National Grid Transco – Potential sale of gas distribution network businesses

Initial thoughts on enduring incentive schemes supporting the offtake arrangements

February 2005 31/05

Summary

This document sets out Ofgem's initial thoughts on the scope, form and duration of the incentive schemes necessary to support the enduring offtake arrangements in the event that NGT's proposed sale of its gas distribution network (DN) businesses proceeds. This sale necessitate significant changes to industry arrangements, as more fully described in Ofgem's four Regulatory Impact Assessments (RIAs) issued during 2004, and its Final Impact Assessment (Final IA), published in November 2004[1].

The publication of this document follows the Gas and Electricity Markets Authority's (the Authority's) recent conditional grant of consent regarding four separate applications from Transco plc (Transco) under Amended Standard Condition (ASC) 29 of its Gas Transporter's (GT) licence to dispose of four of its gas distribution networks (DNs) to four wholly owned subsidiary companies, the shares in which would subsequently be sold to third party purchasers[2].

The Final IA

As noted in the Final IA, the proposed arrangements for the allocation of National Transmission System (NTS) offtake rights under the enduring arrangements were initially consulted upon in the Offtake Arrangements RIA (and described further in a subsequent conclusions document)[3]. In these documents, Ofgem considered a number of alternative options for the allocation of exit capacity. The conclusions document stated that the Authority considered "Option 2"[4] of the proposed offtake arrangements models to be the most appropriate approach to defining the interface between the NTS and NTS

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[1] *National Grid Transco – Potential sale of network distribution businesses, Agency and Governance Regulatory Impact Assessment,* Ofgem, April 2004; *National Grid Transco – Potential sale of network distribution businesses, Allocation of roles and responsibilities between transmission and distribution networks Regulatory Impact Assessment,* Ofgem, April 2004; *National Grid Transco – Potential sale of gas distribution network businesses, Offtake arrangements Regulatory Impact Assessment,* Ofgem, June 2004 *National Grid Transco – Potential sale of gas distribution network businesses, Interruption arrangements Regulatory Impact Assessment,* Ofgem, June 2004; *National Grid Transco – Potential sale of gas distribution network businesses Final Impact Assessment,* Ofgem, November 2004

[2] See *National Grid Transco - Sale of gas distribution networks, Authority Decision, Transco plc applications to dispose of four gas distribution networks*, Ofgem, February 2005. Ofgem also notes that Transco also applied for consents under Paragraph 3 of Schedule 3 to the Gas Act 1986 (the Gas Act) to permit it to dispose of land (relating to the four relevant gas networks) that it has acquired compulsorily, to the four relevant wholly owned subsidiary companies. The Authority consented to these applications at its meeting on 20 January 2005.

[3] *National Grid Transco – Potential sale of gas distribution network businesses Offtake arrangements Conclusions document on framework*, Ofgem, August 2004

connectees in the event of DN sales proceeding. Under this approach, both DNs and shippers serving NTS direct connect customers submit their requests (in investment planning timescales) of NTS exit capacity and NTS exit flow flexibility to the NTS. The NTS is then required to deliver the level of NTS exit capacity and NTS exit flow flexibility requested at each offtake point by DNs and NTS direct connect shippers[5]. DNs are required to deliver the level of DN exit capacity requested by DN shippers.

The Final IA reiterated the Authority's view that the Option 2 model for offtake arrangements would require the design of both NTS and DN incentive schemes, to support both the "enduring" arrangements (i.e. from 1 October 2008 onwards), and the "interim" arrangements (i.e. from "day one" (currently planned to be 1 May 2005) up to 30 September 2008)[6].

Grant of Authority Consent

On 20 January 2005, the Gas and Electricity Markets Authority (the Authority) met to consider Transco's application to dispose of DN assets to four wholly owned subsidiary companies, the shares in which would subsequently be sold to third party purchasers[7].

At its meeting of 20 January 2005 the Authority:

- granted its consent to Transco's applications under ASC 29 of its GT licence and Paragraph 3 Schedule 3 to the Gas Act;
- endorsed the previous decisions that it had reached in 2004 regarding the regulatory, commercial and operational framework that would be necessary to protect the interests of customers in the event that the sale of one or more DNs proceeds; and
- concluded that its consent should be granted subject to certain conditions.

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[4] "Option 2" is described in more detail in Chapter 3.
[5] Note that under an "Option 2" approach, DNs' exit capacity requests are based on their estimate of the level of NTS exit capacity they consider necessary to meet their (DN specific) 1 in 20 obligation.
[6] *National Grid Transco – Potential sale of gas distribution network businesses, Final Impact Assessment,* Ofgem, November 2004, Page 67
[7] Transco also applied for consents under Paragraph 3 of Schedule 3 to the Gas Act 1986 (the Gas Act) to permit it to dispose of land (relating to the four relevant gas networks) that it has acquired compulsorily, to its four wholly owned subsidiary companies. The Authority consented to these applications at its meeting on 20 January 2005.

The Authority's decision on Transco's requests was arrived at having had due regard to its statutory objective and duties as well as its public law duties. In addition, the Authority took into account the statutory and licence obligations of gas transporters.

In considering the regulatory, commercial and operational framework, the Authority endorsed the continued development of the enduring offtake arrangements for the allocation of NTS exit capacity and exit offtake flexibility through the DN sales process and concluded that the proposed arrangements are reasonable and proportionate to protect the interest of customers. However, the Authority also concluded that the implementation of the enduring offtake arrangements does not need to occur prior to the completion of the DN sales transaction[8]. Instead, the Authority decided that enduring offtake arrangements must be implemented by September 2005.

In order to achieve the implementation of the enduring offtake arrangements by September 2005, the Authority imposed certain conditions to its consent that must be met *before* Transco can be permitted to hive down its DN assets to its wholly owned subsidiary companies, scheduled to occur on 1 May 2005.

For the period following hive down and share sale the Authority intends to propose a number of licence conditions on Transco and DNs relating to the implementation of the enduring offtake arrangements.

In particular, the Authority intends to propose licence conditions binding upon Transco and each of the DNs requiring them to use their best endeavours to implement the enduring offtake arrangements by 1 September 2005.

The Authority also intends to propose, as part of the licence condition binding upon Transco, an obligation upon it to procure from NGT an undertaking to the Authority that it will use its best endeavours to ensure that Transco implements the enduring offtake arrangements by 1 September 2005.

[8] Chapter 3 provides a more detailed description of the proposed enduring offtake arrangements.

Further, the Authority intends to propose, as part of the licence conditions binding upon each independent DN, an obligation requiring it to procure an undertaking addressed to the Authority from its ultimate controller that it will use its best endeavours to ensure that the relevant independent DN implements the enduring offtake arrangements by 1 September 2005.

It is important to note that there can be no expectation on the part of NGT, Transco, DN purchasers, potential shippers, suppliers or any other interested parties as to any further decisions which the Authority may be required to take or any further consents which the Authority may be required to grant in relation to the proposed transaction and nothing in this document in any way fetters the discretion of the Authority in respect of this or any other matter.

Requirement for incentive schemes

The Final IA reiterated Ofgem's view that Transco's proposed sale of one or more DNs, and the proposed structure for the enduring offtake arrangements that would be necessary to protect the interest of customers would require the design of both NTS and DN incentive schemes (to support the offtake arrangements). The incentive schemes will, among other things, need to ensure that the NTS is incentivised, through an efficient balance of risk and reward, to release for sale the maximum capability of the network (in response to demand) and to ensure that the DNs book an efficient level of NTS exit capacity and exit flow flexibility.

Under the proposed offtake arrangements, the allocation of firm NTS offtake rights (including exit flow flexibility) will be undertaken at three distinct stages:

- long term (unconstrained) sale;
- medium term (constrained) sale; and
- short term (constrained) sale.

Consistent with the Authority's recent decision, in the event that DN sales proceeds, incentive schemes will be developed to apply to support both:

- interim offtake arrangements (from "day one", which is currently planned for 1 May 2005, to 30 September 2008); and

- enduring offtake arrangements (from 1 October 2008 onwards).

This document outlines Ofgem's Initial Thoughts on the scope, form and duration of the enduring incentive schemes supporting the enduring offtake arrangements. Ofgem's Initial Proposals for the scope form and duration of the incentive schemes supporting the interim offtake arrangements will be the subject of a separate (forthcoming) consultation.

Objectives

In addition to Ofgem's principal objective, statutory duties, as well as its general public administrative law duties and policy requirements, there are a number of objectives that are specific to the development of incentive arrangements. These include ensuring that:

- the NTS has incentives to deliver the full physical capability of its network;
- the NTS has sufficient funds within the relevant price control period to undertake appropriate investment above baseline levels (in response to enduring demand signals);
- the NTS has an incentive to buy back NTS offtake rights in order to relieve network constraints in an efficient and economic manner; and
- the DNs have an incentive to meet their 1 in 20 obligation by making an efficient trade-off between booking NTS offtake rights, contracting for interruption and DN related investment.

