss some of the alternative options to govern the interactions between Transco, as NTS SO, and the DNs under the two models. These options may become more relevant as the proposed models are further augmented. For instance, the implementation of a very simple form of the single SO model in which access to DNs' and Transco's linepack is not subject to any charges would not necessarily require the development of a balancing account, specific linepack arrangements or rules to determine the extent of the trading role of DNs.

Balancing Accounts

6.33. At present, there is no formal recognition of the gas being transferred between the NTS and the DNs. It would be possible to define the transfer of gas, as a commodity, between Transco, as NTS SO, and the DNs in the form of a balancing account. For instance, where more gas was taken from the NTS by a DN than is allocated to shippers (given their offtakes from the DNs) on a daily basis, then this would be reflected in an NTS account imbalance for the DN. Such imbalance could be cashed-out in

accordance with an agreed charging methodology. This methodology could be set out in NGT's proposed offtake agreement.

Treatment of linepack

6.34. At present, linepack is not priced separately. It would be possible for Transco, as the NTS operator, and each DN to hold a linepack inventory, allowing each party to store gas in the other's network to facilitate efficient balancing. For example, to the extent that Transco NTS wished to store gas in a DN for national or localised balancing purposes it could be charged for the use of DN linepack. Similarly, to the extent that a DN wished to draw down on NTS linepack this could be reflected in a change in linepack inventory and reflected in charges.

6.35. As with the balancing account, any arrangements relating to the management of NTS and DN linepack and the pricing of linepack as between the NTS and DNs could be addressed through NGT's proposed offtake agreement. In its simplest form, the offtake agreement would specify administered prices for the use of linepack as between the NTS and DNs.

6.36. Ofgem would also note that consideration could also be given to the provision of market based NTS and DN linepack services that can be accessed by shippers for balancing purposes. Similarly, the NTS SO may wish to access DN linepack for within day system balancing purposes to manage localised linepack surpluses or deficits on the NTS.

6.37. In this instance, DN linepack would be sold by each individual DN, with shippers (and Transco as NTS SO) being able to access this storage in a similar manner to accessing storage from traditional storage facilities thereby ensuring that national supply and demand balancing remained 'whole'.

6.38. Ofgem would note that in its April 2003 document on the gas balancing regime, *'The gas trading arrangements, Reform of the gas balancing regime, Next steps'*, it indicated that Transco should consider offering end-of-day linepack services to shippers as a management tool to help them balance their gas inputs and offtakes over the day. Ofgem would note that it is possible that the buyer of a DN may wish to offer linepack services to shippers to assist them in balancing.

6.39. The introduction of linepack services on an NTS and DN level would inevitably have implications for Transco SO and DN incentive and price control regimes. For example, it is likely that output measures defining levels of linepack on the NTS and each DN would need to be developed to underpin the sale of tradeable linepack rights. Further, Transco and each DN would need to be provided with price control allowances (eg SO incentives) with respect to the sale of these rights.

NTS SO/DN trading role

6.40. A further issue is whether individual DNs could be allowed to trade away their account imbalances with shippers. Under the present gas balancing regime, Transco is able to buy and sell gas both on the day and on a forward basis to balance the NTS. However, Transco is prohibited from trading for speculative purposes.[9] While such prohibitions could be extended to individual DNs under a whole system model, it would be possible to allow the network operators to trade on their own account.

Gas balancing incentives

6.41. In implementing any of the models outlined above, consideration will need to be given as to whether Transco's residual gas balancing incentive would require any substantial re-design. Ofgem's preliminary view is that, under a simple form of the single SO model, Transco's NTS gas balancing incentives would remain largely unaltered by a DN sale (subject of course to Ofgem's forthcoming review of Transco's NTS SO incentives).

6.42. Separate to this question is the extent to which the DNs would need to have their own gas balancing incentives and obligations that are aligned with Transco's NTS SO incentives. The nature of these incentives would depend on the extent of the role taken by the DN in terms of gas balancing.

Governance

[9] Transco GT licence, Special Condition 26, Prohibited Procurement Activities

6.43. As previously noted, NGT has proposed an offtake agreement which would specify the operational and commercial rules surrounding the transfer of gas between the NTS and the DNs and the use of linepack on both networks.

Within day gas balancing issues

6.44. The operational and commercial issues surrounding within-day profiling of gas flows at entry and exit have been extensively discussed by Ofgem[10], the shippers and Transco[11]. Specifically, Ofgem has been concerned that the profiling of gas flows by shippers at beach entry points and by gas fired power stations at exit points was causing Transco to undertake inefficient balancing actions and to experience within-day operational problems. Ofgem also believed that the difficulties faced by Transco might threaten security of supply.

6.45. In its April 2003 document, following further assessment of these issues, Ofgem concluded that Transco was still able to manage its transmission system within safe parameters and, therefore, major reforms were not warranted. However, Ofgem considered that since system conditions could deteriorate in the future, a set of performance indicators should be introduced to give advance warnings of potential threats to security of supply.

6.46. With regard to Transco's proposed sale of one or more DNs, Ofgem is concerned that the profiling of DNs and consequent within-day variations of NTS linepack may become less manageable by Transco as NTS SO, as it loses the direct control of the IDNs. In this respect, Ofgem believes that securing a steady stream of high quality information about actual and expected gas flows between Transco NTS and the DNs should help address potential management difficulties faced by Transco. In addition, Ofgem considers that a monitoring scheme at exit points with or without financial incentives may be developed

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[10] Please see the following Ofgem's documents: *"The new gas trading arrangements. Further reforms of the gas balancing regime. Consultation paper"* February 2001; *"The new gas trading arrangements. Reform of the gas balancing regime. Revised proposals"* February 2002; *"The gas trading arrangements. Reform of the gas balancing regime"*, April 2003.

[11] In this respect, please see the documentation regarding Transco's network code Review Group 513 at http://www.rgta.co.uk/mod513main.htm

to encourage a better control of within-day profiling and better information provision from the DNs.

6.47. Within-day profiling at the DN level and its effect on NTS operations will be regularly assessed as part of Ofgem's monitoring of the performance of the NTS through the proposed set of indicators. As such, a worsening of the problems associated with DN swings will contribute to Ofgem's consideration of the need for major reform of the gas balancing regime, including the introduction of shorter balancing periods.

Questions for consultation

6.48. Ofgem invites shippers, Transco and other interested parties to provide it with comments on the implications of the sale of one or more DNs by Transco with respect to the existing gas balancing arrangements. Ofgem also invites views on the proposed alternative models that have been outlined in this chapter.

6.49. In particular, Ofgem would like respondents to provide comments on the following issues:

- whether the transmission and distribution networks should be governed by a single or multiple SO for the purpose of gas balancing;
- whether commercial arrangements for the provision of linepack by DNs and the Transco NTS SO should be developed in the form of market based linepack services or through administered pricing arrangements within the proposed offtake agreement;
- whether the IDNs, RDNs and NTS should have financial incentives to invest and provide linepack services;
- what charging arrangements, if any, should apply to transfers of gas between DNs and the NTS;
- what charging arrangements, if any, should apply to the use of IDN and RDN linepack by the NTS and the use of NTS linepack by DNs;

- whether there are other alternative and viable models to those outlined above that could be employed to address the issues raised by the sale of one or more DNs by Transco with respect to the gas balancing regime arrangements; and
- whether any other issues should be taken into account with respect to the gas balancing regime.

7. Impact on Supply Point Administration Process

Introduction

7.1. This chapter sets out:

- principles against which we will judge proposed changes to the provision of industry services;
- Ofgem's views of NGT's proposals to facilitate DN divestment by establishing an Agent to manage and process supply point data on behalf of DNs which have been sold; and
- Ofgem's preliminary views on how the divestment of Transco's DNs will affect the way supply point transfers take place.

Application of the gateway concept

7.2. In this regard, Ofgem will expect agreement from NGT as to the nature of the agency arrangements including ownership and funding prior to giving consent to the sale of a DN.

Background

7.3. Currently, Standard Condition 31 of the GT licence sets out obligations to provide a supply point information service. The licence allows GTs to establish or procure this service. GTs are obliged to ensure that the supply point information fulfils the following objectives:

- enabling customers to contract with another supplier for the supply of gas;
- the provision of information to industry participants to enact customer transfers;
- the maintenance of an enquiry service to enable customers to obtain data that is relevant to their gas supply; and

- data management obligations i.e. maintaining a supply point register for all premises connected to its networks which contains the identity of the shipper and supplier to each premise.

7.4. Transco's network code covers all contractual issues relating to the provision of SPA and various data management functions which impact on the change of supplier (CoS) process. Shippers and suppliers have developed their systems and procedures to meet the requirements of Transco's network code. These systems and processes are key to the operation of the market.

7.5. The sale of DNs could require changes to how data management, SPA and CoS activities in relation to customers connected to the sold network will be undertaken. This may be achieved in a number of ways:

- transfer the responsibility for the operation of systems and procedures to each of the DNs who would develop and provide their own set of business processes to support CoS activities; or
- contract the responsibility to a third party; or
- NGT, as the gas transmission operator, continue to provide services on behalf of DNs.

7.6. The approach undertaken will ultimately determine the manner in which changes are considered and implemented by the industry and how the integrity of data and systems are maintained. Ofgem does not seek to promote any particular industry structure over another. However, we are concerned that the structure that is put in place must be consistent with Ofgem's principle objective of protecting the interests of consumers in relation to gas conveyed through pipes by promoting effective competition between persons engaged in the shipping, transportation or supply of gas. This means Ofgem will be mindful of whether proposals facilitate or jeopardise the resolution of existing problems (that would have been addressed anyway over the coming years). NGT's aim in developing their proposals (see below) is to maintain the provision of the data services and the integrity of data across all DN networks.

Issues for consideration

Avoiding market fragmentation

7.7. It appears of prime importance that suppliers should not have to engage with significantly different processes in order to transfer a customer served by different distribution networks. If regional variation of this kind required suppliers to invest in multiple systems, this would be inefficient investment. If the required investments were high, a likely consequence would be that suppliers would choose to compete in some parts of the country but not others. This would have seriously negative consequences for customers.

7.8. Ofgem recognises that some forms of variety between alternative supply point administration systems could facilitate innovation and drive efficiency gains. However, Ofgem's initial view is that, were such variation to mean suppliers needed to vary the processes they need to operate in order to transfer customers, the negative consequence of fragmentation would be likely to outweigh any efficiency gains.

Barriers to change

7.9. Suppliers report that it has been difficult to implement changes to Transco's central SPA systems, in part due to the integration and inter-dependence of its IT systems. For example, a proposal to reduce SPA transfer timescales would require significant changes to a number of Transco's IT systems and business processes that are not directly supporting SPA.

7.10. Another difficulty is whether Transco is incentivised to propose and develop changes to switching services. Transco's price control contains an allowance for the five year period of the costs of maintaining and developing IT systems. However these are not specified against particular systems or proposed changes. Transco may resist introducing innovative CoS/SPA solutions unless it is allowed to recover the costs through its allowed price control revenues. This has caused difficulties for industry participants who wish to develop their business processes that are dependent upon Transco's SPA services.

7.11. Any agency arrangements to provide central data services must address the barriers that prevent change. If Transco continues to provide central SPA services it should seek to

work towards establishing an industry model with sufficient incentives to promote innovations that support the gas retail market.

Development

7.12. As the retail market develops, it places new requirements on the arrangements for maintaining and exchanging industry data. The transitional and enduring arrangements for the provision of these services by Transco or an agent must not hinder the way industry parties are able to develop the transfer process. In particular, industry governance arrangements should be flexible enough to enable industry participants to differentiate and innovate where appropriate. Service providers should have appropriate incentives to deliver enhanced facilities.

Control

7.13. A customer's chosen gas supplier should have control over managing the CoS process. Therefore, the divestment of DNs should not reduce suppliers' abilities to access and process the data required to transfer customers or to develop the systems and processes to meet market needs. Data items required should be made available in a consistent format and data accuracy must be maintained.

New Entrants

7.14. The CoS process should be accessible to new entrants to enable them to enter the market. Industry agreements should specify data items and business processes sufficiently to enable interoperability. They should not offer significant advantages to large operators over small ones, unless these are justified against actual cost variations and would otherwise be unavoidable.

NGT's proposal: an agency

7.15. NGT has proposed that a range of management and processing of supply point data activities, including shipper invoicing, are undertaken on behalf of sold DNs via the establishment of an agent. The rationale for the agent is primarily to maintain the provision of central services following DN sale. Its aim is to maintain a single data repository to facilitate a common customer switching process across NGT and

independently owned networks. As Transco's systems are currently configured to provide SPA and data management services across all its networks, the integration of its systems would make it possible (post divestment) for the agent to provide a variety of services on behalf of DNs, for example, data management, billing, customer transfers and data collection. NGT suggests that the agent will provide the following benefits:

- preserve the continuity of central SPA services (customer registrations, enquiry services and information exchange network) so that shippers only have to communicate with one point of contact;
- minimal changes to shipper systems and processes;
- deliver consistent processes across all networks to optimise overall efficiency and minimise costs to the industry;
- avoid duplication of data storage and processing as data would be stored centrally; and
- maintain uniformity of service which avoids undue preference and undue discrimination.

7.16. Establishing the agent will require NGT to undertake changes to arrangements that govern the provision of SPA services. In order to minimise changes, NGT has applied a number of principles in this respect these are set out below:

- as far as possible, NGT seeks to preserve key features of the current commercial regime and proposes to re-work the current regimes rather than starting from basic principles;
- minimal disruption for shippers; and
- no change required to primary legislation.

7.17. To facilitate its agent proposal NGT, suggests that its current network code is converted into a uniform network code (UNC) as has been explained earlier. In the first instance, the UNC would govern gas transportation arrangements for IDNS, RDNs and shippers. The agent would undertake a number of supporting and administrative functions on

behalf of IDNs and RDNs. The details of these functions would be governed by the UNC, with shippers acceding to a contractual arrangement with each IDN which essentially binds shippers to the UNC. The obligation to provide SPA services would be retained in the GT licence, although it could also be mirrored in the licence applicable to the IDN.

NGT's proposal: options

7.18. There are several aspects of NGT's proposal where there are options for development. We outline some below.

Obligations to Use Agent Services

7.19. NGT's preferred approach is for agent services to remain within Transco as a distinct business unit. This is not significantly different to the way it currently provides central SPA services.

7.20. NGT's agent model obliges independent network owners to use agent services. However, it is not clear from NGT's proposals whether a specific licence condition will oblige IDNs to use agent services or whether this obligation will be maintained through its UNC or another contractual arrangement. It is also unclear whether a licence condition will oblige IDNs to use all of the agent services or whether arrangements will allow IDNs to choose a sub-set of agent services.

7.21. It is important that obligations are set out clearly to avoid confusion over responsibilities via a licensing regime or contractual arrangement. Placing obligation on DNs to provide SPA services via NGT's agent will influence features of the business model that is put in place. In particular, the ownership and funding of the agent will be important and these issues are discussed in more detail below.

Ownership of agent

7.22. It is not clear from NGT's proposals whether ownership of the agent will remain with Transco. There are a number of possibilities in this respect.

Option 1: Transco owns agent

7.23. Under this option, NGT would own the agent and be responsible under its licence for its activities. With this option, the interests of customers and industry participants may be best served if the agent is ring fenced from Transco's transportation business and administered as an autonomous entity. By ring fencing the agent, it would be in a better position to provide services in a non-discriminatory manner to all users of its services, potentially shippers/suppliers, Transco, IDNs and IGTs.

7.24. This option would essentially require Transco to undertake an organisational change. It would not necessarily require shippers/suppliers to undertake significant changes. Under this option, NGT would need to consider carefully the role, duties and accountability of the agent. With this option, an additional consideration is whether the agent's activities should be subject to independent scrutiny, perhaps an audit to ensure that it is acting in accordance with its duties and more importantly in a non-discriminatory manner.

7.25. The incentives on the agent to respond flexibly to customer demands would not necessarily be any greater under this model than at present.

Option 2: Owned by Transco and IDNs

7.26. Under this approach, the agent would be owned by NGT and IDNs, perhaps as a consequence of both parties having licence obligations to provide SPA services. Transco and DNs may seek to support this arrangement through a contractual agreement which sets out amongst other things, funding requirements and responsibilities.

7.27. To support this option would require consideration to how this ownership model would represent the interests of customers and industry participants. In particular, both parties may require incentives to improve services and allow users of the agent to innovate where possible.

7.28. One of the advantages of this approach is that it offers Transco and DNs flexibility in the provision of services. That is, the day to day management of agent services like

settlement, balancing and SPA could be undertaken by a third party whilst SPA in particular could become the responsibility of industry participants.

7.29. In the electricity industry, the National Grid Company (NGC) discharges its obligations to provide settlement and balancing services to a third party. This business model is discussed below and is an example of how Transco could consider structuring agent services.

An alternative approach: Balancing and Settlement Activities/SPA Services

7.30. NGC is obliged by its transmission licence to have in place arrangements which provide for the delivery of balancing and settlement services in electricity. This is, in some respects analogous to Transco's obligations to provide SPA, balancing and settlement.

7.31. The principal difference in approach is that Transco meets its licence and network code obligations to provides CoS, SPA and settlement services by taking on the role of service provider, and funding services from its use of system revenue. In electricity, the BSC specifies provisions for the delivery of balancing and settlement services through Elexon, an independent body which procures the facilities, resources and services for the effective and efficient implementation of settlement.

7.32. Elexon's activities are wide ranging. For example, it administers changes to the Balancing and Settlement Code (BSC) and manages contracts with service providers on behalf of the industry. In its roles as administrator of the BSC, it must satisfy the needs of all interested parties whilst maintaining independence. All licensed electricity suppliers are obliged by their licence to sign the BSC.

7.33. Elexon charges users (parties to the BSC) for the services. Elexon is funded solely by BSC signatories on a pro-rata basis. NGC does not contribute to Elexon funding.

7.34. The Elexon model could be adapted to establish the Transco agent services. The obligation to provide SPA services would remain with NGT who would discharge this obligation through the establishment of an agent company. The costs of providing services would be met through charges to users.

7.35. The advantage of this approach is that it allows industry participants to have direct participation in the delivery of services that are crucial to their business activities and for proper incentives to be established for the service provider. However, establishing an agent company and the associated charging and governance arrangements would be a significant change and may not be feasible in advance of a sale given the proposed timetable. Also, some gas shippers have expressed some reservations about the adoption of this electricity type model.

Funding of agent

7.36. How NGT's agent will be funded for the provision of SPA services after a DN sale will have an influence on the incentives that bear on the agent. Set out below are two possible approaches.

Option 1: Transco's price control

7.37. Under this option, an allowance is made within Transco's price control for the provision of SPA services. Agent charges would be recovered from shippers through transportation charges. Essentially this is how the SPA services are currently funded.

7.38. Transco's current revenue formula includes a provision, although not explicitly, for the operation and development of the service to be performed by the agent. NGT does not intend to request Ofgem to review its current price control formula, and the transportation charging mechanism to split out agency charges.

7.39. The implication of this proposal is that agency costs would remain part of the transmission price control. Users of agent services would not know how much they are paying for agency services or be able to evaluate the costs of changes to central SPA services. There would be no clear incentives acting on Transco for the delivery of the agent services to be more flexible than at present.

Option 2: Transco and IDNs fund agent

7.40. Splitting out agency costs would not require NGT to review the current price control formula. Unbundling could be advantageous for users of the agent, as it could set clear price signals for agent services and products. This could in turn give IDNs and

shipper/suppliers more control over the SPA services provided to shippers who are active on their networks.

7.41. If NGT splits out agent charges from its transportation charging regime, it will need to determine how it will derive agent charges for IDNs, and will need to agree the level of funding with IDNs. For example, in the case of IDNs agent costs could be driven by the scope of services provided and for shippers the volumes of transactions undertaken or number of meter point reference numbers served within individual DNs.

7.42. To support this option would require detailed transactional costing to enable new entrant network operators to assess the costs of SPA services and in the case of existing users to evaluate the costs of improved services.

7.43. Also, clarification will be required as to how to treat the revenue Transco may gain from DNs. In particular, would additional revenues be allowed for under price control resulting in an adjustment/refund to shippers or would the agent charges be treated as profit by Transco?

Governance arrangements

7.44. The sale of one or more DNs and the consequent introduction of an agent providing central services will require significant changes to various aspects of Transco's network code. Currently, Transco's SPA processes are governed by section G of its network code. Section G sets out the data, specifies the timings and manages change control for the CoS process.

7.45. The sale of DNs raises questions about the extent of changes to industry governance arrangements to support the sale and the role of DNs. The extent of changes to governance arrangements partly depends on how CoS activities will be undertaken post divestment. There will also be interactions with other governance issues.

7.46. How the governance arrangements are configured will affect the parties who regularly use Transco's SPA services. They will be concerned as to the stability of systems and the operation of change control arrangements. As a general principle Ofgem considers that cohesive governance arrangements will be required to allow industry parties to influence control over changes to the SPA services provided by Transco's agent.

7.47. The options for governance to support an independently owned network are set out below.

Option 1: Uniform Network Code (UNC)

7.48. This option has been explained elsewhere in this document. Essentially the UNC would govern the SPA services provided by the agent for RDNs and IDNs.

7.49. One of the advantages of the UNC is that it builds on existing industry frameworks and would not require industry participants to undertake significant changes to accommodate its introduction. However, there are a number of uncertainties with this approach. First, it is not clear whether suppliers (as opposed to shippers) will be able to accede to the UNC; second it is unclear how signatories (in particular DNs) will be able to influence and bring about changes. These two points are discussed in further detail below.

7.50. NGT's UNC proposal has implications for a number of industry participants, some of which may or may not be signatories. NGT's UNC model maintains contractual arrangements with shippers and extends accession to DNs (and possibly IGTs). However, it is not clear whether UNC accession will be extended to suppliers.

7.51. The rationale for extending accession to suppliers is to allow suppliers to have greater influence over the provision of CoS activities that are crucial to their business activities.

Option 2: IDN establishes governance arrangements

7.52. Under this option (as explained in chapter 4), the DN establishes its own governance arrangements and develops its own processes to support CoS activities. This could be achieved by establishing its own network code which amongst other things, would govern the provision of SPA services and the CoS process. DNs establishing network codes is in line with the current regulatory regime and would in effect be similar to the current arrangements put in place by non-Transco GTs. This would give the DN scope to develop independently and develop its own set of transportation arrangements.

7.53. This would mirror the current arrangements with independent gas transporters, and risks substantial change resulting in further industry fragmentation.

Option 3: New Governance arrangements in gas – Extending Supply Point Administration Agreement (SPAA) proposal to incorporate agent arrangements

7.54. The potential sale of DNs coincides with the developments of new governance arrangements in gas. Suppliers are currently being consulted on whether they wish to accede to new governance arrangements to support the separation of Transco's transportation and metering businesses and more generally to facilitate changes to industry structures. The sale of the DNs may provide an opportunity to consider other SPAA changes. However, the concept of the SPAA is not dependent on whether or not NGT decides to sell a DN.

7.55. The SPAA is intended to facilitate improvements to the efficiency and effectiveness of the gas retail markets, in particular the transfer of customers. In particular, it has been proposed to meet the requirements to provide governance arrangements for elements of the review of gas metering arrangements baseline and inter supplier processes (such as agreed reads and erroneous transfers) that would otherwise have only voluntary status. Currently it is proposed that parties to the SPAA will be suppliers. However, gas transporters could accede to the SPAA if it was deemed that a transfer of responsibilities from the current network codes to the SPAA was considered appropriate.

7.56. The rationale for considering the SPAA as a vehicle for governing the agent arrangements is two fold. First, Transco's network code is an agreement between shippers and Transco. Suppliers are not able to directly raise modifications and must rely on their shippers to influence SPA services that suppliers rely on to successfully transfer customers. Second, Transco provides transportation services and retail market processes. Its role is not clear and it is subject to conflicting incentives and at times its willingness to only communicate with shippers creates difficulties for suppliers who would benefit from accessing Transco information directly to resolve supplier to supplier issues.

7.57. A SPAA may be a suitable vehicle to enable independently owned network operators to become part of industry governance arrangements. If GTs signal their intent to accede to SPAA this would place the governance of retail markets under one agreement.

Views invited

7.58. This chapter has outlined NGT's proposals to facilitate DN divestment by putting in place an agent to provide SPA services to DNs and networks retained by Transco, sets out a number of regulatory and commercial issues NGT will need to consider and act upon if it is to develop its agent proposal. We also presented several options in this respect. Each of the options has advantages and weaknesses.

7.59. Ofgem invites responses on the issues set out in this chapter in particular:

- whether the agent proposal is a satisfactory model to facilitate ongoing changes to systems and business processes that support the CoS process?
- the feasibility of the options to facilitate agent funding and ownership. We would welcome contributions on other models that could be considered.
- is the proposed UNC an appropriate set of agent governance arrangements or is a different approach needed?

8. Other aspects of the NTS / DN interface

8.1. In the previous two chapters, we have explained the implications of a sale of a DN with respect to the exit arrangements and gas balancing. The potential sale of one or more DNs raises several other issues. These include system planning, the management of gas shrinkage, the treatment of gas quality and impacts on the existing safety / emergency conditions. This chapter explores these issues further.

8.2. As noted above, NGT has proposed an offtake agreement which would specify the operational and commercial rules surrounding the transfer of gas between the NTS and the DNs and the use of linepack on the networks. The potential scope of this has been explained earlier.

Shrinkage arrangements

8.3. Currently, Transco is responsible for fulfilling the shrinkage gas requirements for both NTS and DNs and it has commercial incentives to manage gas shrinkage in the most cost-effective manner. The sale of one or more DNs implies that the management of gas shrinkage may need to be separated into a DN and a NTS procurement service.

Gas shrinkage – Current arrangements

8.4. Shrinkage gas is gas lost through the transportation system at both the DN and NTS levels. DN gas shrinkage results from gas lost through leakage, theft and includes gas used for operational purposes. NTS shrinkage gas includes:

- own use gas, ie gas used for compression, venting and preheating;
- unaccounted for gas, arising from meter inaccuracies and discrepancies between measured flows and actual physical flows which leads to differences in measured NTS entry and exit volumes; and
- unbilled energy, which results from differences between the actual calorific value of gas delivered onto the NTS and the average (flow weighted) calorific value upon which billing is based.

8.5. Under its five-year price control, Transco is provided with a fixed allowance to cover the costs of procuring shrinkage gas at the DN level. In addition, Transco has financial incentives to manage NTS shrinkage gas costs efficiently through its SO incentives.

8.6. Under Transco's NTS SO incentives for the period 1 April 2002 to 31 March 2007, Transco is provided with a cost target for shrinkage gas. This target has been set for two years using Transco's forecast of the volumes of required shrinkage gas. Transco's risks and rewards under the incentive are subject to sharing factors and caps and collars. If Transco performs better (worse) than the target, it bears a share of the difference.

8.7. Transco currently manages both DN and NTS gas shrinkage under a separate shrinkage provider (SP) account.

Issues for shrinkage arrangements

8.8. Ofgem anticipates that the existence of a separate SP account and incentive schemes for DN and NTS gas shrinkage will facilitate the unbundling of this service into the management of DN gas shrinkage and the management of NTS gas shrinkage. In particular, each DN could establish a separate shrinkage account and make separate arrangements for the provision of shrinkage gas with respect to their distribution networks. This approach could have implications for the existing price control assumptions.

8.9. Currently, Transco has contractual arrangements in place for the provision of shrinkage gas for both NTS and DN purposes. If the sale of one or more DNs were to be completed before the expiration of these arrangements, then it is possible that some re-negotiation or assignment of these agreements between the NTS, DNs and the relevant counter-parties would be required in order to effectively separate the present arrangements.

8.10. As different DNs are likely to exhibit different shrinkage requirements, Ofgem expects that the most difficult issue in this respect may be agreeing on the most appropriate unbundling of the aggregate target level for DN shrinkage (the DN shrinkage factor) into individual factors for each of the different independent and retained DNs. As explained above, this factor is proposed annually by Transco after consultation with the shippers and other interested parties.

8.11. An alternative model to that outlined above would be to allow Transco as NTS SO to continue to manage DN shrinkage on behalf of each DN. Such a model may be less complex than specifically unbundling shrinkage management but may not be sufficiently transparent and could potentially lead to discrimination between different DNs.

Gas quality arrangements

8.12. Currently, the Gas Safety (Management) Regulations (GSMR) determine the range of characteristics permitted for the conveyance of gas through the transmission network and determine the permissible range of specification of gas delivered to any exit point.

8.13. Although poor gas quality could cause, under certain conditions, transportation constraints on the NTS, many of the problems associated with gas quality are experienced at the DN level and, mostly, by the final users of gas. However, DNs do not have any control over the quality of gas that is delivered to them. After the sale of DNs, Transco's incentives to maintain the quality of gas delivered to the DNs could be undermined.

8.14. It would therefore seem that incentives should be placed on Transco as NTS owner and operator to offer gas quality services to users on a non-discriminatory basis in response to customer demand. Customers (including DNs) would then be able to determine whether it is cheaper to pay Transco as NTS SO to deliver such services or to invest in their own equipment. Consideration could also be given to the extent to which individual DNs could provide such services. The specification of gas quality services would seem to fall into the scope of the offtake agreement.

8.15. Similar considerations apply with respect to the offtake pressure that will be delivered by the NTS to the DNs.

Related work – DTI/Ofgem/HSE Scoping Study

8.16. Ofgem and the HSE are currently participating in a project initiated by the DTI to assess the gas quality implications for the UK as it becomes import dependent in coming years. The project is due to be undertaken in a number of different stages. After an initial stage where the extent of the problem will be assessed from a largely engineering point

of view, phase two of the project will start to develop a policy framework to address any gas quality issues. Any policy proposals that are developed will then be implemented in phase three. At this point, the DTI intends that any policy proposals arising from the consultation (eg potential changes to gas quality requirements contained in the GSMR) would be implemented by late 2005.

Safety Cases

8.17. The potential sale of one or more DNs raises a number of important safety case issues that will need to be considered by Transco and the HSE.

8.18. The HSE has indicated to Transco that both the Transco and Network Emergency Coordinator safety cases need to be amended in the event of a sale. In amending these safety cases, Transco will need to satisfy the HSE that there will be no reduction in the safe management of the gas system resulting from the potential sale of one or more DNs.

8.19. Prior to completion of a sale the buyer will need to have a safety case for that DN which has been accepted by the HSE. The HSE will then complete an assessment to ensure the DN is able to demonstrate compliance with the requirements set out in that safety case.

Emergency Services

8.20. With respect to provision of emergency services, it is intended that Transco will retain the responsibility for providing the national gas emergency number through its call centres. This is consistent with the current requirements of the GSMR.

8.21. As indicated in chapter 3, the first response workforce associated with the DN could be included in the potential sale. In this case, the full responsibility for management of emergency jobs from receipt of a call to making safe in accordance with the GT licence would rest with the DN.

8.22. An issue to be considered is, in the event of a major supply loss incident, whether the existing arrangements for the DNs to offer support to other DNs should be retained.

Network planning

8.23. Under section 9 of the Gas Act, Transco, as the holder of a GT licence has an obligation to develop and maintain an efficient and economic pipeline system. In addition, standard condition 16(2) of the GT licence specifies that Transco shall plan and develop its pipeline system such that it can meet peak aggregate daily demand that is only likely to be exceeded (whether on one or more days) in 1-in-20 years.

8.24. In order to meet this obligation, Transco undertakes an integrated annual planning process across both its transmission and distribution networks. This planning process involves industry consultation and culminates in the production of Transco's annual Ten Year Statement.

8.25. In order for Transco to sell one or more DNs, consideration will need to be given to the nature of the licence obligations with respect to network planning on both the NTS and DNs. The licence framework will also need to define how the Transco and the DNs will need to interact in order to satisfy their planning obligations.

8.26. Issues to be considered include:

- the nature of the planning obligations on both the NTS and DNs;
- the nature of the planning process;
- the extent to which planning information is to be shared between the NTS and DNs and the nature of this information; and
- the mechanism by which disparities between DNs in determining investment requirements are to be resolved.

8.27. NGT has proposed that the network planning arrangements should be codified within the proposed offtake agreement discussed above.

Questions for consultation

8.28. In particular, Ofgem would like respondents to provide comments on the following issues:

- whether shrinkage arrangements should be fully unbundled at this stage;
- whether incentives with respect to gas quality and pressure need to be placed on Transco as owner and operator of the NTS;
- how best to ensure that the NTS and DNs co-ordinate planning and investment between them; and
- what other issues arise between the NTS and DNs where DNs are owned by a different company from the NTS.

9. Related issues

9.1. In considering NGT's proposals, there are several areas of related work that could be impacted by a decision to sell one or more DNs. We have identified some of the possible interactions here.