Determination of baselines

An important input to the structure of enduring (long, medium and short term) NTS incentive schemes supporting the offtake arrangements concerns the setting of baseline levels for both NTS exit capacity and NTS exit flow flexibility. In this document, four alternative approaches for the setting of baselines (which will apply for the long, medium and short term in the enduring arrangements) are presented. These alternative approaches are:

- forecast 1 in 20 demand;
- forecast 1 in 20 demand plus interruptible volumes;

- practical maximum physical capability; or
- theoretical maximum physical capability.

Illustrative NTS exit capacity baseline data for each offtake point, calculated following each of these approaches is included in Appendix 1. Ofgem invites respondents' views on the most appropriate definition to be adopted in the enduring incentive schemes.

NTS enduring incentives

Ofgem's initial view is that NTS enduring incentive schemes should be defined in relation to the allocation of NTS offtake rights in:

- the long term;
- the medium term; and
- the short term.

The long term incentive schemes relate to the sale of offtake rights three years, and further, ahead. Consistent with the NTS entry capacity arrangements, Ofgem considers that revenue from the sale of rights up to baseline levels should be treated as transmission asset owner (TO) revenue (with requests for NTS exit capacity and/or NTS exit flow flexibility above baseline being termed requests for "incremental exit capacity" and/or "incremental exit flow flexibility").

Ofgem's initial view is that, for the long term, the NTS incentive arrangements should have two distinct revenue streams:

- **Incremental NTS exit capacity and NTS exit flow flexibility release provided by investment**. Ofgem considers that, should the NTS decide to meet demand for incremental capacity and/or flow flexibility, then it should receive incentive payments similar in form to those that apply to "obligated incremental entry capacity" under the entry arrangements.
- **Incremental NTS exit capacity and NTS exit flow flexibility release provided by substitution**. Should the NTS decide to meet requests for incremental capacity and/or flow flexibility at any given offtake point through substituting spare capacity and/or flow flexibility from other offtake points, Ofgem's initial view is

that the NTS should be allowed to retain a proportion of the resulting auction revenue. It should be noted that Ofgem considers that changes to baselines resulting from substitution should only occur following the long term allocation process (and not following medium or short term allocations)).

Ofgem's initial view is that parameters for offtake rights incentives should be designed for five years (with the potential for a reopener after one year in the event that the parameters require recalibration).

Medium and short term incentives are also necessary for the NTS that promote:

- the release of additional NTS exit capacity and NTS exit flow flexibility which becomes available as a result of unexpected changes in the forecast or actual operation of the network; and
- the buy back of NTS offtake rights in an efficient manner.

Ofgem's initial view is that:

- revenue from the sale of rights up to baseline levels (ahead of the day) should be treated as TO revenue (consistent with arrangements at entry); and
- the NTS should be allowed to retain a percentage of the revenue of all sales of all offtake rights sold above baseline through the constrained allocations

Ofgem also proposes that the cost of any buy backs of NTS offtake rights is included within the scope of the short and medium term incentive scheme.

DN enduring incentives

Unlike the NTS incentive arrangements, the DN incentives are designed to remove a potential rational tendency for the DNs to overbook NTS exit capacity and exit flow flexibility. This is a direct result of the externalisation of the NTS-DN interface that arises in a divested industry structure.

Ofgem's initial view is that the structure of the enduring DN incentive should follow a standard "sliding scale" form, with a defined incentive cost target and a cap and collar. The incentive payment / charge made to the DNs would be the difference between the "target" and "actual" level of charges for NTS offtake rights, subject to a sharing factor.

It is Ofgem's initial view that the sharing factor is set at 100%, given that DNs would bear 100% of the cost of any investment that they could choose to undertake in order to reduce their requirements for NTS offtake rights.

Way forward

Following consideration of respondents' views to this document (and consistent with the Authority's recent decision to give its conditional consent), Ofgem intends to publish Initial Proposals for these incentive arrangements (including both proposed incentive parameters, and initial drafting of the licence changes necessary to implement the proposed incentive arrangements) in Spring 2005 (subject to respondents' views to this consultation).

In addition, Ofgem envisages publishing Final Proposals on enduring incentive arrangements in July 2005 following consideration of respondents' views to this Initial Proposals consultation. This document will include a formal consultation under section 23 of the Gas Act on proposed licence modifications necessary to implement these proposals, allowing the enduring incentive arrangements to be finalised by 1 September 2005.

Table of contents

1. Introduction

1.1. This document sets out Ofgem's initial thoughts on the scope, form and duration of the incentive schemes necessary to support the enduring offtake arrangements in the event that the proposed sale of one or more of Transco's distribution networks (DNs) proceeds. This follows the Gas and Electricity Markets Authority's (Authority's) decision on 20 January 2005 to grant its conditional consent to Transco plc's (Transco) applications to dispose of certain DN assets to four wholly owned subsidiary companies. The document sets out initial thoughts on the incentives that should be applied to Transco's National Transmission System (NTS) and the DNs (both Transco's retained DNs and the independent DNs), to facilitate both efficient investment and the efficient operation of their respective systems within a divested industry structure (should the sales proceed).

1.2. Ofgem considers that the proposed incentive schemes to support the enduring offtake arrangements should provide an efficient balance of risk and reward, which is in the interest of customers, who ultimately pay the costs of system operation. The incentive schemes will, among other things, need to ensure that the NTS has appropriate incentives to release the maximum level of NTS exit capacity and NTS exit flow flexibility on its network in response to demand and to ensure that the DNs book an efficient level of NTS exit capacity and NTS exit flow flexibility.

1.3. In August 2004, Ofgem published a conclusions document on offtake arrangements[9], in which the Authority concluded that "Option 2"[10] of the proposed offtake arrangements models (the "NTS connects" model, in which DNs were responsible for booking NTS exit capacity on behalf of DN shippers) was the most appropriate for adoption, in the event of DN sales proceeding.

1.4. In November 2004, Ofgem published a Final Impact Assessment (the Final IA) in which Ofgem reiterated the view that the "Option 2" model for offtake arrangements would require the design of both NTS and DN incentive schemes,

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[9] *National Grid Transco – Potential sale of gas distribution network business, Offtake Arrangements Conclusions document on framework,* Ofgem, August 2004

to support both the "enduring" arrangements (i.e. from 1 October 2008), and the "interim" arrangements (i.e. from "Day One" (currently planned to be 1 May 2005) to 30 September 2008)[11].

1.5. In granting its conditional consent to Transco[12], the Authority endorsed its previous decisions on the proposed regulatory, commercial and operational arrangements necessary to protect the interests of customers in a divested industry structure. This includes the Authority's endorsement of the continued development of the enduring offtake arrangements for the allocation of NTS exit capacity and NTS exit flow flexibility through the DN sales process. In this respect, the Authority concluded that all of the proposed enduring offtake arrangements are reasonable and proportionate and protect the interests of customers.

1.6. In view of the concerns expressed by respondents to Ofgem's Final IA regarding the timetable for the introduction of the proposed enduring offtake arrangements, for the reasons set out in its decision document the Authority concluded that the implementation of the enduring NTS exit capacity and NTS exit flow flexibility arrangements need not occur prior to the completion of the DN sales transaction.

1.7. However, whilst the Authority considered that a short delay in the implementation of the enduring offtake arrangements is appropriate, it considered that their implementation should not be delayed beyond September 2005. The Authority considered that any delay to the implementation of the enduring offtake arrangements beyond September 2005 would be against the interest of customers and would increase the potential for customers to incur costs as a result of inefficient investment or system operation decisions. As such, the Authority concluded that in order to protect the interests of customers the enduring offtake arrangements shall be implemented by September 2005.

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[10] "Option 2" is described in more detail in Chapter 3.
[11] *National Grid Transco – Potential sale of gas distribution network businesses, Final Impact Assessment,* Ofgem, November 2004, Page 67.
[12] Details of the Authority's consent and the conditions attached to this consent can be found in *National Grid Transco – Sale of gas distribution networks, Authority decision, Transco plc applications to dispose of four gas distribution networks,* Ofgem, February 2005.

1.8. In order to achieve this, the Authority has imposed conditions to its consent on Transco and intends to propose a series of licence conditions on Transco and DNs to secure the implementation of these arrangements on a best endeavours basis.[13] Further details on the conditions that are attached to the Authority's consent can be found in Chapter 4 of the Authority's February 2005 decision document.

1.9. This document is structured as follows:

- Chapter 2 provides background to the proposed NTS and DN incentive schemes, including an outline of the DN sales process to date, and a summary of Transco's current incentives, including those in place under the Transco NTS entry capacity arrangements;
- Chapter 3 describes the proposed enduring offtake arrangements that would be implemented, in the event that the DN sales process proceeds, and provides an overview of a number of aspects of the arrangements directly related to NTS and DN incentive schemes;
- Chapter 4 describes initial thoughts on the proposed enduring incentive schemes for the NTS and the DNs; and
- Chapter 5 describes the proposed way forward, including a summary of views invited, and next steps.