Transmission and Distribution price controls

9.2. Transco's gas transmission and distribution revenues are currently regulated through its price control which is set for the period 1 April 2002 to 31 March 2007. Transco's licence currently contains separate price controls on Transco's role as owner of the NTS and DNs. The NTS control has been further sub-divided between the transmission asset owner (TO) and system operator (SO) functions. The NTS SO control includes a series of day to day system operation incentives on Transco as well as investment incentives with respect to entry and exit capacity.

9.3. At present, Transco's LDZ price control for the period 1 April 2002 to 31 March 2007 is a single price control covering all DNs. However, Ofgem has now issued final proposals for the separation of the LDZ price controls.[12] These proposals are due to be implemented in April 2004.

9.4. In issuing its final proposals, Ofgem considered that the separation of price controls would provide enhanced incentives for efficiency in distribution activities. In particular, Ofgem considered that separation would assist in providing better management focus on gas distribution activities and better information on the costs of each DN.

9.5. The possible sale of one or more DN businesses raises a number of issues with respect to the present NTS and LDZ price controls. One important issue in this respect is the extent to which each price control may need to be revisited in the event that regulatory and commercial arrangements including incentives, are to be established governing the provision of interruption and linepack (or other) services at the NTS and DN interface. For example, neither the Transco NTS nor LDZ control currently provides for the treatment of revenues associated with linepack services (other than to the extent that

investment associated with linepack is implicitly included within the NTS and LDZ controls).

9.6. Similarly, consideration may also need to be given to revisiting Transco's SO exit capacity investment incentive to the extent that this currently includes an allowance for DN interruption for NTS purposes in the event that DN sites are interrupted for more than 15 days. Whether or not this incentive requires modification will in part depend on the nature of any future regulatory arrangements that apply at exit.

9.7. In addition, to these issues, there is also a possibility that the purchaser of a DN business may request the re-opening of an individual price control.

9.8. With respect to all these issues, when publishing the LDZ price control separation document, we indicated that the separation of LDZ price controls can be treated separately from potential changes in ownership of DN assets. Thus, it is likely that any adjustments to the LDZ price controls would be introduced at the time of the next LDZ price controls, ie 2007.

Mains Replacement Expenditure Cap

9.9. An issue that arises with the sale of one or more networks relates to the aggregate 5-year cap on safety-related iron mains replacement activity. Currently, Transco can trade off variations in mains replacement workload between regional networks, where such variations to workload are driven by changes to Transco's risk model or requirements of the HSE.

9.10. However, with separate 5-year caps on replacement activity, Transco will no longer be able to trade off variations in workload between networks. Furthermore, it is possible that changes in the allocation of mains workloads may require some regional networks to incur levels of replacement expenditure in excess of their individual allowances, therefore raising funding concerns. In addressing this issue, Ofgem has stated that if developments in either of these two areas result in a material loss of equivalence for

[12] *Separation of Transco's distribution price control, Final proposals*, Ofgem, June 2003.

Transco compared to the single distribution price control, Ofgem would consider relaxing the 5-year constraint on the relevant regional network price.[13]

9.11. This approach is appropriate while all networks are in Transco ownership. However, once a DN is sold, it could be difficult to clearly define "a material loss of equivalence to Transco". Furthermore, an independent network owner would not be clear on whether individual network 5-year caps could be relaxed if HSE requirements or Transco's risk model required an increase in workload in that DN. This would introduce the risk of some IDNs having insufficient funding to undertake their mains replacement activity in accordance with HSE requirements.

9.12. Ofgem would welcome views on how this issue could be addressed. One solution would be for Ofgem to relax an individual network cap if the network owner could demonstrate a material change in workload driven by HSE requirements or Transco's risk model, so far as the additional workload is efficiently incurred. This would mitigate concerns over the funding of safety related main replacement, whilst also protecting customers from inefficient overspend either by Transco or IDNs.

Distribution charging methodology

9.13. Ofgem has undertaken during 2003 to begin a review of Transco's distribution charging methodology. This review will take into account the possible sale of a DN. Such changes could result from development of the relationship between the NTS and DNs, for example, with respect to interruptions.

9.14. An issue that will need to be considered in this context is whether Ofgem should encourage the divergence of charging methodologies. On the one hand, this would lead to the possibility of a more innovative charging methodology allowing region specific issues to be better addressed in the structure of charges. On the other hand, this could be seen as hindering supply competition as it might increase the complexity of the charging arrangements.

[13] *Separation of Transco's distribution price control, Final Proposals*, Ofgem, June 2003

Pensions

9.15. At present, pension costs incurred by Transco are allocated between the NTS and the DNs as part of total employment costs. The basis of allocation largely relates to the numbers of staff employed in each business. The present price controls make allowance for the estimated efficient level of employment costs (including pension costs) that were expected to arise in each business during the period of the control. In separating the LDZ price control, this allowance for employment costs has been allocated to each DN on a broadly similar basis.

9.16. Customers of each DN will therefore pay in their charges for a proportion of the costs incurred by Transco in meeting its obligations in respect of pension benefits. Ofgem has recently[14] published the guidelines it proposes to adopt for the treatment of pension costs at future price control reviews.

9.17. Ofgem recently set out in detail[15] the guidelines that it intends to adopt in relation to the treatment of pension fund costs and the rationale behind its thinking. These can be summarised as follows:

- consumers of network monopolies should expect to pay the efficient cost of providing a competitive package of pay and other benefits, including pensions, to staff of the regulated business, in line with comparative benchmarks;
- in principle, each price control should make allowance for the ex ante cost of providing pension benefits accruing during the period of the control, and similarly for any increase or decrease in the cost of providing benefits accrued in earlier periods resulting from changes in the ex ante assumptions on which these have been estimated;
- pension costs should be assessed using actuarial methods, on the basis of reasonable assumptions in line with current best practice;

[14] *Developing network monopoly price controls*, *Initial Conclusions,* Ofgem, June 2003
[15] *Electricity distribution price control review*, *Initial Consultation,* Ofgem, July 2003

- increases or decreases in the future costs of providing accrued benefits resulting from under- or over-funding in prior periods will need to be considered on a case-by-case basis;

- increases or decreases in the future cost of providing accrued benefits resulting from differences between ex ante and ex post investment returns in prior periods will also need to be considered on a case-by-case basis;

- liabilities in respect of the provision of pension benefits that do not relate to the regulated business should not be taken into account in assessing the efficient level of costs for which allowance is made in the price control; and

- companies will also be expected to absorb any increase (and may retain the benefit of any decrease) in the cost of providing enhanced pension benefits granted under severance arrangements which have not been fully matched by increased contributions.

9.18. Change of ownership of one or more DNs raises additional issues in relation to pensions. Transco is an associated employer of the Lattice Group Pension Scheme (formerly the British Gas Staff Pension Scheme) (the "LGPS"). Following a series of corporate restructurings, substantially all living past and present employees of Transco and its predecessors are members of this scheme. Liability for meeting the pension benefits to which these members are (or will become) entitled therefore is assumed by Transco, unless it is met by another employer.

9.19. It will be important for Transco to structure any sale of a DN so as to ensure that the attributable part of this liability is effectively transferred to the IDN or that Transco is able to recover from the IDN its attributable share of the future costs of meeting this liability. If this is not done, Transco will continue to be exposed to costs that are not related to its remaining activities. This would be likely to have an adverse effect on its cost of capital and, in the extreme case, might prevent it from raising additional finance necessary to enable it to carry out its duties as owner and operator of the NTS and any DNs which remain in its ownership. This could act against the interests of gas customers.

9.20. Transco has considered a number of options to achieve a satisfactory sale structure and has discussed them with Ofgem. There are, in principle, broadly four options that have been considered:

1. sectionalisation of the LGPS, whereby each IDN would become a non-associated employer member of the LGPS, responsible for meeting the pension benefits to which members attributable to that IDN are (or will become) entitled;

2. transfer of active members (ie current employees) and non-active members (ie deferred pensioners and pensioners) attributable to each IDN to a new scheme established by the IDN (or to a suitably amended existing scheme operated by the new owner of an IDN);

3. contractual arrangements between Transco and each IDN whereby the IDN would agree to make payments to Transco equal to the attributable part of its total future pension costs in respect of non-actives; and

4. transfer of active members attributable to each IDN to a new scheme established by the IDN (or to an appropriately amended existing scheme operated by the new owner of an IDN) together with recovery from the customers of each IDN of the attributable part of future pension costs in respect of non-actives borne by Transco through regulated system exit point charges.

9.21. At privatisation, the pension schemes operated for the benefit of employees of the electricity supply and railway industries were each restructured so as to sectionalise them, enabling each of the successor companies (and certain other industry participants) to participate in them on a long-term basis. Existing members of the schemes, including both active and non-active members, were transferred to the appropriate section, together with the associated liabilities and a commensurate share of scheme assets. These transfers were effected by legislation.

9.22. In the absence of legislation, a sectionalisation of the LGPS without the consent of the members concerned could only be achieved with the appropriate actuarial certificate, the agreement of the trustees, and the approval of the Inland Revenue. None of these is assured. Moreover, as the LGPS is most likely to be in deficit, it is considered unlikely that it would be possible to obtain the necessary actuarial certifications to avoid

requiring members consents unless, in effect, the whole of the deficit were to be made good. This would represent an onerous burden. Formal sectionalisation of the LGPS is not therefore regarded as a viable option at the present time.

9.23. Similar considerations apply to involuntary transfers of scheme members to new self-standing IDN schemes or to existing schemes, appropriately amended, of the new owners of IDNs. While it may be expected to be practicable to utilise this approach in respect of active members of the scheme whose employment transfers to the IDN, there may equally be expected to be significant difficulties (which, in practice, might not be overcome) in transferring pensioners and deferred pensioners. In particular, there would be great difficulty in identifying past employment, in respect of which pension benefits have accrued, with a particular IDN. While these difficulties might be circumvented by an approach based on voluntary transfers, the substantial practical difficulties of obtaining agreement from each and every individual non-active member of the LGPS, mitigates against this option.

9.24. In the view of Transco, therefore, only the third (the contractual approach) and fourth (the regulatory approach) options might be viable. Under each of these options, it is envisaged that the pension rights of active members of the LGPS employed in the DNs would be transferred to the relevant IDN pension scheme. Active members employed in a DN which is retained by Transco would remain members of the LGPS. All pensioners and deferred pensioners would remain members of the LGPS. The future costs of providing the pension benefits to which these non-active members are or will become entitled ("legacy pension costs") would be borne by Transco but would be recoverable from each IDN (or from the customers of each IDN) in proportion to the attributable employment in respect of which the benefits have accrued (or an appropriate proxy for this function). In either case, the cost would ultimately fall on customers whose premises are connected to each DN, as is the present position.

9.25. Under the contractual approach, each IDN would contract with Transco to make periodic payments in the future equal to its attributable share of legacy pension costs paid by Transco. These payments would be allowed under the IDN's price control as a pass-through. Transco argues that this approach would leave both itself and the IDN exposed to a number of onerous risks, including tax and credit risks and it would leave the ultimate funding liability with Transco. In addition this approach is extremely

complex and commercially unusual, if not unique. Accordingly, Transco has expressed a preference for the regulatory approach.

9.26. Under the regulatory approach, the transmission price control would be set so as to enable Transco to recover from NTS exit charges the share of legacy pension costs attributable to each DN. The element of legacy pension costs recoverable in this way would be determined by Ofgem as part of the price setting process, in accordance with its guidelines. It would be focused on DN entry points, to avoid unduly affecting directly connected customers. Existing exit charges (or exit and NTS SO commodity charges) might simply be increased to recover the relevant costs. Alternatively, an additional exit charge might be introduced, to replicate or proxy the existing LDZ charging function through which these costs are presently being recovered. There are advantages and disadvantages of each of these methods, including distributional effects.

9.27. Ofgem has indicated to Transco that it would be prepared to consider the regulatory approach, but would need to be satisfied that this would not have effects adverse to the consumer interest, nor unduly constrain future development of the NTS price controls or of market mechanisms for the allocation of exit capacity.

Metering

9.28. NGT has indicated that the sale of metering assets will not form part of any DN sale. Clearly, any decision to sell DNs while retaining metering ownership with Transco could have implications for the existing metering processes.

9.29. At this stage, Ofgem would envisage that the current obligations in Transco's licence in relation to metering would fall on the DNs. The metering price control currently takes the form of a tariff cap and Ofgem would need to examine whether different levels of tariff caps would be needed in each different regions. Placing the obligations on the DNs would be analogous with the position in electricity where metering obligations sit with the distribution companies. Clearly, if Transco decides to retain the metering assets centrally then further consideration will need to be given to what arrangements, if any, would need to be put in place to ensure access to these assets.

9.30. Further consideration also needs to be given to the provision of metering information to enable third parties to provide metering services. This information includes technical

information on the gas pressure, for example, which would need to be provided by the DNs. At present the requirements to provide this information to shippers are in Transco's network code. Ofgem is currently investigating Transco's performance in this area following industry complaints. Consideration will need to be given to the implications for DN separation when this investigation is completed.

Asset risk management

9.31. Asset risk management is an important part of the process of ensuring longer-term network performance. Ofgem is seeking to promote greater visibility of asset risk management in the transmission and distribution of electricity and gas. The key aims of this initiative are as follows:

- to allow Ofgem to gain reassurance of the quality of the approaches being adopted by the network companies to the risk management aspects of their stewardship of the asset base; and
- the identification and encouragement of good practice in the area of asset risk management

9.32. To fulfil the aims of this initiative, Ofgem has initiated an Asset Risk Management Survey. The 2002 survey was designed to explore the asset risk management approaches of the electricity and gas network companies and it is the first stage of an evolving process. It has provided valuable information in understanding how the companies carry out the process of asset risk management and it has highlighted areas of the survey where further development will enhance it for future years.

9.33. The 2002 survey covered the large monopoly licence holders. Whether to extend the scope to include smaller independent networks will require consideration, including any implications of the sale of a DN or other corporate re-structuring.

Status of potential purchasers

9.34. Whilst this consultation document sets out the issues associated with the sale by NGT of the DNs, it does not set out issues associated with a potential purchaser. However, it is clear that there will be a range of issues associated with potential purchasers of DNs. In

particular, we would expect to be involved in discussions with the HSE regarding the issuing of a safety case to a potential purchaser. We would also expect to be discussing the competition implications associated with a potential purchaser with the Office of Fair Trading.

Questions for consultation

9.35. Ofgem would welcome comments on any of the issues raised in this chapter. We would also appreciate views as to any other issues that might be affected by the proposed sale of the DNs.

10. Ofgem's initial view and way forward

Introduction

10.1. In this chapter, we:

- provide our initial view on the application of the gateway concept to NGT's proposals;
- give an initial Ofgem view on several of the options presented above;
- explain Ofgem's overall view as to NGT's proposals; and
- explain the way forward.

Application of the gateway concept

10.2. Ofgem has created a 'gateway' in order to define those matters that will need to be resolved or the changes that will need to be delivered for Ofgem consent to any sale.

10.3. Under this approach, Ofgem has drawn a distinction between changes that must be delivered before a sale can occur and those matters where it is more appropriate for Transco to commit to broadly identified milestones and objectives prior to Ofgem providing approval for a disposal of assets.

10.4. In terms of regulatory architecture, Ofgem considers that changes that are required to licence, network code and (potentially) offtake agreement arrangements must be completed prior to any consent being given to a disposal of DN assets.

10.5. In terms of the gas balancing regime, Transco will need to develop and gain Ofgem's approval as to:

- the redesign of the gas balancing regime as governed by a single SO or by multiple SOs; and
- the introduction of commercial and / or charging arrangements to account for transfers of gas and linepack between Transco and DNs.

10.6. In terms of the exit capacity regime, Transco will need to develop and gain Ofgem's approval of:

- the contractual arrangements for interruption at the NTS / DN interface; and
- the pricing of exit capacity and interruption.

10.7. In terms of supply point administration, Transco will need to develop and gain Ofgem's approval as to the nature of the agency arrangements including ownership and funding.

10.8. In principle, with respect to exit, balancing and SPA, new arrangements should be in place prior to Ofgem approval as to the disposal of assets. However, given the significant nature of the work, and the interactions with other areas of the gas industry, it may be sufficient that, at the time of sale, Transco agrees to make appropriate changes with implementation to follow later.

Ofgem's initial views

Licensing

10.9. We have identified the following options for licensing arrangements:

- separate transmission and distribution licences for Transco and each DN, including the DNs retained by Transco; and
- retain the existing GT licence structure and identifying separate transmission and distribution obligations within that structure.

10.10. Ofgem's initial view is that it would be preferable to create separate transmission and distribution licences. These licences would be "GT" licences for the purpose of the Gas Act. Ofgem understands that this option requires more work than the other option identified. However, we consider that the clear delineation of transmission and distribution activities will help to minimise the potential for discrimination by Transco, as NTS owner and operator, in its treatment of the DNs.

Network code issues

10.11. In terms of network code arrangements, we identified the following options:

- each retained and independent DN business has its own network code arrangements and modification rules;
- uniform network code arrangements applying to Transco and each DN with the network code specifying transmission and distribution related obligations; and
- a common distribution network code for all DNs with a separate transmission code to apply to Transco.

10.12. In terms of network code arrangements Ofgem's initial view is that uniform network code arrangements would be an appropriate starting point for network code governance as it would minimise disruption for shippers and therefore facilitate competition. Initially, this would mean that all DNs, retained and sold, offered the same terms and conditions to the shippers.

10.13. Ofgem would also note however that in the future it may be desirable for the regime to evolve to separate transmission and distribution network codes. As such, any uniform network code arrangements should not preclude these developments.

NTS and DN exit capacity arrangements

10.14. The potential sale of one or more DNs raises significant issues for its exit capacity arrangements. These issues include:

- the charging and contracting arrangements associated with NTS interruption and whether Transco, as NTS SO, contracts directly with shippers or customers at DN supply points for DN interruption requirements or contracts with the relevant DN operator within the context of Transco's proposed offtake agreement;
- related to the issue of charging, the nature of the mechanisms for allocating exit capacity on the NTS and DNs;

- the revenue and price control implications associated with different contractual frameworks for managing DN interruption for NTS purposes and for DN purposes;

- considering the impact of a sale on Transco's 15 day NTS/DN exit interruption and other exit capacity incentives; and

- whether each DN should be provided with financial incentives to efficiently manage DN interruption for DN purposes.

10.15. Ofgem has not yet come to a view on NGT's proposals in this area.

Gas balancing arrangements

10.16. Ofgem identified two options for gas balancing:

- a single SO model in which the shippers' incentives to balance across the system are retained as now, with the NTS and DNs managing gas transfers via an offtake agreement; and

- a multiple SOs model in which shippers are required separately to balance across the NTS and the DNs.

10.17. Ofgem's initial view is that the benefits of retaining liquidity at the NBP, and the implications this has for wholesale and retail gas competition, points towards retaining balancing incentives across the whole system. There does however seem to be significant merit in using the opportunity of revisiting the gas balancing arrangements to introduce market related pricing of NTS and DN linepack.

Supply point administration

10.18. In terms of supply point administration we set out:

- a number of principles against which we will judge proposed changes to industry services;

- our preliminary views on NGT's proposals to provide industry services via an agent; and

- a number of issues which NGT will need to consider if it is to develop further its agent proposal.

10.19. Ofgem is not yet in a position to come to a view on NGT's agent proposal. We require further understanding of how the agent will be funded, whether ownership of the agent will remain with NGT and the governance arrangements that will be put in place to support the agent proposal.

Ofgem's initial view on NGT's overall proposals

10.20. NGT's proposals represent a fundamental change to the structure of the gas industry and significant work will be required to understand the detailed implications of any DN sale. A number of important issues have to addressed, including complexity for shippers and customers, as well as the avoidance of discrimination. Nevertheless, it is Ofgem's initial view that if these issues can be resolved satisfactorily, then NGT's proposals should be beneficial for customers.

10.21. To support this view, we have carried out an initial RIA. This is attached as appendix 5. A summary table is given below.

Table 10.1: Valuing the issues associated with divestment

Issue	**Assessment**
Ofgem and supplier/shipper costs of developing proposals	Significant resource costs in developing proposals. Level of costs dependent on complexity of proposals and arrangements at NTS / DN interface. **£5m**
NGT costs	Significant, however NGT would only proceed with divestment if it expected net benefits for its shareholders
Shipper/supplier implementation costs	Potentially significant IT costs associated with introduction of new change of supplier processes. Costs dependent on change of supplier process adopted. Potential IT costs associated with introducing linepack and interruption services at the NTS / DN interface. **£10m's**
Benefits to customers from improved operational efficiencies and better comparative price regulation	Significant. Indicative estimate of benefits of operational efficiencies of between **£150m** and **£330m** depending on quantity of DNs sold. Efficient pricing of interruption and linepack at the

	NTS / DN interface and introduction of non-discriminatory transportation arrangements should provide significant benefits to customers. Conversely, administered arrangements for transportation pricing and a lack of effective ring fencing or separation of retained DN businesses could generate significant costs to customers.
Environment	No significant costs or benefits
Security of supply	Some security of supply benefits associated with improved investment signals – but dependent on nature of commercial arrangements applying at the NTS / DN interface.
Overall	**Positive**

10.22. Ofgem accepts that the RIA is at an early stage but considers that there is significant merit at this point in considering and further evaluating NGT's proposals to sell off one or more DNs. Ofgem will be able to make a further assessment of the proposals having reviewed the responses to this consultation document and upon further detailed consideration of NGT's proposals.

10.23. We would welcome comments on this initial RIA. In our conclusions document, we will update the RIA taking into account respondents' views, as well as more work on some of the options identified in this document.

The Way Forward

10.24. We have explained above that Transco needs two broad approvals before it can formally dispose of a DN:

- Approval from Ofgem as to the "disposal of relevant assets" and
- Approval from the HSE as to the necessary changes in Transco's safety case.

10.25. This document starts the process by which Transco will be able to secure Ofgem approval to the disposal of relevant assets having regard to the application of the gateway concept as discussed above.

10.26. A possible timetable for taking the issues raised in this consultation document forward is:

- July 2003 – consultation document
- September 2003 – consultation workshop and close of consultation
- October 2003 – Possible further workshop following consultation close
- November 2003 – Ofgem conclusions
- January 2004 – Workstreams on exit capacity, gas balancing, regulatory architecture, SPA and other issues to commence
- June 2004 – Transco consults on network code modifications and Ofgem consults on licence modifications
- September 2004 – licence modifications made, network code modified and consent to dispose of relevant assets given.

10.27. We recognise that there is much work to be done in order to meet this timetable. As such, we consider that the proposed timetable represents a best case for approval to disposal. Slippage into 2005 cannot be ruled out.

10.28. Ofgem recognises the potentially significant nature of the NGT's proposals. To this end, we are intending to hold a workshop at which interested parties can explore the issues raised, with Ofgem and NGT, in this document in more detail. Details will be appearing on the Ofgem website shortly. In the meantime, if you wish to attend, please send names to becky.neale@ofgem.gov.uk.

Appendix 1 Gas industry regulatory framework

1.1 This chapter sets out the current regulatory framework for the gas sector from offshore gas production to customers.

Regulatory framework

1.2 We explain below the relevant components of the regulatory framework for the present gas regime. These include the Gas Act 1986, the Utilities Act 2000, the offshore regulatory regime, the Electricity Act 1989, competition legislation and financial regulation.

The onshore regulatory regime

The Gas Act

1.3 The Gas Act, as amended by the Utilities Act, provides for the regulation of the onshore gas regime in Great Britain and for the separate licensing of GTs, gas shippers and gas suppliers. Transco is the largest GT in Great Britain. The Gas Act also provides for the creation of the Authority.[16]

1.4 Section 4AA of the Gas Act provides that the principal objective of the Authority in carrying out its functions under the Gas Act is to protect the interests of consumers in relation to gas conveyed through pipes, wherever appropriate by promoting effective competition between those engaged or concerned with the shipping, transportation or supply of gas or engaged in commercial activities relating to such activities. In carrying out its functions under the Gas Act in a manner which is best calculated to further the principal objective, the Authority is required to have regard to the following:

- 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; and

[16] With the commencement of relevant provisions of the Utilities Act in December 2000, the duties and functions of the Directors General of Electricity and Gas Supply were transferred to the new Gas and Electricity Markets Authority.

- the need to secure that licence holders are able to finance the carrying on of the activities which they are authorised or required to do.

1.5 In performing such duties, the Authority must have regard to the interests of individuals who are disabled or chronically sick, of pensionable age, with low incomes or residing in rural areas.

1.6 The Authority may, in carrying out any of its functions, have regard to the interests of consumers in relation to electricity, telecommunications, and water and sewerage services, which are affected by the carrying out of those functions.

1.7 The Authority must carry out its functions in the manner it considers is best calculated to:

- promote efficiency and economy on the part of authorised persons and the efficient use of gas conveyed through pipes;
- protect the public from dangers arising from the conveyance of gas through pipes or the use of such gas; and
- secure a diverse and viable long term energy supply.

1.8 The Authority must also have regard to the effect on the environment of activities connected with the conveyance of gas through pipes.

The Utilities Act

1.9 The Utilities Act amends the Gas Act in a number of significant ways. The Utilities Act gave the Authority, a new principal objective, new duties, as outlined above, and functions in relation to licensing and setting performance standards.

1.10 The Gas Act provides for the licensing of GTs, gas shippers and gas suppliers and imposes a number of conditions on the licensees. Where the Authority is satisfied that a licensee is contravening, or is likely to contravene any licence condition or relevant obligation, the Authority can take enforcement action, including among other things, the issue of an enforcement order against the licensee under section 28 of the Gas Act.

1.11 Section 30A of the Gas Act sets out the provisions by which the Authority can impose penalties on a licence holder where it contravenes its obligations. Section 30E sets out the provisions by which the licence holder can appeal such penalties.

1.12 Section 34(1) of the Gas Act places a duty on the Authority, as far as it appears to the Authority to be practicable, to keep under review the carrying on both within and outside Great Britain licensed activities and relevant ancillary activities. It is also the duty of the Authority, as far as it appears to the Authority to be practicable, to collect information on the activities of GTs, gas shippers, gas suppliers and ancillary services, in relation to matters with respect to which its functions are exercisable.

1.13 Section 35 of the Gas Act provides the Authority with the powers to publish advice or information, related to the conveyance of gas through pipes, where it would promote the interests of existing and future consumers. In publishing the advice or information the Authority must have regard to the need for excluding information, so far as that is practicable, which relates to an individual or body if, in the Authority's opinion, publication of the information would or might seriously and prejudicially affect that individual or body's interests. Before deciding to publish advice or information in relation to a particular individual or body, the Authority must consult that individual or body.

Transco's Gas Transporters Licence

1.14 Transco has a duty, under section 9 of the Gas Act, to develop and maintain an efficient and economical pipeline system for the conveyance of gas and, so far as it is economical to do so, to comply with any reasonable request to connect to that system and convey gas by means of that system to any premises. It is also the duty of Transco to facilitate competition in the supply of gas. A GT has a further duty to avoid any undue preference or discrimination in the connection of premises to any pipeline system operated by it, or in the terms on which it undertakes the conveyance of gas by means of such a system.

1.15 Amended standard condition 4D(1) of Transco's GT licence requires it to conduct its transportation business in the manner best calculated to ensure that neither the GT nor any affiliate, nor any gas shipper nor gas supplier, obtains any unfair commercial advantage.

1.16 Standard condition 16(2) sets out certain gas security standards to which Transco must plan and develop its pipeline system. In essence, these standards require the pipeline system to be capable of meeting a peak aggregate daily demand that is only likely to be exceeded in one year in every 20 years.

1.17 Special condition 27(1) requires Transco to operate the National Transmission System (NTS) in an efficient, economic and co-ordinated manner.

1.18 Amended standard condition 4E requires Transco only to enter into transportation arrangements, which are in conformity with any relevant provisions of the network code. This would include any obligations in the network code to disclose information relating to the operation of Transco's pipeline system or any market relating to Transco's pipeline system.

Transco's network code

1.19 Transco's GT licence places certain obligations on Transco, including the requirement that it prepares a network code (amended standard condition 9), which sets out the arrangements between the GT and shippers for the use of, and connection to, that GT's pipeline system. The network code is required to meet the following relevant objectives as set out in standard condition 9 of the GT licence:

- the efficient and economic operation by the licensee of its pipeline system;
- so far as is consistent with sub-paragraph (a), the efficient discharge of its obligation under its licence;
- so far as is consistent with sub-paragraphs (a) and (b), the securing of effective competition between relevant shippers and between relevant suppliers; and
- so far as is so consistent, the provision of reasonable economic incentives for relevant suppliers to secure that the domestic supply security standards (as defined in the GT licence) are satisfied as respects the availability of gas to their domestic customers.

1.20 Transco's network code was put in place in March 1996. The mechanism for modifying the network code is set out in standard condition 9 of Transco's GT licence and in the

network code modification rules. Under the modification rules, shippers, Transco and third party participants are able to propose modifications to the network code. Paragraph 6(a) of condition 9 also sets out the requirement for the network code modification rules to identify the designated third party participants. Ofgem is not itself able to propose modifications, although the implementation of all modifications requires the consent of the Authority.

1.21 The Authority may only direct that the network code should be modified if, in its opinion, the proposed modification would, as compared with the existing provisions of the network code or any alternative proposal, better facilitate the achievement of the relevant objectives as set out in standard condition 9 of the GT licence. In making such a direction, the Authority is required to have regard to its statutory duties.

Transco's Operational Guidelines

1.22 The purpose of the Operational Guidelines (OGs) is to identify the various balancing measures available to Transco and the basis on which Transco will employ particular balancing measures during any day. The OGs are not part of the network code but are established by a separate obligation under Transco's GT licence (special condition 17). Nevertheless, they are required by the licence to be consistent with the network code. The OGs are intended to ensure that Transco takes balancing actions that are consistent with the efficient and economical operation of the system. Only Transco is allowed to propose modifications to the OGs and these require the consent of the Authority.

Procurement Guidelines

1.23 Special condition 27(3) of Transco's GT licence requires it to prepare an annual procurement guidelines statement in a form approved by the Authority. This statement sets out the kinds of system management services that Transco may be interested in purchasing and the mechanisms by which it envisages purchasing, entering into or otherwise acquiring them. Transco must also prepare an annual report on the system management services it has procured in each 12 month period.

System Management Principles Statement

1.24 Special condition 27(5) of Transco's GT licence requires it to prepare a System Management Principles Statement (SMPS) in a form approved by the Authority. The SMPS sets out the principles and criteria by which Transco will determine which system management services it will use to assist it in the operation of the NTS, and for what purpose, and when it would resort to measures not involving the use of system management services in the operation of the NTS. Transco must take all reasonable steps to comply with the SMPS and is required to prepare an annual report on its compliance.

1.25 In addition, under special condition 27(8) Transco is required to conduct a yearly review of the SMPS in consultation with shippers and other interested parties. As part of this review, Transco may propose revisions to the SMPS. Any such revisions can only be implemented following the consent of the Authority.

Gas Shippers Licence

1.26 Standard condition 3(1) of the gas shippers' licence requires the licensee to act in a reasonable and prudent manner in making use of a GT's pipeline for the conveyance of gas. Standard condition 3(2) requires that the licensee shall not knowingly or recklessly pursue any course of conduct which is likely to prejudice:

- the safe and efficient operation, from day to day, by a relevant transporter of its pipeline system;
- the safe, economic and efficient balancing by that transporter of its system; or
- the due functioning of the arrangements provided for in its network code.

1.27 Standard condition 3(3) requires that the shipper shall not knowingly or recklessly act in a manner likely to give a false impression to a relevant transporter as to the amount of gas to be delivered by the licensee on a particular day to that transporter's pipeline system.

1.28 Standard condition 4 relates to the policies of dominant shippers in gas markets. In essence, standard condition 4(2) provides that a dominant shipper must, if requested by

the Authority, supply it with a statement of the shipper's policies in respect of its participation in the gas market. Where that statement no longer adequately or accurately describes the policies to which it relates, the licensee shall as soon as is reasonably practicable, give the Authority a statement of any change in those policies or of any new policies.

1.29 Standard condition 9 places further obligations on a licensee to provide, among other things, information to a relevant transporter to enable the transporter to make plans for the safe operation of its pipeline system.

1.30 Standard condition 10 requires licensees to furnish the Authority with information as it may reasonably require, or as may be reasonably necessary for the purpose of performing functions assigned to it by or under the Gas Act and any functions transferred to or conferred on it by or under the Utilities Act.