[13]The proposed DN sales transaction is also subject to the consent of the Secretary of State under ASC 29. The Secretary of State granted its consent on 27 January 2005. In addition, in order for DN sales to proceed, the Health and Safety Executive (HSE) will need to consider a revised Transco safety case for its NTS and retained DN businesses, as well as safety cases for the four wholly-owned subsidiary companies to which DN assets are to be hived down. The purchasers of the DN businesses also need to have their safety cases accepted by the HSE before they can take over the operation of these businesses.

Views invited

1.10. Ofgem welcomes views on all aspects of this consultation, to be received by close of business on 10 March 2005. Respondents are asked to provide views in a timely manner. Responses should be addressed to:

Sonia Brown

Director, Transportation

Office of Gas and Electricity Markets

9 Millbank

London SW1P 3GE

(Telephone: 020 7901 7412)

1.11. Electronic responses may be sent to sonia.brown@ofgem.gov.uk

1.12. 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.

1.13. If you wish to discuss any aspect of this paper, Matteo Guarnerio (telephone 020 7901 7493) or Mark Feather (telephone 020 7901 7437) would be pleased to help.

Consultation code of practice

1.14. If respondents have comments or complaints about the way this consultation has been conducted these should be sent to:

Michael Fews

Head of Licensing

Office of Gas and Electricity Markets

9 Millbank

London SW1P 3GE

(Telephone: 020 7901 7085)

michael.fews@ofgem.gov.uk

Related consultation documents

1.15. Ofgem is planning to issue a consultation document in late February 2005, outlining its initial proposals on the incentive schemes to support the interim offtake arrangements, which will apply from 1 May 2005 to 30 September 2008.

1.16. Following consideration of respondents' views to the informal consultation issued in November, and further discussion through the DISG, Ofgem has also refined its proposals with respect to the structural changes and licence modifications required to implement DN Sales. As a consequence, Ofgem will shortly be issuing a formal consultation on these proposals under section 8AA of the Gas Act in respect of the four GT licences which will apply to the four IDNs and under section 23 of the Gas Act in respect of the two licences which will apply to the NTS and the RDNs.

Way forward

1.17. Following consideration of respondents' views to this document (and consistent with the Authority's recent decision to give its conditional consent), Ofgem intends to publish Initial Proposals for these incentive arrangements (including both proposed incentive parameters, and initial drafting of the licence changes necessary to implement the proposed incentive arrangements) in Spring 2005.

1.18. In addition, Ofgem envisages publishing Final Proposals on enduring incentive arrangements in July 2005 following consideration of respondents' views to this Initial Proposals consultation. This document will include a formal consultation under section 23 of the Gas Act on proposed licence modifications necessary to implement these proposals, allowing the enduring incentive arrangements to be finalised by 1 September 2005.

2. Background

2.1. This chapter sets out the regulatory background relevant to the development of the proposed incentive schemes. It presents an overview of:

- the regulatory process to date associated with Transco's proposed sale of DNs[14]; and
- Transco's current incentives, including those in place under Transco's NTS entry capacity arrangements.

DN sales process

2.2. In May 2003, Transco publicly announced that it would consider the sale of one or more DNs, were this to maximise shareholder value (with any such sale requiring the consent of the Authority, the Health and Safety Executive (HSE) and the Secretary of State for Trade and Industry).

2.3. In July 2003, Ofgem issued a consultation document on the regulatory, commercial and operational changes required to facilitate the sale of one or more DNs.[15] Following this consultation, in December 2003, Ofgem issued a Next Steps document[16]. This set out responses to the July consultation, Ofgem's current views and a proposed way forward for considering Transco's proposals including the establishment of workgroups to take forward the development of a commercial and regulatory framework (including the development of appropriate offtake arrangements).

2.4. The remainder of this section provides an overview of the key elements of this process, including:

- role of workgroups;

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[14] Full details of the regulatory process associated with Transco's DN sales and copies of all documents published by Ofgem can be found in the gas distribution networks sale area of work on Ofgem's website (http://www.ofgem.gov.uk).
[15] *National Grid Transco – Potential sale of network distribution businesses, A Consultation Document*. Ofgem, July 2003.
[16] *National Grid Transco – Potential sale of network distribution businesses 70/03. Next steps*. Ofgem, December 2003.

- Regulatory Impact Assessments (RIAs);
- conditional agreements between National Grid Transco plc (NGT) and purchasers in respect of the DNs proposed to be sold[17]; and
- recent developments.

Workgroup processes

2.5. In January 2004, Ofgem established a number of workgroups as part of the consultation process for DN sales. These included a Development and Implementation Steering Group, a Commercial Interfaces Workgroup, a Regulatory Architecture Workgroup and an Agency Workgroup.

2.6. These groups, which have been chaired by Ofgem (and conducted on a non-binding informal basis without in any way fettering the Authority's discretion), are composed of a diverse representation of interested parties including shippers, customers, potential buyers of the DNs and NGT. The groups commenced work in January 2004 and made considerable progress in clarifying the way in which a divested industry model could operate were sales to proceed (and subject to any necessary licence modifications). In particular, the groups provided a significant contribution to the development of the proposed offtake arrangements.

2.7. These workgroup discussions have highlighted, amongst other issues, the importance of developing effective and well targeted incentive schemes as part of the development of the possible commercial and regulatory framework.

Regulatory Impact Assessments

2.8. Between April and June 2004, Ofgem consulted upon a series of RIAs on the regulatory, commercial and operational arrangements necessary to protect customers within a divested industry structure. These include:

- Agency and Governance Arrangements RIA, published in April 2004;

[17] Note that in this document, references to NGT and Transco have been used interchangeably.

- Allocation of Roles and Responsibilities between Transmission and Distribution Networks RIA, published in April 2004;
- Offtake Arrangements RIA, published in June 2004; and
- Interruption Arrangements RIA, published in June 2004.

2.9. Following consideration of responses from industry participants and other interested parties, decision documents detailing the Authority's conclusions with respect to these issues were published. The conclusions regarding the "Agency and Governance" and "Roles and Responsibilities" RIAs were issued in May 2004[18], and in respect of the Interruption and Offtake arrangements in August 2004[19]. It was made clear that, in reaching these conclusions, there could be no expectation on the part of any interested party (including without limitation, NGT, Transco, potential purchasers, shippers, suppliers and other interested parties) either as to what the Authority's final decision in relation to the proposed sale of DNs may be, or as to the regulatory, commercial and operational framework which may be implemented if the Authority consents to the proposed sale of DNs.

2.10. Ofgem has also published a number of (non-binding) open letters and preliminary position papers relating to various aspects of the proposed regulatory arrangements[20]. In September 2004 Ofgem published a position paper outlining an initial view that any incentive scheme that would apply to the DNs would, at the commencement of the scheme, have a duration of one year. In that document, it was noted that this would provide Ofgem and the new DN owners and interested parties, with the opportunity to reconsider the target levels of costs of the schemes at a relatively early stage and in light of further information arising from the first year of operation of the scheme.

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[18] *National Grid Transco – Potential sale of gas distribution network business, Allocation of roles and responsibilities between transmission and distribution networks,* Ofgem, May 2004, 119/04 and *National Grid Transco – Potential sale of gas distribution network business, Agency and governance arrangements,* Ofgem, May 2004 120/04

[19] *National Grid Transco – Potential sale of gas distribution network business, Offtake arrangements, Conclusions document on framework,* Ofgem, August 2004, 199/04 and *National Grid Transco – Potential sale of gas distribution network business, Interruptions arrangements, Conclusions document on framework,* Ofgem, August 2004 198/04

[20] Copies of all open letters published by Ofgem relating to the DN sales process can be found in the gas distribution networks sale area of work on Ofgem's website (http://www.ofgem.gov.uk).

Conditional agreements between NGT and purchasers

2.11. On 31 August 2004, NGT announced that it had reached agreement on the sale of four DNs[21], and informed Ofgem that it had entered into conditional agreements of sale, with the following prospective purchasers:

- a consortium led by Cheung Kong Infrastructure Holdings Ltd including United Utilities plc had agreed to purchase the North of England DN;
- a consortium led by the Macquarie European Infrastructure Fund had agreed to purchase the Wales & West DN; and
- a consortium comprising Scottish and Southern Energy plc, Borealis Infrastructure Management Inc and Ontario Teachers Pension Plan had agreed to purchase the South of England and Scotland DNs.

2.12. In its statement, NGT indicated that these transactions were subject to certain regulatory consents and approvals including from the Authority, the Secretary of State of Trade and Industry (Secretary of State) and the Health and Safety Executive (HSE). In addition, the statement highlighted that the proposed transactions would raise a potential £5.8 billion for NGT.

Recent developments

2.13. Following the release of the Authority's conclusions document regarding the offtake arrangements RIA and the interruptions arrangements RIA, NGT, Ofgem and other interested parties have started to address the detail of the proposed reform. Among other things, this programme has involved:

- the establishment of a Uniform Network Code Workgroup (chaired by NGT), which is considering potential changes to Transco's network code and the development of a Uniform Network Code; and

[21] National Grid Transco statement, *Sale of four gas distribution networks and proposed £2 billion one off return of capital to shareholders,* 31 August 2004.

- the establishment of an Exit Reform Forum (chaired by NGT), with the objective of further developing the details of potential reforms to the exit arrangements.

2.14. In the remainder of this section, we describe three key recent developments. These are:

- the publication of a Final Impact Assessment in November 2004;
- the publication of an initial thoughts document on the proposed restructuring of Transco's existing GT licence and its five additional GT licences in November 2004; and
- the Authority's decision regarding Grant of Consent in January 2005.

Final Impact Assessment

2.15. In November 2004, Ofgem published a Final IA[22], which set out:

- a proposed alternative regulatory, commercial and operational framework to the status quo, which would be necessary to protect the interest of consumers were the sale of DNs to proceed. This framework built upon each of the decisions set out in previous RIAs; and
- Ofgem's analysis of the estimated potential costs and benefits that customers are likely to accrue in the event that the proposed sale of the DNs proceeds.

2.16. Ofgem invited views from interested parties on all aspects of the Final IA. Summaries of responses to the Final IA were provided to the Authority in order to inform their decision on DN sales.

November licensing document

2.17. In November 2004[23], Ofgem issued a licensing document setting out Ofgem's initial thoughts on the restructuring of Transco's existing GT licence and five

[22] *National Grid Transco, Potential sale of gas distribution network businesses, Final Impact Assessment.* Ofgem, November 2004, 255/04a

additional GT licences (granted to Transco as part of the proposed sale of its DNs[24]). This document included a formal consultation under Section 23 of the Gas Act 1986 to modify Transco's GT licences, and a Section 8AA informal consultation.

2.18. The modifications under Section 23 were limited to conditions relating to Transco's price control, and were designed to separate the price control between Transco's six GT licences[25].

2.19. The document also consulted (on an informal basis) on some of the substantive licence changes that would be required to support Transco's proposed divestment of its DN businesses so that customers' interests are protected within a divested industry structure. It is intended that these changes (and others) will be consulted upon formally as part of the Section 8AA process associated with the transfer of licences in respect of those businesses that Transco intends to sell (with an associated additional Section 23 modification for those DN businesses that will continue to be owned by Transco) in February 2005.

Grant of Authority consent

2.20. On 20 January 2005, the Authority met to consider Transco's application to dispose of DN assets to four wholly owned subsidiary companies, the shares in which would subsequently be sold to third party purchasers.

2.21. At its meeting of 20 January 2005 the Authority:

- granted its consent to Transco's applications under ASC 29 of its GT licence and Paragraph 3 Schedule 3 to the Gas Act;

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[23] *National Grid Transco, Potential sale of gas distribution network business, Initial thoughts on restructuring of Transco plc's gas transporter licences*, Ofgem, September 2004 215/04

[24] In November 2004 (pursuant to applications from Transco in connection with DN sales), without fettering the Authority's discretion in relation to DN sales, five additional GT licences were granted to Transco. As a result, Transco currently holds six GT licences. As at the date of this document, all gas transportation assets are operated pursuant to Transco's original GT licence. The new licences, whilst active, do not relate to any particular GT assets owned or operated by Transco. Transco's applications for consent were made under ASC 29 of the original GT licence.

[25] Following Ofgem's grant of licence consultation and the responses received in relation to the notice issued in July 2004, on 5 November 2004 the Authority (without in any way fettering its discretion in relation to the proposed transaction) granted five additional GT licences to Transco. The five new additional licences were approved on the basis that they can be revoked in the event that the proposed disposal of DN assets from Transco to wholly owned Transco subsidiaries does not proceed.

- endorsed the previous decisions that it had reached in 2004 regarding the regulatory, commercial and operational framework that would be necessary to protect the interests of customers in the event that the sale of one or more DNs proceeds; and

- concluded that its consent should be granted subject to certain conditions.

2.22. The Authority's decision on Transco's requests was arrived at having had due regard to its statutory objective and duties as well as its public law duties. In addition, the Authority has taken into account the statutory and licence obligations of gas transporters.

2.23. In considering the regulatory, commercial and operational framework, the Authority endorsed the continued development of the enduring offtake arrangements for the allocation of NTS exit capacity and NTS exit flow flexibility through the DN sales process and concluded that the proposed arrangements are reasonable and proportionate to protect the interest of customers. However, the Authority also concluded that the implementation of the enduring offtake arrangements[26] need not occur prior to the completion of the DN sales transaction. Instead, the Authority decided that enduring offtake arrangements must be implemented by September 2005.

2.24. In order to achieve the implementation of the enduring offtake arrangements by September 2005, the Authority has imposed certain conditions to its consent that must be met before Transco can be permitted to hive down its DN assets to its wholly owned subsidiary companies, scheduled to occur on 1 May 2005.

2.25. For the period following hive down and share sale the Authority intends to propose a number of licence conditions on Transco and DNs relating to the implementation of the enduring offtake arrangements.

Enduring offtake arrangements – conditions to consent

2.26. The first of the conditions to consent relating to the enduring offtake arrangements is that Transco must procure an undertaking addressed to the

Authority from NGT, specifying that NGT will, prior to the proposed section 8AA (and related section 23 licence modifications) to the six Transco GT licences becoming effective, use its best endeavours to ensure that steps are taken to implement the enduring offtake arrangements by 1 September 2005. [27]

2.27. The second of these conditions is that Transco must procure undertakings addressed to the Authority from each proposed third party purchaser specifying that prior to the completion of the sale of shares to the new purchaser, such purchaser will use its best endeavours to ensure that steps that are taken to implement the enduring offtake arrangements by 1 September 2005.

Enduring offtake arrangements - proposed licence conditions

2.28. In order to cover the period following hive down and the subsequent sale of shares in the DNs to the new purchasers, the Authority intends to propose a number of licence conditions on Transco and each DN regarding the implementation of the enduring offtake arrangements. Transco and the DNs will be required to accept these licence conditions before the hive down can take place.

2.29. In particular, the Authority intends to propose licence conditions binding upon Transco and each of the DNs requiring them to use their best endeavours to implement the enduring offtake arrangements by 1 September 2005.

2.30. The Authority also intends to propose, as part of the licence condition binding upon Transco, an obligation upon it to procure from NGT an undertaking to the Authority that it will use its best endeavours to ensure that Transco implements the enduring offtake arrangements by 1 September 2005.

2.31. Further, the Authority intends to propose, as part of the licence conditions binding upon each independent DN, an obligation requiring it to procure an undertaking addressed to the Authority from its ultimate controller that it will use its best endeavours to ensure that the relevant independent DN implements the enduring offtake arrangements by 1 September 2005.

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[26] Chapter 3 provides a more detailed description of the proposed enduring offtake arrangements.
[27] The enduring offtake arrangements are described in chapter 5 of Ofgem's Final IA.

2.32. Ofgem proposes to consult upon these proposed licence conditions in February 2005 as part of the proposed Section 8AA and associated Section 23 licence modification proposals to Transco's six GT licences.

2.33. It is important to note that there can be no expectation on the part of NGT, Transco, DN purchasers, potential shippers, suppliers or any other interested parties as to any further decisions which the Authority may be required to take or any further consents which the Authority may be required to grant in relation to the proposed transaction and nothing in this document in any way fetters the discretion of the Authority in respect of this or any other matter.

Transco's current incentives

2.34. Since 1 April 2002 Transco has been subject to a set of system operator (SO) incentives that encourage Transco to reduce the costs associated with the day-to-day management of its gas transportation system. In addition, Transco has been subject to a set of NTS SO capacity investment incentives, which provides Transco with financial incentives to invest in the NTS, where is efficient to do so and in response to its customers' changing needs.

2.35. This section provides an overview of a number of the incentive schemes currently in place. In particular, it provides a description of:

- NTS entry capacity incentives;
- current NTS exit incentives; and
- other incentive schemes on the NTS.

Entry capacity incentives

2.36. This section outlines the incentives currently in place as part of the NTS entry capacity arrangements, providing a description of both:

- the entry capacity investment incentive scheme (a "deep" incentive); and
- the entry capacity buyback incentive (a "shallow" incentive).

NTS entry capacity investment incentive scheme

2.37. At present, Transco's price control for the NTS is split between its TO and its SO functions. In respect of NTS entry capacity, Transco is funded under its TO function to provide specified TO baseline output measures of entry capacity at each existing entry terminal to the NTS. These baseline output measures are based on the maximum physical capability at each system entry point and are referred to as Transco's TO baseline output measures.

2.38. Under its original licence, Transco is obliged to offer 90 per cent of these output measures for sale as SO level entry capacity rights (this is referred to as NTS SO baseline capacity)[28]. Transco currently offers for sale SO baseline output measures through a series of long-term and short-term entry capacity auctions. Capacity is offered in quarterly blocks in long-term entry capacity allocations and in monthly and daily blocks in shorter-term auctions. Transco currently offers 80 per cent of the initial SO output measures in long-term entry capacity auctions. The remaining 20 per cent is reserved for release in shorter-term auctions.