Obligations under Transco's network code

1.31 Under condition 4E of the GT licence, Transco is required to enter into transportation arrangements in conformity with the network code. As signatories to Transco's network code, shippers are faced with commercial incentives designed to encourage them to balance the gas that they put into the pipeline network with the gas they take off each day. In addition, shippers are required by Section I3.10.1 and I3.10.2 of the network code to use all reasonable endeavours to ensure that their daily gas inputs are delivered onto the NTS at a uniform flow rate to the end of the day, sometimes referred to as the 1/24 flow rate rule.

The offshore regulatory regime

1.32 Offshore sectoral regulation is the responsibility of the Department of Trade and Industry (DTI). The DTI aims to maximise the economic benefits to the nation from the exploitation of its hydrocarbon resources, having due regard to the potential impact of such activities on the environment and on other land and sea users. It takes account of the need to ensure secure, diverse and sustainable supplies of energy for business and consumers at competitive prices. It liaises with the industry and other interested bodies to improve cost effectiveness and heighten awareness of environmental issues.

1.33 The Petroleum Act 1998, which consolidated a number of provisions previously contained in five separate pieces of primary legislation (including the Petroleum (Production) Act 1934), vests ownership of oil and gas within Great Britain and its territorial sea in the Crown and enables the Secretary of State to grant licences to explore for and exploit these resources and those on the UK Continental Shelf (UKCS). The DTI manages the licensing process. It issues exploration and production licences, approves operators and issues field determinations.

The Electricity Act

1.34 The Electricity Act as amended by the Utilities Act, sets out the role of the Authority in relation to the electricity industry and sets out the licensing regime in relation to the supply, distribution, generation and transmission of electricity.

1.35 Under section 3A(2)(a) of the Electricity Act the Authority must have regard to the need to secure that all reasonable demands for electricity are met.

1.36 Under section 9(2) of the Electricity Act, transmission licensees are obliged to develop and maintain an efficient, co-ordinated and economical system of electricity transmission and to facilitate competition in the supply and generation of electricity.

NGC's Electricity Transmission Licence

1.37 Special condition AA4, paragraph 1 of National Grid Company's (NGC) transmission licence requires it to operate the electricity system in an economic, efficient and co-ordinated manner. In addition, standard condition 7 of its licence requires NGC to prepare and at all times have in force and implement and comply with its Grid Code, one of the objectives of which is to promote the security and efficiency of the electricity generation, transmission and distribution systems in England and Wales.

Competition legislation

1.38 The Authority has concurrent powers with the Office of Fair Trading (OFT) under the Competition Act 1998. In relation to these concurrent powers, the Authority works in conjunction with the OFT under the terms of a concordat between the Authority and the OFT.

The Competition Act

1.39 The Competition Act prohibits anti-competitive agreements and abuse of a dominant position. Under the Competition Act, the OFT and Ofgem enforce the Chapter I and II prohibitions using their concurrent powers. Chapter I prohibits agreements between undertakings, decisions by associations of undertakings or concerted parties which have the object or effect of preventing, restricting or distorting competition in the United Kingdom and which may affect trade in the United Kingdom.

1.40 Chapter II prohibits conduct by one or more undertakings which amounts to the abuse of a dominant position in a market in the United Kingdom which may affect trade in the United Kingdom. Under the Competition Act the Authority has the power to impose financial penalties of up to 10 per cent of turnover on companies infringing the prohibitions.

The Enterprise Act 2002

1.41 The Enterprise Act 2002 came fully into force in June 2003. The Enterprise Act implements changes to give more independence to the competition authorities. It establishes the Competition Appeals Tribunal (CAT). It also makes changes to the Competition Commission (CC), to reform bankruptcy laws and to tackle trading practices that harm consumers.

1.42 Part 4 of the Enterprise Act makes provision for market investigation references to the CC made by the OFT. The Authority (along with other specified sectoral regulators) has concurrent powers to make references to the CC in respect of the gas and electricity markets if it has reasonable grounds for suspecting that one or more features of a market prevent, restrict or distort competition in relation to the supply or acquisition of goods or services in the UK. Having received a reference, the CC is able to carry out an investigation to inquire into markets where it appears that the structure of the market or the conduct of suppliers or customers is harming competition. The Authority is able to accept undertakings in lieu of a reference to the CC (publishing its reasons for doing so).

1.43 There is a right to apply for a review by the CAT of a decision taken by, among others, the Authority and the CC in connection with market investigations. Such a review is

carried out by the CAT, which can review the lawfulness and fairness of the decision. It can require the decision to be reconsidered, but it cannot substitute its own decision.

Financial services regulation

Financial Services and Markets Act 2000

1.44 The Financial Services Authority (FSA) is a statutory regulator responsible for the regulation of financial services and the protection of consumers of financial services. The Financial Services Act 1986 was replaced by the Financial Services and Markets Act 2000 (FSMA). Since the FSMA came into force in 2001, the FSA's primary function is to regulate financial services and markets in the UK in accordance with four objectives.

1.45 The four objectives of the FSA under the FSMA are to:

- maintain market confidence in the UK financial system;
- promote public understanding and awareness of the financial system;
- secure an appropriate degree of protection for consumers; and
- reduce the scope for financial crime.

1.46 This overhaul of financial services regulation took place against a backdrop of fundamental change in the wholesale energy markets. The FSMA contains a regime dealing with market abuse that may extend to markets such as the OCM and trading upon such markets. Individuals and companies are subject to the regime. The new regime relating to market abuse applies to the behaviour of all legal persons in relation to qualifying investments traded on 'prescribed markets', regardless of whether they require FSA authorisation.

FSA's code of market conduct

1.47 Part VIII of the FSMA contains market abuse provisions. These provisions aim to make the operation of the markets more open, transparent and fair by penalising certain forms of behaviour considered to constitute market abuse or malpractice. In accordance with these provisions, the FSA is required to produce a code of market conduct to give

guidance to those affected by the new regime and to assist in determining which types of behaviour may be considered to constitute market abuse. The following are three examples of behaviour which might be caught under the code:

- misuse of information - for example, this could include taking a position prior to the disclosure of a forthcoming outage for the purpose of making a windfall gain out of the impact of that outage on the market;

- giving false or misleading impressions - for example, this could include deliberately misleading the market or denying accurate stories about significant new gas finds that would be expected to move prices; and

- market distortion - for example, undertaking trades just prior to an exchange closing, which position the price at a distorted level and which have the effect of avoiding a pay out on a related contract.

1.48 In light of the increasing importance of financial regulation in the energy markets, Ofgem and the FSA are seeking to ensure the exchange of information relating to the physical and financial markets to enable both regulators to discharge their statutory duties. We are also in regular contact with the FSA and in discussions over the application of the code of market conduct to the energy industry and the relationship between the two regulatory regimes.

Concordat between Ofgem and the FSA

1.49 Ofgem and the FSA have produced a proposed concordat which outlines the procedures for working in concert and general principles to be observed by the agencies. The concordat also details the respective roles of the FSA and Ofgem and the reasons for and the aims of the concordat. The concordat is not a legally binding document but it will serve as a point of reference for both agencies where appropriate.

Appendix 2 NGT paper on licensing framework

General Background and Issues

2.1 Section 5(1)(a) of the Gas Act 1986 makes it an offence:

- to convey gas through pipes to any premises; or
- to any pipeline system operated by a gas transporter

2.2 unless that person is authorised to do so by a licence.

2.3 This is subject to certain exceptions in Section 6A. The exception most relevant for this purpose is contained in paragraph 4 of Schedule 2A and Schedule 6A to the Gas Act 1986: *"Section 5(1) is not contravened by a person conveying gas to any premises if it any time they are supplied with gas at a rate which at any time within a 12-month period immediately preceding that time he reasonably expected to exceed 75,000 therms per annum."*

2.4 A gas transporter can be authorised by licence to do either or both of the following:

- to convey gas through pipes to any premises in an authorised area of his, i.e. any areas specified in the licence as it has effect for the time being, and
- to convey gas through pipes either to any pipeline system operated by another gas transporter (i.e. to pipeline systems generally) or to any pipeline system as operated (i.e. by a gas transporter) which is specified in the licence.

2.5 References in the Gas Act to gas transporter mean the holder of the licence under Section 7, except when the holder is acting otherwise than for a purpose connected with:

- the carrying on of activities authorised by the licence (i.e. (i) and (ii) above), or
- the conveyance of gas through pipes which
  - are situated in an authorised area of his, or

- are situated in an area which was an authorised area of his, and were laid at the time when it was that transporter's authorised area, or

- the conveyance of gas through pipes, which is the course of being conveyed to or from a country or territory outside Great Britain.

2.6 This definition is important, as it defines when a person is acting as a GT, and therefore, when it has statutory powers and duties in relation to connections, and in relation to metering, including rights of access and rights to disconnect contained in Schedule 2B of the Gas Act.

Distribution Networks (DNs)

2.7 It is assumed that a DN owner will convey to all or virtually all premises in its network, and will therefore require a licence under Section 7(2)(a). It should be noted that although there is no requirement for a licence to convey solely to premises likely to consume more than 75,000 therms per annum, Section 7(2)(a) does permit a person to be authorised to do so. The distinction between the two is that, if a person relies on the exemption, it will not be acting as a GT, and will therefore not have statutory powers, but it will do if it has an authorisation under Section 7(2)(a).

2.8 It is assumed that a DN will also need an authorisation under Section 7(2)(b) to cover existing flows of gas between networks and the potential for future "interconnectors". It is assumed that the nature of the authorisation will be a generic authorisation, rather than a specific authorisation.

NTS

2.9 Although considering the NTS separately to draw distinctions it is assumed that the NTS will not be legally separate from DNs retained by Transco.

2.10 It is assumed that the NTS, if separate, would require an authorisation under Section 7(2)(b), as it would be conveying gas to pipeline systems operated by another gas transporter. It is assumed that the authorisation requested would be a generic one, rather than a specific one.

2.11 The question is then whether it requires an authorisation under Section 7(2)(a) to convey gas through pipes to any premises. The NTS does not require such a licence if it is merely going to convey to premises likely to exceed 75,000 therms per annum. There remains a question as to the status of the occasional hot tap connection from NTS pipelines to individual farms and other such premises, which do exist across the system.

2.12 If it were not to have an authorised area, however, in relation to those premises for which it is currently the conveyor, e.g. power stations, it would need to rely on Section 7(1)(b)(ii) to qualify as a gas transporter, i.e. that it was conveying gas through pipes which were in an authorised area previously belonging to it. This is because, if it merely has an authorisation under Section 7(2)(b), it would not have any authorised area, the authorised area having in effect been transferred to the DN. This then potentially throws into doubt what its powers would be as a GT. It would seem that activities connected with the repair and maintenance of the pipe would enjoy such statutory powers, e.g. deemed planning permission, NRSWA rights, as any other GT. It is not so clear what the status of a replacement pipe or an alteration to the route of the pipe would be. It might well be that it would have to lay such pipes under the provisions of the Pipelines Act 1962, having obtained planning permission and such NRSWA rights as might be applicable.

2.13 In relation to the connection of new premises to the NTS, it seems possible that it would not be acting in the connection activity as a GT, and therefore would need planning permission, NRSWA rights and to follow the process under the Pipelines Act 1962, in order to make the connection.

2.14 Further consequences of not acting as a GT may be to restrict the ability under Schedule 2B to exercise the rights of a GT to enter premises for the purpose of meter reading, removing meters, ensuring appropriate meters are in place, etc. While these powers may still be connected to the conveyance of gas through existing pipes (serving existing premises), it is not clear that they would apply to new connections to the NTS.

2.15 The consequences of not having an authorised area are as follows:-

- The duty to develop and maintain an efficient and economical pipeline system (Section 9(1)(a)) would not apply, as that duty only applies as regards the GT's

authorised area. The NTS licence would need a special condition to replace this.

- Section 9(1)(b) will not apply, as that also relies on the concept of licensed area.
- Section 9(1A), the duty to facilitate competition in the supply of gas will apply, as that is not linked to authorised area.
- Section 9(2)(a) will not apply in relation to premises (the duty to avoid undue discrimination and preference in connections), since although NTS Co would be able to connect, since one does not require a licence to effect connection, NTS Co would not be acting as a GT, and therefore not within the ambit of the section.
- Section 9(2)(a) would apply in relation to connections to other pipeline systems.
- Section 9(2)(b) would apply, as it relates to conveyance to pipeline systems and existing pipes.
- Section 10 would not apply, as that relates to authorised areas.
- Section 10A would not be applicable, as that relates to the supply of premises, although it might be used in relation to a premises using above 75,000 therms per annum.
- Section 22A would apply, as that applies irrespective of authorised areas.

2.16 There therefore may be grounds for ensuring that the NTS does have an authorised area or authorised areas in order to give it the statutory powers currently enjoyed by a GT. This would suggest that in order to be able to continue to operate as at present, particularly in terms of system development, it is important for the Transco licence to continue to encompass both the NTS and retained networks.

2.17 It is possible for Transco's existing licence to be restricted with the consent of Ofgem, using Section 7(4A). However, unlike the corresponding provision in Section 7A(6) which permits shippers and suppliers to have their licence restricted to exclude premises, the restriction in relation to GTs is only in relation to areas or pipeline

systems. However, if Transco applied, as part of the regime reorganisation, to request a restriction of the entirety of a DN except the areas of land comprising the NTS premises currently connected to it, a similar effect could be achieved. If new premises wish to be connected to the NTS, the NTS would then apply for an extension of its licence to cover those premises in rather the same way the GTs currently do with new housing sites. This would then permit the GT to lay a pipe, albeit not in its area, but to serve premises within its licensed area, as IGTs can do at present, and still have the benefit of its statutory powers. This would also mean that the general duties to connect under Section 9(1)(b) and Section 10 could effectively be excluded.

Process for Disaggregation of the Licences

2.18 There are two potential routes for disaggregating the licences between a DN and Transco.

Assignment

2.19 Under Section 8AA of the Gas Act 1986 a licence is capable of being transferred by the licence holder with the consent of the Authority, in accordance with the section, and any term of the licence relating to its transfer. The licence may include conditions which must be complied with before the licence can be transferred. A consent may be given subject to compliance with such modification or other conditions as Ofgem considers necessary.

2.20 In deciding whether to give its consent to a proposed transfer, the Authority shall apply the same criteria as it would apply if the Authority were deciding whether

- in the case of a general transfer, to grant a corresponding licence to the transferee, or
- in the case of a partial transfer,
  - to grant to the transferee corresponding to so much of the licence as it proposed to be transferred, and
  - to grant to the transferor a licence corresponding to so much of the licence as it proposed to be retained.

2.21 The Authority must give to the Health and Safety Executive not less than 28 days' notice of any proposal to consent to a proposed transfer, and give to the HSE and the Secretary of State not less than 28 days' notice of any proposal to impose a modification condition. Therefore, if the Authority does not intend to impose additional modification conditions, no notice to the Secretary of State is required. However, if a modification is proposed, the Secretary of State can, within the notice period, direct the Authority not to impose a condition, and the Authority must comply.

2.22 A purported transfer of the licence is void if the licence is not capable of transfer or the Authority has not given its consent, or if the purported transfer is in breach of a condition of the licence or if there has been, before the purported transfer, a contravention of the condition, subject to compliance with which the Authority's consent is given.

2.23 Transco's licence contains a Special Condition 25A, which requires that in addition to compliance with the procedure in Section 8AA of the Act, the prior written consent of the Secretary of State to the transfer must be obtained. It should be noted that, in any event, at least 60 days' advance notice of the disposal of the assets comprising the transportation assets within the DN would be required to the Secretary of State under Standard Condition 29(5).

Grant and Restriction

2.24 Each DN could make a fresh application in respect of the area concerned for a GT licence in the ordinary fashion under 7B of the Gas Act. This would be accompanied by a corresponding application for a restriction of the residual Transco licence (whether of the other DNs, plus the NTS, or, ultimately, just of the NTS alone) under 7(4A) of the Act, excluding from such restriction any NTS premises still wishing to be served by the NTS, as referred to earlier in this note.

Process for Amendment of Licence Conditions

2.25 The Act contains two processes for amendment of conditions

- Standard Conditions - procedures contained in Section 23(7) of the Gas Act contain a requirement relating to the participation of all relevant licence holders

with the potential for the Authority to be unable to enact change if more than a relevant percentage of relevant licence holders object.

- Modification by Agreement with a particular licence holder – used extensively in the current Transco licence and can include modification of standard conditions or creation of special standalone conditions. Process requires the agreement of the particular licence holder (S23(6)) and that the Authority has undertaken an appropriate consultation exercise (S23(3)) and considered representations received before making any modification. The Authority is also required under S23(4) to include the HSE within the consultation exercise.

Network sale options

2.26 We have prepared a table which sets out Transco's analysis of the current Transco GT Licence with a view as to whether the conditions therein relate solely to transmission, distribution or are common to both activities. The table identifies that the vast majority of licence conditions within the Transco Licence relate to both activities.

2.27 It seems there are three broad options as to how licences might be structured and how a Distribution Network (DN) GT Licence might be accommodated. Broadly these are:-

A. <u>The GT Licence remains as it now is covering both transmission and distribution activities associated with gas conveyance.</u>

2.28 The analysis demonstrates that the vast majority of Licence conditions are common to both activities, although capable of different interpretation for transmission and distribution. The majority of Licence conditions are phrased in terms of gas conveyance and draw little distinction between transmission and distribution activities, although distribution arguably attracts what might be considered as certain 'retail' obligations. Clearly price controls are structured differently but these are currently accommodated within the same document. Amendments required to both the Transco and DN licence could be dealt with by agreement under the S23 procedure.

2.29 Either process of assignment/transfer (S8AA) or grant of a new Licence under 7B accompanied by a restriction in the scope of the Transco Licence under S7(4A) could apply upon resolution of the precise form of Licence. Secretary of State consent would

also be required under Special Condition 25A and amended Standard Condition 29. Ofgem might also wish to consider appropriate conditions for compliance of the Transco Licence prior to transfer.

Pros

- Meets the transaction requirements in the minimum time and is not dependent on Parliamentary time.
- Simplest option and closest to the status quo.
- Changes can be contained to the Transco Licence and can therefore be effected by the agreement route, no need to follow the route for collective agreement of all relevant licence holders.
- Does not preclude further change and development to the Licence.
- Doesn't trigger need for any primary change i.e. no new licensable activity which would require further legislation.
- Minimum change to the Transco Licence which is limited to reduction of authorised areas and new implementation conditions.
- Within the Transco and DN Licence all are GT's and still able to use the statutory powers re system development.
- Section 8AA procedure has flexibility to accommodate a distribution context which could be effective upon transfer.

Cons

- No division between Transmission and Distribution activities.
- The DN Licence on day 1 might require amendment to add a distribution context, although this could be accommodated in the Section 8AA procedure.

Potential New Licence Conditions

- Uniform Code arrangements which would include concept of mutual modification rules and the ability for an individual GT to satisfy the requirement to have a Network Code by signing onto the uniform arrangement.

- System Security Standards for Transmission Owner recognising the need to incorporate within the 1 in 20 requirement that the NTS when planning its System would need to take account of the DN requirement for conveyance to premises.

- Offtake Agreement placing a requirement on Transco as the operator of the NTS to establish, consult etc. on a form of offtake agreement and secure regulatory approval for the same. Also recognition of the need for the NTS to be operated as regards DN's without undue preference or discrimination.

B. <u>GT Licence split into separate transmission and distribution licences.</u>

2.30 This could entail the creation of two separate GT Licences, clearly the main issue will be what, if any, distinction is perceived in gas conveyance terms between transmission and distribution. This also raises the issue of what , if any, authorised area the NTS has, also potentially losing Sch4 powers and planning powers as described above

2.31 In Gas Act terms Sections 9 and 10 apply to distribution systems for connections whereas the broader Section 9 economic duty only applies to NTS. Using the analysis in the attached table there is clearly the potential for considerable replication of current existing provisions. New provisions would be required to deal with the relationship between the transmission licence and the distribution systems that are inter-dependent.

2.32 Creation of such licences suggests a procedure for modification/creation of new licences contemplated within the Gas Act (dependant upon the DTI issuing an order on the relevant percentage). Also a question for Ofgem is whether they would want the majority of licence conditions in both to be standard, amended standard or special Conditions in which case a more general public revision process is likely to be followed requiring collective amendment

2.33 In terms of a procedure for establishment of a DN Licence either process of assignment/transfer grant and restriction as described in A above could apply. However if a new category of licensable activity needs to be created this will still require secondary legislation in order to facilitate the granting of a new Licence.

2.34 A separate question for Ofgem would be whether the restructure of the licence would apply purely to Transco in which case it might just be capable of being dealt with using the S23 process or whether it would look to establish different licences more generally in which case the process described above for standard conditions would be relevant with amendments under S23 for Transco.

Pros

- Allows for separate subsequent development of the Licences.
- Consistency with electricity regime in terms of licensing.
- If a new licensable activity was required this could be done through a S41C order by the Secretary of State which could include other modifications of the Licence but would be after a prolonged process of consultations.

Cons

- Unlikely that licence changes can be contained wholly to the GT Licence where wholesale revision is contemplated.
- Potential need for secondary legislation and parliamentary time under S41C if new licensable activity is required.
- Possible major delays.
- Trigger reconsideration of retail obligations.
- Unnecessary duplication of provisions.
- Magnitude of exercise too great and probable requirement to open up other GT licence holders' licences.

- Timetable likely to make project less attractive from NGT perspective.
- Need for definition of what a transmission activity is as opposed to distribution.
- Whilst Transco retains DNs possibility for internal inefficiencies to arise through separate admin requirements.

Potential New Licence Conditions

2.35 As in A above.

C. <u>Create a Transmission and Distribution distinction within the same GT Licence.</u>

2.36 What is envisaged here is a form of Licence that would contain conditions relating to the common activities of gas conveyance and then additional conditions purely relating to transmission and distribution activities. Examples of the transmission activity could include system planning, 1 in 20 management, whereas examples of distribution conditions could include the retail type conditions currently contained within the Licence e.g. last resort etc.

2.37 Price Control conditions could then relate to either transmission or distribution activities. Having created such a structure the specific parts of the licence relating to transmission or distribution could then be "switched on or off" (through an application condition in the Licence concerned) dependant on which licensed activity was being carried out by the licence holder. To get to such a position however would require a public reconsideration of the suite of licence conditions as currently composed to gather them into the general, transmission and distribution classes as envisaged. Query whether this could be done via a restructure of the Transco Licence, in which case it might be dealt with by consent with Transco and consultation, or whether it is collective modification of Standard Conditions in which case this would have to be done through the prevailing collective procedure under S23. of the Act (query whether the relevant percentage issue has not yet been prescribed).

2.38 Either process of assignment/transfer (S8AA) or grant and restriction described in A above of a licence (S7B) could apply upon resolution of the precise form of licence.

Pros

- Contains all changes to GT Licence.
- Avoids unnecessary duplication of provisions.
- No new licensable activity required, not dependant on legislation.
- Is more consistent with current BETTA proposals for electricity transmission Licensing.
- Each licence holder would retain an authorised area and the ability to use statutory powers.

Cons

- Major exercise, more extensive consultation required with the potential to prejudice the project timescales.
- Unlike BETTA, not going to be achieved through legislation and would require a S23 process which could include the collective agreement of relevant licence holders. The procedure for collective agreement is not finalised and hence any agreement is likely to defeat the process.
- Need for a view of what a transmission activity is as opposed to distribution.
- Opens up an extensive review of GT activities which may result in a need to re-define at a primary level.
- Mechanics of moving to a hybrid licence in absence of legislative support are complex.

Potential New Licence Conditions

2.39 As in A above.

Summary: Transco's Licence – Split between Transmission and Distribution

		Transmission	Distribution	**Common to both or Elements applicable to both**
ASC 1	Definitions & Interpretation			√
SC2	Application of Section C (Transportation Services Obligations)			√
SC3	Payments by the Licensee to the Authority			√
ASC4	Charging Gas Shippers – General			√
ASC4A	Obligations as Regard Charging Methodology			√
SC4B	Connection Charges etc		√	
SC4C	Charging of Gas Shippers – Supplemental Connection Charges		√	
ASC4D	Conduct of Transportation Business			√
ASC4E	Requirement to Enter into Transportation Arrangements in Conformity with Network Code			√
SC5	System development Obligations			√
SC5A	Information to be Provided to the Designated Registrar of Pipes			√
ASC6	Emergency Services and Enquiry Service Obligations			√
SC7	Provision of Information Relating to Gas Illegally Taken			√
SC8	Provision and Return of Meters		√	
ASC9	Network Code			√
SC16	Pipe-Line System Security Standards			√
SC17	Provision of Services for Persons who are of Pensionable Age or Disabled or Chronically Sick: Arrangements in Respect of Meters		√	
SC18	Provision of Services for Persons who are Blind or Deaf		√	
SC19	Arrangements in Respect of Powers of Entry			√
SC19A	Authorisation of Officers			√
SC19B	Exercise of Powers of Entry			√
ASC20	Standards of Performance			√

		Transmission	Distribution	**Common to both or Elements applicable to both**
SC21	Complaint Handling Procedure		√	
SC22	Preparation, Review of and Compliance with Statement and Codes			√
SC23	Record of and Report on Performance			√
ASC24	Provision of Information to the Authority			√
ASC25	Long Term Development Statement			√
SC27	Adjustment of Amounts by Reference to the Retail Price Index		√	
SC28	Termination of Shipping Arrangements			√
ASC29	Disposal of Assets			√
ASC30	Regulatory Accounts			√
SC30A	Change of Financial Year			√
ASC31	Supply Point Information Service			√
ASC32	Interpretation of Section C			√
SC33	Designated Registrar of Pipes			√
SC38	Availability of Data Formats			√
ASC39	Restriction on Use of Certain Information and Independence of the Transportation Business			√
SC40	Appointment of Compliance Officer			√
SC41	Prohibition of Cross-Subsidies			√
ASC45	Undertaking from Ultimate Controller			√
ASC47	Indebtedness			√
SC48	Last Resort Supply: Payment Claims			√
SpC1	Interpretation and Construction			√
SpC2	Restriction on Activity and Financial Ring-Fencing			√
SpC3	Availability of Resources			√
SpC4	Investment Grade Credit Rating as Issuer of Corporate Debt			√
SpC5	Cross-Default Obligations			√

		Transmission	Distribution	**Common to both or Elements applicable to both**
SpC9D	Restriction of Prices for LNG Storage Services	√		
SpC17	Operational Guidelines for Balancing			√
SpC18	Conveyance to Independent Systems			√
SpC19	Emergency Services to or on Behalf of Another Gas Transporter		√	
SpC23	Provision of Metering and Meter Reading Services		√	
SpC25A	Assignment of Licence			√
SpC26	Prohibited procurement activities			√
SpC27	Licensee's procurement and use of system management services	√		
SpC28A	Revenue restriction definitions			√
SpC28B	Restriction of revenue in respect of the NTS transportation owner activity, LDZ transportation activity and NTS system operation activity			√
SpC29	Allocation of revenues and costs for calculations under the price control			√
SpC30	Supplementary provisions of the revenue restrictions			√
SpC31	Restriction of prices in respect of tariff capped metering activities		√	
SpC32	Non-discrimination in the provision of metering activities		√	
SpC33	Information to be provided to the Authority in connection with the transportation system revenue restriction			√
SpC34	Licensee's methodology for determining incremental entry capacity volumes	√		
SpC35	NTS performance reporting	√		
SpC36	LDZ incentive scheme and performance reporting		√	
SpC37	Exit code statement			√
SpC38	Restriction on Use of Information deriving from the EnMo Business	√		
New SpC[x]	To facilitate proposed commercial arrangements			√

Appendix 3 NGT paper on network code framework and issues

GENERAL BACKGROUND AND ISSUES

3.1 Amended Standard Condition 9 of the Transco Licence relates to Network Code being the transportation arrangements in respect of the Transco System. The Condition requires the Licensee to establish transportation arrangements together with procedures for the modification of such Network Code.

3.2 Amended Standard Condition 4E of the Transco Licence then requires the Licensee, having established a Network Code, only to enter into arrangements that are in conformity with it.

3.3 A network sale would involve the disposal of part of the Transco Network into a separately licensed entity with licence conditions in a form similar to the above. If the basic approach, being Conditions 9 and 4E as amended, continues to apply each individual Transporter would be required to establish its own transportation arrangements, prepare a Network Code and Modification Rules. Each Network Code would then need to be given contractual force by a contract between the relevant Transporter and each Shipper. Currently, contractual force is given by the Network Code Framework Agreement and with respect to the sale of a DN, the available options for achieving this are:

- A number of Framework Agreements between individual Transporters and Shippers; and
- A single Framework Agreement between all Transporters and Shippers.

3.4 Separating the ownership of the NTS from a DN exposes commercial issues at the interface between the two GT networks not previously addressed within the commercial regime. These include:

- Co-ordination of NTS and DN investments;

- Operational arrangements to manage flows between the two respective systems;
- Ownership specification and operation of the offtake points;
- Co-ordination of maintenance and engineering;
- Co-ordination of safety;
- A definition of services to be provided at the offtake points by the NTS to the DN.

3.5 It is proposed that the main document covering such issues would be an Offtake Agreement which would detail the main technical and commercial terms applying between the NTS and DNs (including Transco DNs), governing the interface between the NTS and the current DNs. Supplemental schedules might contain DN- specific details not necessarily common across all offtakes from the NTS.

3.6 In looking at how DN sales might be accommodated with a commercial regime, certain key assumptions have been taken into account, including:

- Looking as far as possible to preserve key features of the current commercial regime and using a re-working of the current regime rather than starting from basic principles;
- Minimal disruption for Shippers;
- No change being required to primary legislation;
- Changes in the licensing regime being contained wholly or mainly to the GT Licence.
- The model should not preclude further development at a later date consistent with policy objectives of Ofgem.

3.7 Transco and DNs would retain the licence obligation to establish a network code in short form referencing the rules of the UNC as their substantive code

provisions as relevant. The UNC would have modification rules anticipating the participation of all relevant parties (as now) with Ofgem continuing its role as approver of changes. This would require DNs that are to be sold to have a framework agreement prepared for shippers to sign on to that DN's network code. No change would be required to Transco's current framework agreement.

3.8 Initially, the UNC would govern gas transportation arrangements between the respective GTs and Shippers on what is currently the Transco System, which albeit at that stage would include distribution networks within separate ownership. Within the uniform document, wherever possible, obligations would be identified as being either at NTS level or at a relevant DN level although a large proportion of such obligations naturally fall at a particular level of the System currently.

3.9 It has been assumed that a form of offtake agreement would be required between operators as described above and that also agency arrangements might be required to provide a common interface between GTs who are a party to the uniform arrangements with Shippers looking to have gas conveyed through the NTS and distribution networks. The agency could continue to undertake a large range of supporting and administrative functions on behalf of GTs (Transco and DNs) required by the UNC, in particular data management and processing for Code purposes together potentially with invoice preparation. The agency arrangement would be largely a private arrangement between Transporters.

STRUCTURAL OPTIONS

3.10 With respect to DN sales, there may be three broad options as to how the Network Code regime might be structured. Broadly these are:

Individual Network Code

3.11 Each GT (including a DN) establishes its own individual Network Code in respect of its System.

3.12 The DN to be sold would need to establish its own Network Code, Modification Rules and Framework Agreement. It would need to execute a Framework

Agreement with all Shippers who sought to have gas conveyed on the DN's Network to establish contractual force of the Code provisions. In such a scenario, the Shippers would have to nominate gas from the NTS onto the distribution network separately using the procedures established by the DN. It is likely that the two GT operators at the interface would still require some form of offtake agreement, albeit in a potentially simpler form addressing issues of physical flow, with commercial issues being addressed purely in each GT's respective Network Code. It is also plausible that the DN could establish the Network Code utilising different principles from those contained in the current Transco Code.

Pros

- It preserves features of current regulatory regime, the DN's would under the terms of their gas transporters licence establish transportation arrangements in the form of a network code, establish and operate modification rules and enter into a framework agreement with shippers. There would be no changes to the conditions of a shippers or suppliers licence;
- The form and content of the DN's network code and modification rules would be based to a large extent on the term's of Transco's current network code and modification rules;
- Future changes can be considered in the context of the relevant DN's own arrangements i.e. changes to the regime for the DNs do not need to be considered / implemented in the context of arrangements applying to the NTS. Therefore DNs would be free to develop independently.

Cons

- It disrupts shippers, who would need to be party to two commercial regimes in order to deliver gas at entry points on the NTS and offtake gas exit points on DNs;

- Shippers are exposed to commercial issues at the NTS/DN interface. At present the NTS/DN interface is invisible to shippers and they are not exposed to issues connected with NTS exit capacity, physical flows and allocations etc. In effect the 'whole system' experience enjoyed by shippers is lost and separate balancing regimes would exist;

- Shippers will be exposed to greater administrative costs; DNs will incur costs in developing operating and maintaining their own codes;

- There may be significant costs for DNs if new IT systems are required;

- A dispute between a transporter and a shipper under one code could be resolved in a manner which is inconsistent with the way a dispute about the same subject matter is resolved under a different code;

- Separate modification rules would give rise to the need to develop complex rules to ensure the individual network codes where not modified so as to become inconsistent with each other. Change management would be more burdensome and costly;

- Each DN and those shippers using the DN will need to sign a framework agreement i.e. shippers will need to agree to a new contract.