2.39. Under the entry arrangements, revenue from the sale of rights up to baseline levels is treated as TO revenue. Requests for capacity above baseline are termed requests for "incremental capacity". Unit Cost Allowances (UCAs) are specified in Transco's original GT licence for each existing entry point and determine the range of Transco's SO incentive revenue allowance for the provision of incremental entry capacity.

2.40. Transco's original GT licence includes an entry capacity investment incentive scheme which allows it to earn a potentially higher rate of return (capped at 12.25% and collared at 5.25%) on incremental investment on a five-year rolling basis. This investment incentive is designed to encourage Transco to respond to changes in the levels and locations of demand for entry capacity to its NTS.

2.41. Under its original GT licence, Transco is able to apply to Ofgem to release either permanent or annual obligated incremental capacity in response to signals from

[28] SO baseline capacity volumes for each NTS entry point are specified in Transco's original GT licence.

long-term capacity auctions, subject to Transco's incremental entry capacity release (IECR) methodology.

2.42. The IECR methodology specifies a Net Present Value (NPV) test[29] which determines whether bids in the long term entry capacity auctions automatically trigger Transco releasing permanent obligated incremental entry capacity. Investment associated with providing the level of permanent obligated incremental capacity generates incentive SO revenue for five years. After the end of this five-year period the investment enters Transco Regulatory Asset Value (RAV)[30] and it earns a return equal to its allowed cost of capital on this capacity.

Entry capacity buy-back incentive

2.43. In the event that Transco cannot deliver the entry capacity it has sold and which shippers are intending to use, Transco is required to buy that entry capacity back from shippers and is currently incentivised to reduce the costs associated with buying back firm entry capacity that it is unable to make available on the day.

2.44. The entry capacity "buy-back" incentive is a sliding scale incentive, with a target level of costs, sharing factors and a cap and a collar. The performance measure under the scheme is calculated from the costs Transco incurs in buying back the entry capacity less the revenue it earns from the sale of certain types of entry capacity products (e.g. on-the-day sales of firm and interruptible entry capacity, and sales of non-obligated incremental firm NTS entry capacity) and also revenue from overrun charges.

2.45. Parameters for the buy-back incentive are specified until 2007[31].

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[29] The NPV test requires the NPV of the aggregate value of bids for incremental capacity over thirty-two quarters to equal at least 50 per cent of the 'assumed project value' at any one entry point. The 'assumed project value' is an estimate of the cost of providing the incremental capacity, and it is based on the UCA and on the volume of incremental capacity being considered.

[30] Subject to the normal check at the time of the price control review that the construction costs were efficient.

[31] Note that parameters for the buy-back incentive were initially set for two years, and parameters applying from 2004 to 2007 were consulted upon at a later stage. For more details, see *Transco's National Transmission System system operator incentives 2002-7, Final proposals,* Ofgem December 2001 and *Transco's National Transmission System Review of System Operator incentives 2002-7 – Proposals document,* Ofgem, February 2004

Exit incentive

2.46. The exit incentive schemes as described in Transco's original GT licence are designed to ensure that Transco operates its NTS and DN networks in a manner consistent with its statutory duties and licence obligations. These obligations include the requirement to develop and maintain an efficient and economical pipeline system and the obligation to operate the NTS in an economic, efficient and coordinated manner.

2.47. Under the current exit arrangements Transco is incentivised in four key areas:

- a foregone charges incentive;
- an interruptible incentive;
- an LNG-related incentive; and
- an exit investment incentive.

Foregone charges

2.48. This element of the current exit incentive scheme is based upon the revenues foregone by Transco as a result of its existing interruption discounts. In exchange for agreeing to be interrupted by Transco up to 45 days per year, interruptible customers do not pay exit capacity charges. Ofgem refers to these foregone charges as the "interruptible discount".

2.49. There is a target set within Transco's original GT licence for the level of these "charges foregone". Transco is then exposed to a proportion of the difference between this target level and actual foregone charges across the NTS (including the NTS charges foregone as a result of the existence of interruptible customers on the LDZs).

Interruptions incentive

2.50. By entering into an interruptible contract, a customer agrees to turn off or turn down their supply of gas in certain circumstances. Transco may call an interruption in the event of network capacity constraints, supply demand balancing on high demand days, in an emergency or for testing purposes.

Where Transco nominates a supply point to be interrupted for more than 15 days in a particular year (up to the maximum permitted which is usually 45 days), there is a transportation charge credit.

2.51. Under the second element of the current exit incentive schemes, Transco is set a target cost related to interruption, based on the expectation of the costs it will be deemed to have incurred in procuring interruption from customers (i.e. the cost of interrupting connectees in excess of 15 days in a given year).

2.52. A deemed level of incurred costs, and in the event of interruption more than 15 days, an *actual* level of costs is calculated. Transco is exposed to a proportion of the difference between these calculated costs and the target level, incentivising the efficient use of interruption and reducing the likely level of costs borne by customers.

LNG-related incentive

2.53. The third element of the current exit incentive schemes relates to the use of LNG facilities. Transco is set a target for the cost of using constrained LNG storage, and is exposed to the difference between actual costs and this target, thereby incentivising the efficient use of LNG.

2.54. When originally developing the exit incentive schemes, Ofgem considered that Transco's incentives could be distorted by its ownership of LNG storage facilities that can function as an alternative to interruption[32]. In particular, increases in the price and/or volume of its use of LNG over forecast levels, as an alternative to using interruption, could result in increased revenues to Transco LNG.

2.55. If the sharing factors and caps and collars outlined above were also applied to LNG costs, then Transco SO would only bear a proportion of such higher costs. The remainder would be then recovered in whole (or in part) by higher transportation charges levied on shippers and eventually borne by customers.

2.56. In order to avoid such a perverse outcome, no cap or collar was specified with regard to the costs of Transco procuring transmission support from the LNG

[32] *Transco's National Transmission System Review of System operator incentives 2002-7, Proposals Document,* February 2004.

facilities (with Transco therefore facing a 100% exposure to the LNG costs incurred).

Exit investment incentive

2.57. The final aspect of the exit incentive schemes rewards Transco for investing efficiently to meet its customer requirements. Under its exit capacity investment incentive Transco is allowed additional revenues associated with delivering network capacity in excess of the baseline firm and interruptible output measures.

2.58. Where Transco provides additional exit capacity above the baseline measure, it is allowed additional revenue equal to the volume of additional capacity provided multiplied by the exit unit cost multiplier. The exit unit cost multiplier is comprised of the exit capacity UCA (0.322£m/GWh day) multiplied by the exit capacity adjustment factor (0.10772) and adjusted for inflation. If Transco provides a lower level of capacity than the baseline measure, no additional revenue is allowed.

Other incentives on the NTS

2.59. This section describes incentive schemes currently in place on Transco that are not directly related to the entry or exit arrangements. These include:

- the residual gas balancing incentive;
- the system balancing incentive; and
- Transco's internal cost incentive.

Residual gas balancing incentive

2.60. In using Transco's NTS, shippers have an incentive to ensure that the volume of gas that they enter onto the system matches the volume of gas that they take off from the system on a daily basis. This is achieved through the cash-out

arrangements[33]. In aggregate, however, shippers do not always maintain a balance throughout the day. In these circumstances, Transco may need to buy and sell gas in the On-the-day Commodity Market (OCM) to keep the system pressure within certain limits. The daily buying and selling of gas to keep the system within safe operational limits is referred to as the residual balancing function of Transco as SO. Transco has been provided with an incentive to encourage it to minimise the balancing costs incurred in its role as residual balancer.

2.61. Under the residual gas balancing incentive, Transco is exposed to separate incentives with regard to the price at which it takes actions on the OCM (the price incentive) and with regard to changes in the volume of gas held on the system (the linepack incentive).

2.62. The price incentive encourages Transco to take balancing actions at prices close to the System Average Price (SAP), thereby reducing the spread between its buy and sell actions. The price incentive is measured on a daily basis, based on the differential between the prices of Transco's marginal trades on either side of the market.

2.63. The daily linepack incentive is based upon a similar format to the price incentive and was put in place to encourage Transco to minimise day-to-day changes in the level of linepack (i.e. to keep the system balanced on a daily basis).

System balancing incentive scheme

2.64. In operating the NTS, Transco uses compressors to ensure that gas is transported to the points on its system where customers are using gas. It also secures gas in store to ensure that the supply of gas is maintained in the event of a network emergency. The use of compressors and gas storage capacity to meet demand requirements is referred to by Ofgem as system balancing. As the costs of undertaking system balancing are borne largely by shippers and customers, an incentive was placed on Transco to encourage it to minimise these costs.

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[33] For a description of the cash-out regime, please see *The New Gas Trading Arrangements – Reform of the gas balancing regime – Revised proposals*, Ofgem, February 2002 and *Electricity and gas cash out review – Consultation document,* Ofgem, May 2004

2.65. Transco's system balancing incentive consists of two components relating to system balancing costs:

- NTS SO gas costs (shrinkage); and
- system reserve (operating margins).

2.66. The target volumes, caps, collars and sharing factors for the system balancing incentive were set for the full five year price control period in the licence (2002-2007).