3.13 Establishing individual Codes would involve:

- Each of the DN transporters preparing their own long form code so as to comply with their new GT licence;

- Appropriate changes being made to Transco's current network code by way of a modification;

- The DNs signing new framework agreements with shippers to give effect their individual codes.

Uniform Network Code

3.14 As described previously, a uniform Network Code would be a common set of transportation rules covering both the transmission and distribution systems connected to the NTS applicable to all GTs who are a party to the arrangement. It is anticipated that the detailed provisions would remain similar to those set out in the current Transco Network Code and would include concepts such as whole system balancing and operation on similar terms.

Pros

- It preserves key features of current regulatory regime, the DNs would under the terms of their gas transporters licence establish transportation arrangements, establish and operate modification rules and enter into a framework agreement with shippers. There would be no significant changes to the conditions of a shippers or suppliers licence;
- Both Transco and the DNs network codes and modification rules would be very simple documents incorporating by reference or requiring compliance with the uniform network code and the modification rules for the uniform network code;
- The current network code and modification rules can be converted into the uniform network code and the modification rules for the uniform network code;
- It does not disrupt shippers. It preserves the invisibility to shippers of the NTS/DN interface and the 'whole system' experience;
- With appropriate agency arrangements being in place there should be no requirement to develop new IT systems;
- Shippers would not be exposed to greater administrative costs;
- It minimises the risk of the transportation arrangements for the NTS and the DNs developing in an inconsistent manner;

- All disputes between transporter(s) and shipper(s) would be capable of being resolved in the same forum and in a consistent manner.

Cons

- The uniform approach might operate to restrict the development of specific distribution transportation arrangements over time; and
- The DN and each shipper on that network will need to sign a new framework agreement.

3.15 Establishing a Uniform Network Code could include:

- Transco and DNs preparing a short form network code which would incorporate or require compliance with the uniform network code;
- Transco's current network code being changed by modification to remove the substantive provisions (which would, as amended become a UNC) and incorporate the UNC by reference;
- Each DN and each shipper signing a new or amended framework agreement.

Separate Transmission and Distribution Code

3.16 Broadly, this might encompass an NTS Network Code and then a common Code for all distribution networks. This would seem to entail taking the current Transco Network Code and splitting out appropriate transmission and distribution arrangements into separate contractual Codes given effect by separate Framework Agreements and would entail a complete restructuring of the current Transco Network Code into two separate contractual arrangements.

3.17 It seems sensible that some form of offtake agreement would be required potentially dealing with interface issues. As the Codes would be legally separate Codes, it is possible that separate systems will be required for Shippers to nominate flows into and out of the Transmission System and onto the Distribution System. Moving gas from network to network in such a manner

would need the Shipper to be more active at the interface, and not invisible. It is assumed that each of the separate Codes would require separate Modification Rules to be established.

Pros

- It would be consistent with separate transmission and distribution licences;
- Transporters would only be bound by arrangements relating to their own system, and not other systems;
- It would facilitate future developments to the extent targeted at NTS or DNs;

Cons

- It involves a different approach to the current approach in standard condition 9; DNs would be required to be party to common transportation arrangements instead of having their own transportation arrangements;
- Shippers are exposed to commercial issues at the NTS/DN interface. At present the NTS/DN interface is invisible to shippers and they are not exposed to issues connected with NTS exit capacity, physical flows and allocations etc. The 'whole system' experience enjoyed by shippers is lost and separate balancing regimes would exist;
- The current network code would need to be split between NTS and DN separate codes would to contain a large number of similar provisions, it is not clear who would have 'ownership' of the distribution code;
- There may be significant costs for DNs if new IT systems are required;
- Separate modification regimes would give rise to the need to develop complex rules to ensure the separate codes where not modified so as to

become inconsistent with each other. Change management would be more burdensome and costly.

- Moving from a single Code to Transmission and Distribution Codes could trigger attempts to renegotiate substantive parts of the current Codes and would require substantial resources from all parties together with a substantial time commitment.

3.18 Establishing independent Transmission and Distribution Codes could involve:

- The DNs preparing a short form network code which would incorporate or require compliance with the distribution code (there is the issue of whether a particular DN would own this document);
- Appropriate changes being made to Transco's current network code by way of a modification so that it became a transmission code;
- Each DN signing new framework agreements with shippers so as to give effect to the distribution code.

OFFTAKE AGREEMENT

3.19 As stated earlier in this paper the separation of ownership of the NTS from a DN exposes certain commercial issues at the interface between these two networks that has not previously been dealt with within the commercial regime. It is proposed that the main document covering such issues would be an Offtake Agreement that would set out the main technical and commercial terms applying between the NTS and DNs (including Transco DNs) governing the interface between the NTS and what are currently DNs.

3.20 If the offtake arrangements are to be invisible in impact to shippers then consideration will need to be given to the status of the offtake arrangements within the Uniform Code and what mention is made in the Uniform Code, if any. The necessary parties to the offtake arrangements have been identified as Transco and the DNs

3.21 In terms of governance of the offtake agreement the alternative seems to be:

- A regulatory modification process (like the Network Code) between the parties to the agreement.
- Change being conditional on the agreement of Transco and all DNs.
- All contractual modification rules made with a specified percentage/number
- of DNs in agreement before a change can be made.

3.22 A flexible governance regime has advantages; in that it supports change in the early stages of implementation of the arrangements, it allows for change to ensure continued consistency with the Network Code and/or other external developments and it allows an opportunity to change risk allocation between Transco and the DNs if these are found to be inappropriate following initial implementation.

3.23 The offtake agreement could be produced as a result or a regulatory requirement on Transco and GT licence holders for the owner of the NTS to prepare and enter into an offtake agreement. Such a licence condition might then also specify the degree of consultation required with shippers, together with definition of Ofgem's role in governance terms.

Appendix 4 NGT paper on scope of offtake agreement

Introduction

4.1 This note provides an overview of the offtake agreement and addresses particular subject areas in more detail as follows:

Section	Subject area
1	Introduction
2	Offtake Agreement Overview
3	Charges for Services
4	Planning
5	Diurnal Storage
6	Operational Flows
7	Interruption
8	Balancing

Offtake Agreement Overview

4.2 The National Transmission System (NTS) and the eight Distribution Networks (each comprising one or more LDZs) are wholly owned by National Grid Transco (NGT). The key management responsibilities are as follows:

- Management of NTS assets is the responsibility of UK Transmission within NGT.
- Management of the Distribution Networks assets is the responsibility of UK Distribution within NGT.

- Day to day operation (system control) of both the NTS and the Distribution Network assets is the management responsibility of the Gas Operations Department within UK Transmission.

4.3 The Offtake Agreement between NTS and Distribution Networks will codify the interactions across various areas so that NTS and Distribution assets are developed and operated in a safe, economic, efficient and coordinated manner. Key areas to be addressed in the Agreement are briefly described below:

- **Charges for Services:** the arrangements by which services provided under the agreement are charged for.

- **Planning**: the arrangements for the medium and long term planning processes addressing development of and required investment in NTS and Distribution assets, including capacity, pressure and diurnal storage provision (from the NTS).

- **Connected Facilities**: outlining the ownership of facilities at each of the Offtakes which convey gas from the NTS to the Distribution Network.

- **Offtake Flow Metering:** the arrangements relating to offtake meters and gas flow measurement at offtakes including access and meter performance provisions.

- **Maintenance and Engineering Works**: the arrangements by which NTS and Distribution Networks will coordinate planned asset maintenance and other engineering works affecting flows at the offtakes.

- **Safety and Emergency Coordination:** the roles and responsibilities of NTS and Distribution Networks in emergency situations.

- **Gas Quality and Pressure:** provisions relating to gas quality and pressure at the offtakes.

- **Calorific Value (CV) Management**: the arrangements covering the CV levels at offtakes.

- **Offtake Capacity**: the arrangements by which capacity at the offtake is made available and the linkage to pressure, interruption management and planning.

- **Diurnal Storage**: arrangements by which Diurnal Storage provided to Distribution Networks from the NTS will be measured and (in the longer term) priced.

- **Operational Flows:** the processes for dealing with daily gas flows through the offtake (day-ahead notifications, on the day notifications, on the day flows and after the day assessment).

- **Balancing:** the key principles by which a Distribution Network will operate its balancing role.

Charges for Services

Current Arrangements

- The offtake agreement will deal with a number of services in relation to gas flows at the offtakes including:
  - Offtake Capacity
  - Offtake Flexibility (including diurnal storage)
  - Pressure Maintenance
- The gas flow services currently provided from the NTS to the Distribution Networks are specified during the annual planning cycle and made available in accordance with Transco internal operating rules.
- There are no charges between the NTS and the Distribution Network for these types of gas flow services.
- The costs of these services are recovered from shippers through NTS charges.

- The Distribution Network form of control does not provide revenue in respect of the purchase of gas flow services from the NTS.

- Transco has an obligation under Special Condition 37 to prepare annually an exit code statement containing a description of the services (and the associated revenues or charges) provided to the LDZ transportation activity by the NTS (both TO and SO) activity and vice versa. It is anticipated that gas flow services (particularly diurnal storage) will be addressed in this statement.

Options under the network sale scenario

- In principle, Distribution Networks should be incentivised to meet demands on their system at least cost. There should be appropriate economic signals where demands can be met either through investment in the Distribution Network infrastructure or through investment in the NTS. This could be in the form of a charge for certain gas flow services (e.g. diurnal storage).

- However, charging for such services would be inconsistent with the current transmission and distribution forms of control and with the contractual framework for gas conveyance.

- It is therefore proposed that the Offtake Agreement should codify the existing planning process between NTS and Distribution Networks and ensure that capacity is made available to meet 1 in 20 planning criteria. Initially there would be no charges associated with the gas flow services provided to Distribution Networks from the NTS.

- The agreement would make provision for charges to be introduced at a later stage if this were consistent with developments in the regulatory regime and the contractual framework for gas conveyance.

Planning

Current Arrangements

- Transco's planning process across its Transmission and Distribution Networks is managed in an integrated fashion, which ensures efficient, appropriate and timely investment is made in the gas supply system.
- Transco's annual planning process is based (primarily) around Capacity, Pressure and Diurnal Storage requirements using supply and demand forecasts as drivers.

Planning under the network sale scenario

4.4 Principles underpinning the planning rules will be:

- NTS shall plan the development of the NTS to meet its licence obligations in the most efficient manner possible, consistent with the principle of equitable treatment.
- A Distribution Network owner shall plan the development of its Network(s) to meet its licence obligations in the most efficient manner possible.
- NTS and Distribution Networks shall work cooperatively together within an Annual Planning Process in order that all parties satisfy their respective obligations in relation to planning the development of their networks.
- The industry planning process culminating in the production of the Ten Year Statement will need to accommodate the existence of independent Distribution Networks.

4.5 More specific requirements supporting the principles above are anticipated to centre on the following:

- Defined Planning Process to be utilised by all parties

- Agreed (published) methodologies to be used for load growth, one in twenty curve etc

- Default planning positions in the absence of shared / available information (to other relevant Networks)

- Consideration to be given to resolution of disparities between Operators in terms of projected planning / capacity requirements. Required governance supporting any such scenarios to be developed.

4.6 Outputs from the planning process will establish the parameters within which daily flows of gas through the offtakes to the Distribution Networks will conform.

Diurnal Storage

Current Arrangements

- Diurnal storage is used by both the NTS and the Distribution Networks to meet within-day fluctuations in supply and demand.

- Diurnal storage from NTS linepack is used to meet requirements associated with:

  - Profiling at entry points (e.g. front/back loading at beach terminals)

  - Profiling at exit points (e.g. power stations/interconnectors)

  - Profiling at NTS/LDZ offtakes

  - Other operational purposes (e.g. compressor trips)

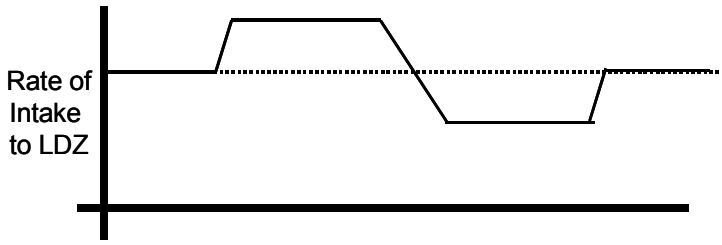
- NTS linepack availability is a by-product of efficient investment in high-pressure transmission capacity. Availability is location dependent, according to transmission requirements.

- Those Distribution Networks that have insufficient diurnal storage assets to meet their requirements take additional diurnal storage from the NTS under internal Operating Rules, agreed as part of the annual planning cycle:

Planned Diurnal Storage provision from NTS to Distribution Networks
1 in 20 peak day provision in GWh/day

Network	2002/3	2003/4	2004/5	2005/6	2006/7
East of England	17	11	14	15	18
London	0	11	11	0	0
North of England	8	5	6	8	6
North West	5	6	6	7	8
Scotland	30	36	37	22	24
South of England	12	14	10	13	14
Wales and the West	8	9	10	9	8
West Midlands	14	9	9	10	5
Totals	94	101	103	84	83

- The operating rules cover:
  - The diurnal profile, e.g.



  - the quantity of diurnal storage to be provided as a function of demand
  - flexibility to deviate from the basic Operating Rules if both NTS SO and DN SO agree
  - changes in the total daily intake to the Distribution Network. The rate change is limited to 5% of the remaining quantity to be taken over the day on 2h notice
  - these rules are designed to ensure that appropriate pressures can be maintained across the NTS.

Options under the network sale scenario

- Charges could be made under the offtake agreement for the provision of diurnal storage services from the NTS to the Distribution Networks.

However this would be inconsistent with the existing forms of control and industry contractual framework.

- An alternative is to develop a rules based arrangement reflecting the current Transco planning and operational processes relating to diurnal storage provision. Indicative prices for diurnal storage could be published in the Exit Code statement and become applicable when and if consistent with form of control and industry contractual framework developments.

Operational Flows

Current Arrangements

- The National Control Centre (NCC) manages flows within the NTS whilst the four Area Control Centres (ACCs) manage flows within the Distribution Networks. National Grid Transco's Gas Operations Department has management responsibility for both the NCC and the ACCs.

- The daily flows of gas through the Offtakes are controlled by the ACCs, working closely in conjunction with the NCC, in accordance with an agreed set of operating rules. These cover the capacity and offtake flexibility (ramp rates, notice periods and diurnal storage profile) for each offtake and the Distribution Network (LDZ) as a whole. The flow parameters included in these rules are developed ahead of each year using outputs from the planning process relating to forecast flows for the immediately forthcoming year.

- Generally, the offtake flexibility afforded to Distribution Networks under the internal operating rules is less than that provided at NTS supply points.

Operational Flows under the network sale scenario

Control

4.7 Gas flows through the Offtakes will generally be notified and controlled by the Distribution Network System Operator

Flow Parameters

4.8 Flow notifications and changes to notifications must be within limits set by the Flow Parameters derived from the annual planning process which specify for the full range of forecast demand conditions and for each Offtake, each Offtake Group and for the LDZ as a whole the maximum flows, the available pressure and the diurnal storage profile.

Day Ahead and On the Day Nominations

4.9 Notifications comprise the profile of instantaneous flow rates for the [remainder of the] gas flow day for each Offtake, for each Offtake Group and for the LDZ in total.

- Notifications and changes to notifications within the Flow Parameters are Properly Notified flows
- Notifications and changes to notifications outside the Flow Parameters may be requested [by either party, with other party obliged to use reasonable endeavours to accommodate] and if accepted these become Properly Notified flows

On the Day Flows

- The Distribution Network is responsible for ensuring that actual Offtake flows conform to the Properly Notified flows within tolerances
- The NTS is responsible for ensuring that gas is made available at the inlet to the Offtakes in accordance with the Properly Notified flows

Other alternatives considered

4.10 Incorporation of NExA terms in the Offtake Agreement to deal with operation flows was considered. However these are insufficiently sophisticated to address the complex, NTS/ Distribution interactions

Interruption

Current Arrangements

- Interruption to meet NTS requirements can involve interruption of both NTS connected supply points and Distribution Network supply points. This form of interruption includes that required to address NTS transportation constraints, supply/demand matching and National emergency circumstances.