Internal cost incentive

2.67. Transco's internal incentive scheme covers those elements of SO internal costs over which Transco has direct control. These include:

- operating expenditure;
- capital expenditure; and
- a return on the SO Regulatory Value (RV).

2.68. Ofgem applied sharing factors to all of these NTS SO internal costs. In order to maintain consistency across the NTS SO incentive schemes, these sharing factors were set equal to the average sharing factors of the day-to-day external cost schemes (excluding the entry capacity buy-back scheme).

2.69. The parameters for the internal costs incentive were set for the full five year price control period in the licence (2002-2007).

3. Proposed enduring offtake arrangements

3.1. This chapter describes in detail the enduring NTS offtake arrangements that are proposed for implementation by 1 September 2005 in the event of DN sales proceeding, consistent with the Authority's recent decision.

3.2. Offtake arrangements have been proposed for both:

- the long term (i.e. "enduring" arrangements from 1 October 2008 onwards); and
- the short term, "transitional" period (i.e. arrangements proposed for adoption from "go live" (currently planned for 1 May 2005) until 30 September 2008).

3.3. Given that this consultation document only concerns Initial Thoughts on the *enduring* incentive schemes supporting the offtake arrangements for the NTS and the DNs, this chapter focuses on outlining the proposed enduring offtake arrangements. The proposed offtake arrangements for the transitional period will be described in more detail in the (forthcoming) Initial Proposals document on interim incentive schemes for the NTS and DNs.

3.4. In this chapter, we describe:

- the form of the proposed enduring offtake arrangements; and
- a number of elements of the proposed offtake arrangements specifically relevant to the development of enduring NTS and DN incentive schemes supporting the enduring offtake arrangements.

Enduring offtake arrangements

3.5. This section describes the enduring arrangements that have been proposed for implementation in the event that DN sales proceeds. These are consistent with the Authority's recent decision and with those initially proposed in the Offtake Arrangements and Interruptions arrangements RIAs published in June 2004, the Offtake Arrangements and Interruptions conclusions documents published in August 2004, and most recently presented in the Final IA, published in November 2004.

3.6. As outlined in the Final IA[34], the proposed offtake arrangements are a key component of the package of reforms required to ensure that the interests of present and future customers are protected within a divested industry structure. These proposed arrangements would be required to ensure that the previously internalised interface between the NTS and the DNs is externalised in a manner consistent with the GTs statutory duties and licence obligations, including (without limitation) providing access to all network users on a basis which is not unduly discriminatory.

3.7. Note that, as described in Chapter 2, the Authority met in January 2005 to consider Transco's application to dispose of DN assets to four wholly owned subsidiary companies, the shares in which would subsequently be sold to third party purchasers. At this meeting, the Authority endorsed the previous decisions that it had reached in 2004 regarding the regulatory, commercial and operational framework that would be necessary to protect the interests of customers in the event that the sale of one or more DNs proceeds. The Authority also required enduring offtake arrangements to be implemented by September 2005.

3.8. The arrangements outlined in this section relate to:

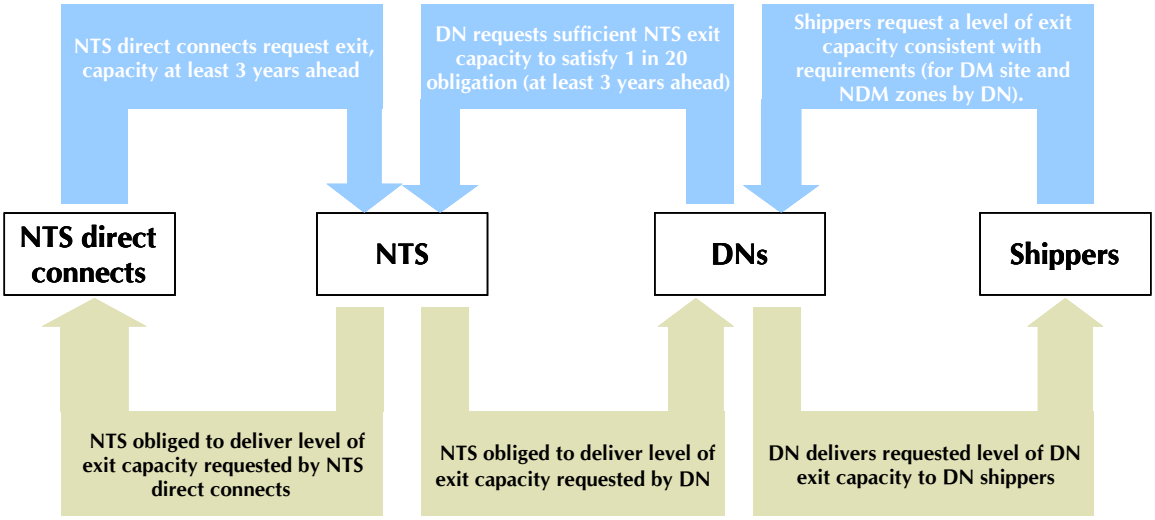
- NTS exit capacity;
- interruptions arrangements; and
- NTS exit flow flexibility.

NTS exit capacity

3.9. As noted in the Final IA, proposals for the allocation of NTS exit capacity under the enduring offtake arrangements were initially consulted upon in the June 2004 offtake arrangements RIA. In these documents, Ofgem considered a number of alternative options for the allocation of NTS exit capacity. The conclusions document stated that the Authority considered Option 2 (depicted in Figure 3.1 below) to be the most appropriate approach to defining the interface between the NTS and parties connected to the NTS.

[34] Chapter 5, page 65.

Figure 3.1 Overview of "Option 2"



3.10. As explained in the Final IA, the key features of the "Option 2" approach are as follows:

- DNs estimate the level of NTS exit capacity they consider necessary to meet their (DN specific) 1 in 20 obligation;
- shippers serving NTS direct connects (i.e. sites connected to the NTS other than DNs) estimate the level of NTS exit capacity they require at NTS offtake points of the customers to whom they convey gas;
- DNs and shippers serving other NTS direct connects use these estimates as the basis for the NTS exit capacity requests they submit to the NTS;
- NTS exit capacity requests, by both DNs and shippers of other NTS direct connects, are submitted to the NTS in investment planning timescales (i.e. relating to three years ahead and beyond);
- the NTS is required to deliver the level of NTS exit capacity requested at each NTS offtake point by DNs and NTS direct connect shippers[35];

[35] As these requests will be provided in investment timescales, NTS may meet these rights through a combination of new investment, buy-back of firm NTS exit capacity rights and / or substitution from other offtake points (depending upon which approach the NTS considers to be most efficient).

- shippers that have customers connected to DNs submit DN exit capacity requests to DNs (by daily metered site and non daily metered zone), similar to the current arrangements at the DN level; and

- DNs deliver the level of DN exit capacity requested by DN shippers.

3.11. In terms of payment flows, Ofgem considers that an Option 2A approach, as described in the Final IA (and outlined in more detail below), is the most appropriate option. This is because, under this model, payment flows are relatively simple, minimising the number of payment interfaces between shippers and network owners.

3.12. Under this approach, DNs have a central role in the payments process, effectively acting as an intermediary for all NTS-related payments from DN shippers who convey gas to customers offtaking from the DNs. The key features of this are:

- both DNs and shippers of other NTS direct connects pay the NTS directly for their requested level of NTS exit capacity;

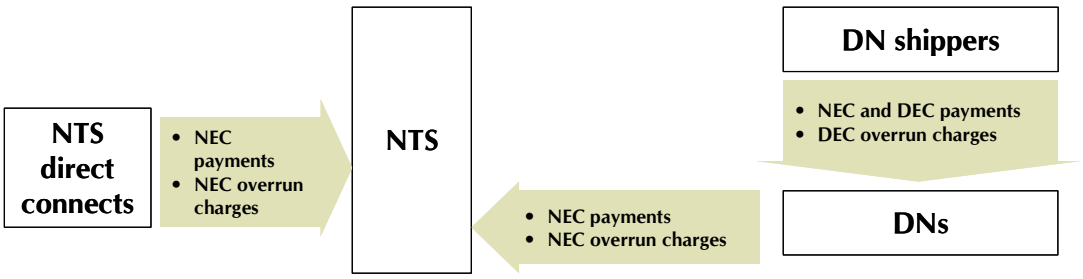
- to the extent that the volume of offtake through the NTS/DN interface exceeds the level of NTS exit capacity allocated to the DN, overrun payments are charged to the DNs;

- the DN recovers NTS exit capacity charges from shippers on its network (maintaining the locational element of NTS charges levied on DN shippers); and

- DN shippers do not make any payments directly to the NTS.

3.13. This model of payment flows is illustrated in Figure 3.2 below.

Figure 3.2 Option 2A payment flows



3.14. There are two other issues that are key to the definition of the NTS exit capacity product. These are:

- locational scope; and
- duration.

Locational scope

3.15. A key element of the definition of NTS offtake rights under the new arrangements is the definition of the locational area in respect of which the rights are valid. Following discussion of this issue at industry workgroup meetings, it was concluded that NTS offtake rights should be defined by individual offtake point (i.e. follow a "nodal" approach). This approach was favoured by the Development and Implementation Steering Group (DISG) over an approach that would group together NTS offtake points into zones (allowing the holder of a zonal offtake right to offtake gas at any offtake point within that zone)[36].

3.16. Under these proposed "nodal" arrangements, trading of NTS offtake rights between participants will be possible, facilitated by the NTS. Amongst other things, this facilitation of trading will require the definition of "exchange rates" between different NTS offtake points.

[36] Discussed at DISG 23, held on 26 October 2004.

Duration of rights

3.17. At the most disaggregated level, NTS exit capacity rights give the holder a daily right to offtake a quantity of gas from an NTS offtake point on a given day. The question of the most appropriate duration for NTS exit capacity rights therefore concerns the extent to which these daily rights are "bundled" into longer time periods for the purposes of the long-term allocation.

3.18. It is proposed that NTS exit capacity rights at the initial allocation (i.e. in which rights are sold for three years ahead and beyond) are grouped into annual "strips". It is anticipated that by bundling rights by year, the initial allocation of rights will deliver investment signals to the NTS regarding the level of peak offtake users require in a year. Furthermore, as described in the Final IA, bundling the rights into annual "strips" is expected to make the initial allocation process more simple and transparent than less aggregated product "bundles".

Interruptions arrangements

3.19. As noted in the Final IA, the August 2004 conclusions document for interruptions arrangements[37] described a number of principles under which arrangements for interruption would be implemented in the event of DN sales proceeding, these being that:

- **current arrangements for interruption for NTS direct connectees will be reformed**. Under the enduring arrangements, the NTS will offer an interruptible product, at the day ahead stage, to users of the NTS. This will give the Transco the right, but not the obligation, to provide NTS exit capacity to that user on the day. In addition, the NTS may choose to contract for longer term demand management services with holders of firm NTS exit capacity. This would assist Transco in managing congestion on the NTS.

[37] *National Grid Transco – Potential sale of network distribution businesses, Interruptions arrangements Conclusions document on framework,* Ofgem, August 2004

- **interruptions arrangements at the DN level will not be reformed as part of the DN sales process.** The August Interruptions conclusions document stated that, although reform of DN exit capacity arrangements is not being pursued as part of the DN sales process, in the longer term work should progress on developing new arrangements (with reform of the interruption arrangements at the DN level being implemented "no later than April 2006"[38]).

NTS exit flow flexibility

3.20. As described in the Final IA, the August 2004 offtake arrangements conclusions document outlined the Authority's view that, in the event of DN sales proceeding, a commercial regime for the allocation of the NTS exit flow flexibility and operational flows should be established (and this view was reiterated in the Authority's recent decision). It was also noted in this conclusions document that further work was required to develop the detail of the regime, and that this would be consulted upon further through the Final IA.

3.21. Prior to the publication of the Final IA, NGT, Ofgem and the workgroups developed in more detail an approach to the treatment of NTS exit flow flexibility and operational flows consistent with the Authority's indicative decision. The proposed approach for both, which was originally presented in the Final IA, is set out in the following subsections.

NTS exit flow flexibility

3.22. Under the proposed offtake arrangements, NTS exit flow flexibility will be allocated on a commercial basis, and will be a product sold by the NTS to DNs and shippers acting on behalf of directly connected NTS customers (i.e. including but not limited to power stations, industrial plant, storage sites and the interconnectors).

[38] *National Grid Transco Potential sale of gas distribution network businesses, Interruptions arrangements, Conclusions document on framework*, Ofgem, August 2004, page 77.

3.23. In the Final IA, NTS exit flow flexibility usage is defined as being where connectees offtake gas from the NTS at anything other than a flat offtake profile throughout the day (i.e. higher than the "end of day quantity"/24 rate). This means that NTS exit flow flexibility is defined independently of the basic NTS exit capacity product.

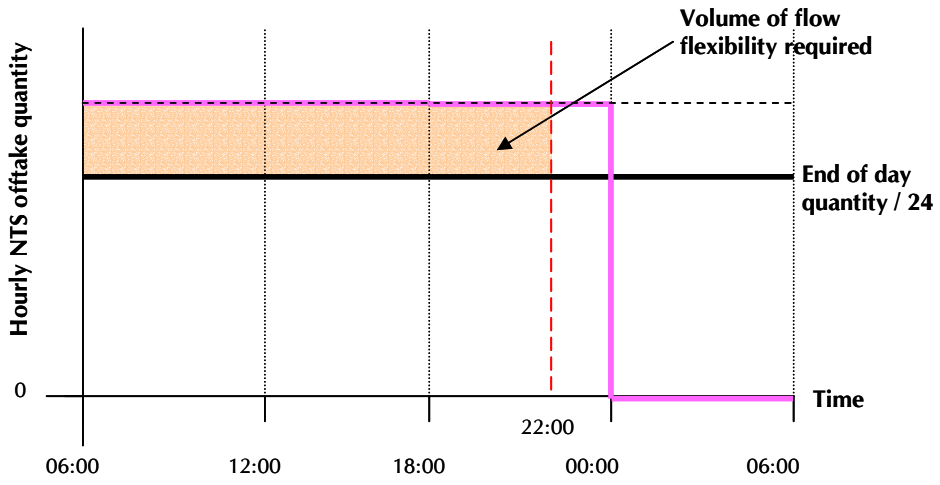
3.24. Under the proposed offtake arrangements, NTS connectees will be required to purchase a level of (financially firm) exit flow flexibility from the NTS equal to their net impact on the system at 10 p.m. on the gas day. This represents the impact of their usage of flexibility on the system at the time at which the NTS is typically under most stress.

3.25. Therefore, under the proposed arrangements, NTS exit flow flexibility is:

- defined in terms of usage over the period 06:00 to 22:00 in a gas day;
- is independent of holding of NTS exit capacity; and
- is defined as being used whenever offtake of gas deviates from a flat 1/24th profile over the day.

3.26. An illustration of the volume of NTS exit flow flexibility required by an NTS connectee for a given offtake profile is provided in Figure 3.3 below:

Figure 3.3 Exit flow flexibility



Operational flows

3.27. Under the proposed offtake arrangements, operational flow requirements will be managed by the NTS through the purchase and sale of NTS exit capacity and NTS exit flow flexibility products. The NTS will therefore (for example) be required to buy back NTS exit flow flexibility rights if it wishes to curtail the use of exit flow flexibility in the course of operating its network.

3.28. Requiring the NTS to manage operational flows on the NTS through the purchase (and sale) of NTS exit capacity and NTS exit flow flexibility rights will give the NTS an incentive to minimise the cost of organising operational flows. It will also remove the possibility that the NTS could unduly discriminate in operational flow planning.

Proposed offtake arrangements and incentives

3.29. In order to provide a more complete context to the enduring NTS incentive arrangements, there are a number of more detailed aspects of the proposed enduring offtake arrangements that also need to be described. As a consequence, this section outlines:

- definition of baselines;
- allocation of NTS offtake rights; and
- treatment of substitution and investment.

3.30. It is noted that these issues have been discussed extensively by Transco and industry participants in the context of the Exit Reform Forum.

Definition of baselines

3.31. As with the arrangements in place at entry, an important input to the structure of enduring NTS incentive schemes supporting the enduring offtake arrangements concerns the setting of baseline levels for both NTS exit capacity and NTS exit flow flexibility. Baselines are important as they define the amount of capacity and flow flexibility that the NTS is obliged to release through the long, medium and short term allocation processes.

3.32. Consistent with the NTS entry capacity arrangements, Ofgem proposes that baselines are defined by offtake point (for both NTS exit capacity and NTS exit flow flexibility), and that the release of NTS offtake rights up to baseline levels would be a licence obligation. Note that the release of NTS exit capacity and NTS exit flow flexibility up to baseline levels would be funded by TO revenue, determined at the time of the TO price control. Release of NTS offtake rights above baseline would be termed "incremental", and may attract additional (SO) revenue.

3.33. The remainder of this subsection describes:

- existing NTS exit capacity baselines;
- the methodology currently followed at NTS entry points; and
- alternative approaches for enduring NTS exit capacity baselines.

Existing exit capacity baselines

3.34. Baselines for NTS exit capacity are defined as part of Transco's current GT licence. Currently, separate baselines are specified for firm and interruptible exit capacity, for each of Transco's Local Distribution Zones (LDZs)[39].

3.35. No baselines are currently defined for NTS exit flow flexibility. Instead, Transco's LDZs receive an allocation of flexibility consistent with Transco's estimate of the level required to meet the 1 in 20 obligation. In contrast, other

[39] It should be noted that in the future, given the approach to define exit capacity rights by node, these will need to be expressed on an offtake point specific basis.

NTS direct connects have rights to flexibility of offtake bundled together with their allocation of Supply Offtake Quantity (SOQ)[40].