- Interruption to meet Distribution Network requirements involves interruption of Distribution Network connected supply points only. This form of interruption includes that required to address Distribution Network transportation constraints (Network sensitive loads) and local emergency circumstances.

- The process for effecting interruption involves use of a database (SC95) containing information on shipper/supply point ownership drawn from the UK-Link Sites and Meters database. Interruption of some larger NTS connected supply points is effected manually outside the SC95 system.

- Where there is an NTS requirement for interruption the National Gas Control Centre specifies both the NTS and Distribution Network supply point sites to be interrupted and implements interruption via shippers using the SC95 system.

- Where there is a Distribution Network requirement for interruption the Area Gas Control Centre specifies the Distribution Network sites to be interrupted. The National Gas Control Centre implements interruption of these sites via shippers using the SC95 System.

- The commercial treatment of the interaction between capacity rights and interruption involves no test of actual flows against firm capacity holdings at the NTS/DN offtakes.

- The NTS Exit Regime is currently under review and Transco has a Licence obligation to use reasonable endeavours to implement an "all firm" NTS Exit Regime from 1 April 2004. The industry is considering proposals whereby the NTS would contract with consumers (or their shippers) connected directly to the Distribution Networks.

Options under the network sale scenario

- The options considered are based on the current exit regime. Implementation of a DN sale is not dependent on changes to the regime which are being considered through a separate industry process.

Option 1

- Arrangements could be put in place restricting site level interruption rights to the owner and operator of the network to which the site is connected.

- In the event of the NTS requiring interruption of Distribution Network load (due to NTS transportation constraints, supply/demand matching or National emergency circumstances), the NTS system operator would seek reduced flows at the [NTS/ Distribution Network] Offtakes through direct contact with the Distribution Network system operator. The later would effect interruption at a site level to meet the reduced flow requirements.

- This would involve a change to existing operational procedures.

- However, this operator-to-operator approach could be inconsistent with any future arrangements for interruption involving the NTS contracting directly with consumers in the Distribution Networks for turn down services.

Option 2

- An alternative is to maintain the existing arrangements whereby NTS requirements are met by the NTS system operator specifying the Distribution Network sites to be interrupted and effecting interruption via shippers using the SC95 system. The existing procedures to ensure equitability of interruption would be maintained.

Balancing

Current Arrangements

- At a National level physical balancing is conducted across the NTS by the National Gas Control Centre, which uses tools at its disposal (e.g. the on-the-day commodity market, NTS linepack, etc.) to adjust supply and demand levels.

- At a local level, physical balancing is conducted across the Distribution Networks by the Area Gas Control Centres, using stock changes and changes in the rate of offtake from the NTS to ensure demands are met. There is no purchase or sale of gas involved in this local balancing exercise.

- Shipper imbalances are based on NTS inputs and allocations at NTS offtakes. Physical stock changes for the Distribution Networks are excluded from shipper NTS offtake allocations.

- The overall impact of these arrangements is that system imbalances show up at a National level and need to be dealt with by the National Gas Control Centre. For example, where a particular Distribution Network increases its stock levels by 10 units over a day then (assuming an otherwise perfect balancing situation for the NTS and other Distribution Networks) the National Gas Control Centre would buy 10 units to balance the system as a whole.

- Transco is incentivised under the NTS SO residual balancing scheme to minimise NTS linepack changes and to buy and sell gas for balancing at close to the market price. The costs of system balancing are recovered from shippers through the neutrality mechanism

Balancing Costs

- There may be concerns that balancing costs could increase under a DN sale scenario for two reasons:
  - An independent Distribution Network System Operator may operate its network to take advantage of gas market arbitrage opportunities, by making physically unnecessary stock changes or rate changes at the offtakes.
  - The operating rules under the offtake agreement may be insufficiently flexible for the NTS to manage system balancing in the way it does currently

Options under a network sale Scenario

- One option would involve granting all Distribution Network system operators a commercial balancing role (an ability to buy and sell gas on the OCM for example), in addition to the essential physical role. However this would result in fragmentation of the balancing role amongst a number of different network operators and the introduction of commercial drivers into Distribution Network balancing that could result in use of stock changes to take advantage of arbitrage opportunities. There are safety implications associated with this type of arrangement.

- An alternative is to continue with the current arrangements involving a single commercial National balancing entity. The offtake agreement would include operating rules regarding rate variations at the offtakes that are sufficiently flexible for the Distribution Network System Operator to manage physically the balance within its Network and the

NTS to manage system balancing at a national level. This leaves the Distribution Network System Operator role as non-commercial in the first instance.

- A more sophisticated regime involving multiple balancing roles could develop over time through the normal industry processes.

Appendix 5 Preliminary Regulatory Impact Assessment

Introduction

5.1 This appendix sets out Ofgem's draft Regulatory Impact Assessment (RIA) on the possible sale by NGT of one or more of its DNs. The purpose of this RIA is to provide a preliminary evaluation of the impacts associated with the sale of one or more DNs.

5.2 The RIA is intended to inform Ofgem's decision as to whether detailed proposals should be developed that would permit sales of DNs and the nature of these proposals. Ofgem expects to conclude in November 2003 how to proceed with NGT's proposals. A more detailed RIA will accompany these conclusions. In developing any such proposals, Ofgem will take into account respondent's views on the preliminary RIA set out in this appendix.

Objectives

5.3 The objective of this consultation is to assess the impact of NGT's possible sale of one or more of its DNs and to suggest different options for changes to the regulatory arrangements governing gas market participants that may need to be implemented to protect customers in the event of a sale. It is noted in this respect that Ofgem's principal objective is to ensure that customers' interests are protected.

5.4 Ofgem considers that the transfer of ownership of a DN should provide benefits associated with improved network operation and management with any increased efficiencies being shared with customers via the price control process in the normal way.

5.5 Further, we consider that the separate ownership of DN businesses is likely to assist Ofgem in comparing and bench marking the performance of distinct DN business units as part of the price control review process. However, it is noted

that this benefit is already expected to arise to a certain degree with all DNs under common ownership given Ofgem's proposals to separate DN price controls.

5.6 There are however, also a number of other issues that need to be considered for a DN sale to be compatible with Ofgem's primary objective of protecting customers' interests. These include:

- determining the impact of a sale on competition between shippers and suppliers including assessing any increase in transaction and contracting costs that may arise as a result of increased industry fragmentation;
- developing governance and commercial arrangements that ensure that Transco does not discriminate in favour of particular DNs and which promote the efficient operation of the transmission and distribution networks and competition between shippers and suppliers; and
- assessing the impact of a sale on issues such as security of supply and emergency management.

5.7 A primary objective of this RIA is to examine whether Ofgem should proceed to develop more detailed proposals enabling a sale to occur or whether it should rule out sales altogether. In assessing the costs and benefits of proceeding with a sale, consideration needs to be given to the regulatory, commercial and governance arrangements that might accompany a sale. As we have explained in the document, there are several options with respect to NGT's proposals. We have come to an initial view as to an appropriate regulatory structure and the RIA has been carried out against this initial view. This structure has then been compared to the "status quo" option.

Status quo option – NGT retains all DNs

5.8 As this option involves retaining the status quo, it involves no project or implementation costs for customers, shippers or suppliers.

5.9 However, retaining the existing ownership structure would seem to rule out any of the potential benefits associated with a sale such as operational efficiencies and improved comparators for price control bench marking purposes. Further, retaining the existing ownership structure may restrict the ability of the industry to develop more efficient, non-discriminatory and cost reflective arrangements for the pricing of interruption and linepack services on the transmission and distribution networks.

5.10 The development of these arrangements may be impeded to the extent that common ownership reduces the extent to which the costs of using linepack and the costs of locational balancing actions can be appropriately targeted and incentivised. In particular, common ownership could also reduce the potential for the development of effective locational signals and incentive arrangements for Transco and the DNs.

Ofgem's initial view option

5.11 Having assessed the option whereby NGT retains the DNs, this section considers the option whereby one or more DNs are sold by NGT. We have made an initial assessment of the costs and benefits of such a proposal. We have assumed that a regulatory structure as indicated in chapter 10. Clearly, different models could have different costs and benefits. More radical restructuring might add to complexity. However, minimal restructuring might lead to discrimination. In the final RIA, we could consider the costs and benefits of a range of options.

5.12 In general terms, the costs associated with this option can be summarised as follows:

- the costs of developing and implementing new licensing, and network code arrangements as well as the costs of developing the proposed offtake agreement and any new safety and emergency management arrangements. These costs comprise Ofgem costs and the costs faced by shippers, suppliers and customers in attending workstreams and

preparing submissions. We estimate that these costs could be of the order of £5m.

- the costs incurred by NGT and shippers in developing, implementing, and operating the proposed Agency arrangements and the data processing systems associated with these arrangements. These costs, taken together with the costs in the next section could in principle amount to tens of millions of pounds.

- the increased administrative, legal and operational costs to suppliers/shippers and indeed Transco, resulting from increased fragmentation within the gas sector and the need to contract with a new industry participant; and

- the costs to Ofgem, as a result of the need for detailed regulatory oversight of and involvement in the creation of the new NTS / DN interface. Ofgem's initial estimate is that this could amount to up to £1 million.

5.13 The benefits of this option arise from increased operational efficiencies derived by a new DN owner as well as the price control comparator benefits referred to above. It is noted that some elements of the DN cost base would increase as a result of sale and the loss of economies of scope and scale with NGT. For example, new head office and regulatory compliance costs would be likely to arise.

5.14 It is also important to note that any benefits in the form of improved efficiency of operating the DNs would, in the first instance, accrue to the owners of the DNs (to the extent that these efficiencies had not been foreseen at the time of the preceding price control review). Ofgem would then expect these efficiencies to result in prices lower than they would otherwise have been at the time of the subsequent price control review.

5.15 Controllable operational costs in gas distribution are approximately £680 million per year. Ofgem has previously estimated that it may be reasonable to assign around a 1.3% annual reduction in controllable costs as a result of operational

efficiencies and improved management. Over the period of three price controls, a 1.3% reduction in operational costs has a net present value of about £330 million. There is considerable uncertainty in this indicative estimate, and it is also dependent on the number of DNs that NGT may sell. Ofgem therefore considers it reasonable to reduce the expected indicative benefit accordingly. However, we consider that there would be significant benefits to customers if only one DN was sold. Thus, we have assumed that half of the potential benefit could be obtained if there was only one comparator – i.e. only one DN was sold.

5.16 The extent to which these benefits would be passed on to final customers (and the distribution of any such benefits over the customer bases of each shipper/supplier) may depend on the level and nature of competition then operating in the retail market. Ofgem considers it reasonable to assume that a significant proportion of the savings would be passed on.

Environmental impacts

5.17 The sale by NGT of one or more DNs is not expected to have a significant effect on the final price of gas that would result in a significant change in the consumption of gas or other fuels.

5.18 Further, it is not expected that the operations of a DN would vary significantly from those that would prevail if it remained in Transco ownership in relation to:

- the rate of pipe replacement (this has been agreed with HSE, and the obligation would be transferred over to the successor DN), or
- environmental management and pollution control at compressor stations.

5.19 In summary, it is therefore expected that the proposal would not have any significant effect on the environment.

Security of supply

5.20 Ofgem considers that the sale of one or more DNs could have a positive impact on security of supply to the extent that any new commercial arrangements at the

NTS / DN interface lead to improve signals regarding the true value of linepack and capacity on each network as well as improved incentives on the NTS and DNs to respond to demand through investment.

5.21 However, Ofgem also notes that increased fragmentation within the gas sector has implications for the effective management of emergency response across the gas network. In particular, effective communication and coordination processes will need to be established between the various networks to minimise the risks to security of supply associated with a gas emergency.

5.22 On balance, Ofgem considers that a sale of a DN would be likely to be neutral or positive with respect to security of supply.

Distributional effects

5.23 Any sale could result in distributional effects between different demands at different locations. An important distinction is between customers connected to an independent DN compared to those connected to DNs retained by NGT. It is likely that benefits, in the form of reduced distribution charges could be greater in relation to gas distributed by independent DNs that have derived efficiency gains following a change in ownership.

5.24 Further, distributional effects may arise from the introduction of either administered or market based arrangements associated with the provision of interruption and linepack services at the NTS / DN interface and the impact of these services on transmission and distribution charges. For example, one possibility is that some customers may pay higher transportation charges at the NTS / DN interface whereas others receive a greater discount, depending on the nature of any NTS exit capacity and DN capacity arrangements that are developed. However, given that, as yet, these arrangements have not been developed, the precise nature of these distributional effects is unclear.

Risks and unintended consequences

5.25 There are a number of risks that could impact upon an assessment of costs and benefits and therefore change Ofgem's view as to such a sale. These risks are outlined as follows:

- implementation and operational costs could be higher than estimated;
- proposals to change governance and regulatory arrangements require legislation;
- the HSE refuses to accept any necessary amendments to Transco's and the Network Emergency Coordinator's Safety cases that are associated with a sale proposal;
- Transco's price controls may need to be re-opened.

Competition

5.26 As has been outlined earlier in this document, the potential sale of a DN could have significant implications for competition in the gas sector, particularly as between shippers and suppliers.

5.27 The competition issues associated with a sale can be summarised as follows:

- the extent to which increased industry fragmentation increases the complexity of the gas sector and therefore barriers to entry to shippers and suppliers in terms of change of supplier processes, and with respect to contracting for transportation services;
- the extent to which any new regulatory and commercial arrangements and any new pricing structures at the NTS / DN interface are able to ensure non-discrimination and efficient system operation;
- the extent to which new regulatory and commercial arrangements ensure efficient network investment.

Review and compliance

5.28 Ofgem expects NGT to carry out much of the work discussed above voluntarily, since it has a strong interest in the success of the project. Ofgem expects that any necessary changes to licence conditions or industry codes will be introduced following the procedures set out within the Gas Act with respect to licence changes and the modification rules with respect to Transco's network code.

Conclusion

5.29 A valuation of the issues arising from a DN sale are summarised in the table below.

Table 1: Valuing the issues associated with divestment

Issue	**Assessment**
Ofgem and supplier/shipper costs of developing proposals	Significant resource costs in developing proposals. Level of costs dependent on complexity of proposals and arrangements at NTS / DN interface. **£5m**
NGT costs	Significant, however NGT would only proceed with divestment if it expected net benefits for its shareholders
Shipper/supplier implementation costs	Potentially significant IT costs associated with introduction of new change of supplier processes. Costs dependent on change of supplier process adopted. Potential IT costs associated with introducing linepack and interruption services at the NTS / DN interface. **£10m's**
Benefits to customers from improved operational efficiencies and better comparative price regulation	Significant. Indicative estimate of benefits of operational efficiencies of between **£150m** and **£330m** depending on quantity of DNs sold. Efficient pricing of interruption and linepack at the NTS / DN interface and introduction of non-discriminatory transportation arrangements should provide significant benefits to customers. Conversely, administered arrangements for transportation pricing and a lack of effective ring fencing or separation of retained DN businesses could generate significant costs to customers.

Environment	No significant costs or benefits
Security of supply	Some security of supply benefits associated with improved investment signals – but dependent on nature of commercial arrangements applying at the NTS / DN interface.
Overall	***Positive***

5.30 On the basis of the above analysis, Ofgem's conclusion at this stage is that the possible benefits resulting from sale of the DNs could outweigh the costs of implementation. As such, we consider that work should continue on development of more detailed proposals.

5.31 Nevertheless, Ofgem notes that there would be likely to be significant implementation costs should Ofgem agree in principle to any sale, and the magnitude of the offsetting benefits is very uncertain. In particular, Ofgem notes that the benefits would be likely to be significantly reduced (although not eliminated) were there to be no sale. Further, any benefits could be significantly reduced by inadequate regulatory and commercial arrangements at the NTS / DN interface. In particular, Ofgem believes that these arrangements need to be sufficiently robust to ensure non-discrimination between DNs in the provision of Transco system operation services.

5.32 For this reason Ofgem's eventual conclusions and the urgency with which it takes forward the work could be influenced by the extent to which NGT is able to commit to the sale of at least one DN and the nature of any regulatory and commercial arrangements proposed by NGT.

5.33 In developing proposals in more detail, it will be important to obtain robust estimates of the associated implementation costs. Ofgem is particularly interested to hear views from interested parties on this issue as well as the other issues raised in this preliminary Regulatory Impact Assessment.