3.36. In this consultation document, Ofgem considers a number of approaches that could be followed in defining baselines that will apply to both NTS exit capacity and NTS exit flow flexibility in the enduring regime. Since the enduring regime would apply from 1 October 2008, any change to the methodology followed in the definition of baselines will have no impact on TO revenues in the current price control period (that ends on 31 March 2007). However, in selecting the most appropriate methodology to adopt in setting baselines for the enduring arrangements, Ofgem will need to consider, among other things, consistency with the current methodology.

Methodology followed at NTS entry points

3.37. For reasons of consistency, an important consideration in selecting an appropriate methodology for the setting of baselines for NTS offtake rights is the approach adopted at NTS entry points for the determination of capacity baselines.

3.38. Under the price control regime established in Transco's GT licence, Transco is funded through its TO price control to provide a series of baseline output measures of entry capacity for each NTS entry point. These baselines are calculated on the basis of assessing the maximum physical capability at each system entry point. These baselines are referred to as Transco's TO baseline output measures, and Transco is obliged to offer 90 per cent of these output measures for sale as "initial NTS SO baseline entry capacity".

3.39. When first set, the levels of capacity released at NTS entry terminals were defined following a Seasonal Normal Demand (SND) approach. In relation to this, Ofgem was clear both prior to the commencement of the first auctions and subsequently, that it did not support this approach as an enduring methodology. Instead, Ofgem has consistently supported (and continues to support) the use of

[40] Note that the Supply Offtake Quantity (SOQ) is the maximum daily consumption for a supply point. The SOQ allocation process allows NTS connectees to request changes to SOQs at any time, subject to a number of restrictions on the extent and timing of changes. Change requests that require investment to be undertaken by the NTS are considered in the annual planning process.

a capacity release mechanism based on the maximum physical capacity of each terminal, given that this would deliver a robust and verifiable measure of actual capacity at each entry point.

3.40. In August 2001, Ofgem therefore directed Transco to implement a modification to the Network Code[41] through which the baseline volume of capacity released at entry terminals would be linked to the maximum physical capacity available (with Transco buying back capacity in the event of a constraint). At the time, Ofgem stated that this approach was the most simple and transparent method of releasing capacity and reduced any Transco discretion in determining how much capacity to release.

3.41. Additionally, Ofgem considered that such an approach would remove any reliance on historical data (and the possibility that a historically based methodology could artificially restrict the amount of capacity being released to market).

3.42. At the time of the modification, Ofgem accepted that a release based on maximum physical capacity could increase the probability of buy-back actions, with consequent implications for the structure and level of required incentives. However, Ofgem considered that defining baselines consistent with maximum physical capacity was the best way of ensuring the efficient and economic operation of the pipeline system.

Potential approaches for enduring NTS exit baselines

3.43. Following discussions at the Exit Reform Forum, Ofgem considers that there are four broad alternatives for the way in which baselines may be defined[42]:

- forecast 1 in 20 firm demand;
- forecast 1 in 20 firm demand plus interruptible demand;

[41] Ofgem decision letter on modification proposal 0481 *'Release of ASEP maximum system entry capacity volumes for MSEC auction'*, Ofgem, August 2001

[42] An alternative approach would be to design arrangements *without* the explicit definition of baselines. The NTS would instead be obliged to release all physically available capacity, without this volume being specified prior to the initial allocation. This approach would fundamentally differ from the structure of the arrangements currently in place at entry, however, and is not considered in any more detail in this document.

- practical maximum physical capacity; or
- theoretical maximum physical capacity.

3.44. The first approach considered in this document is defining baselines consistent with the **forecast demand expected to arise on the network under 1 in 20 conditions**[43]. This means that the level of NTS exit capacity and NTS exit flow flexibility sold would be consistent with the capability of the system at anticipated peak conditions. Following this approach would mean that the sale of baseline NTS exit capacity and NTS exit flow flexibility would closely reflect demand, with any requests for these products above baseline levels constituting demand for "incremental exit capacity" and/or "incremental exit flow flexibility".

3.45. An alternative approach would be to define baselines in terms of the **forecast demand expected to arise on the network under 1 in 20 conditions plus the existing forecast level of NTS interruptible capacity**. This would deliver a higher level of baseline than the initial definition, yet the meaning of such a baseline would be more ambiguous than option 1 (most likely lying somewhere between a forecast 1 in 20 level of demand and maximum physical capacity), and would not be directly linked to the actual physical capacity of the network.

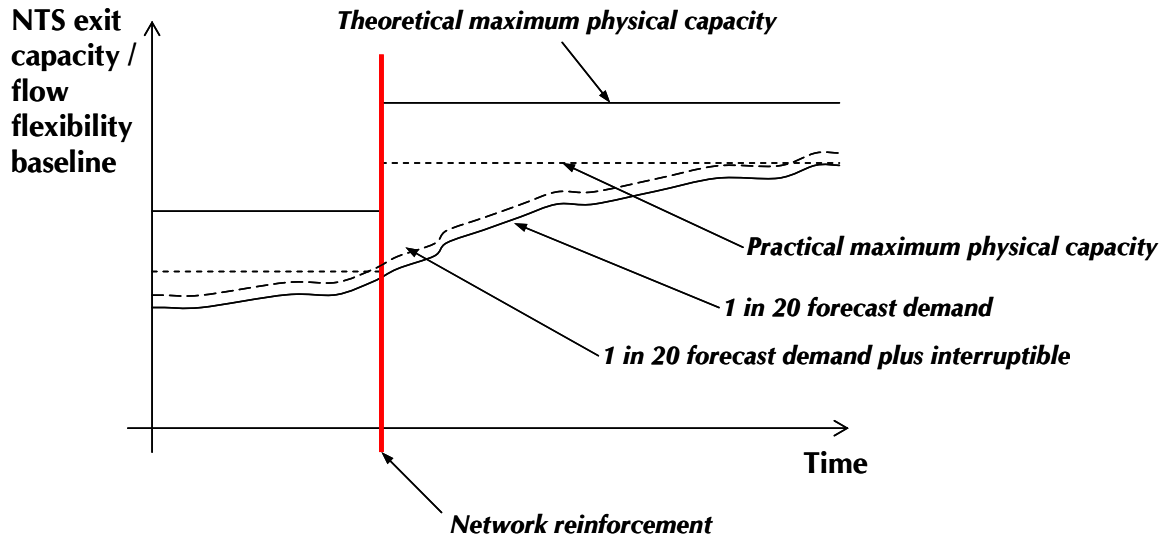
3.46. Baselines could also be calculated to give the "**practical maximum physical capacity**" at each offtake point. Under this approach, baselines would be calculated to be consistent with a volume of maximum capacity available at each offtake point given a set of scenarios for flows elsewhere on the network (without the need for new investment or significant buyback). This methodology would be likely to produce a set of baselines that would be lower than the "theoretical maximum physical capacity" approach, since the ability of the network to serve flows at other offtake points would be taken into account. However, as a result of a range of factors (including, for example and without limitation, the interaction with entry capacity) it is likely to produce a higher baseline than the forecast demand approach. It should be noted that, given the NTS has a licence obligation to invest in the network in an economic and efficient manner consistent with the 1 in 20 obligation, there may be a number

of places on the NTS where baselines defined by the practical maximum physical capacity methodology will be similar to 1 in 20 forecast demand. This may be particularly likely in the period immediately preceding network reinforcement at certain points on the network.

3.47. Finally, the "**theoretical maximum physical capacity**" approach to defining baselines would involve assessing the maximum possible throughput of each offtake point on the network independent of wider system conditions. This would give a value of baseline that would represent the maximum amount of NTS exit capacity and NTS exit flow flexibility at each offtake point. In contrast to the 1 in 20 baseline approach, specifying baselines according to this methodology would mean that demand would need to exceed maximum physical capacity levels before resulting in any signal for incremental capacity. Note that this approach is the most consistent to the method adopted for the derivation of the current NTS entry capacity baselines.

3.48. The potential definitions of "baseline" are illustrated in Figure 3.4 below.

Figure 3.4 Baseline definitions



[43] Note that Transco is required, through its licence, to design the NTS consistent with the 1 in 20 obligation.

3.49. This figure provides an illustration of the likely relativity and evolution of capacities under each baseline methodology over time (with an illustrative network reinforcement occurring at the point indicated in the diagram). As indicated above, "theoretical maximum physical capacity" is likely to provide the highest baseline figures[44], followed by "practical maximum physical capacity". The forecast 1 in 20 demand approach is likely to produce the lowest baseline capacities, although as demand grows and parts of the network require reinforcement, the capacities under the forecast 1 in 20 approach may come close to the practical maximum physical capacity approach[45].

3.50. For reference, indicative baseline data for NTS exit capacity calculated under each of these methodologies is included in Appendix 1 of this document. This is intended to be only illustrative, and has been provided by Transco to give respondents an initial view of the relative size of baselines that could be derived under each proposed methodology.

3.51. An additional issue concerns the level of baselines specified for the duration of the price control period (i.e. for the period 2008-2013). Specifically, baselines could be assumed to remain constant over this time period, or could be "profiled" (i.e. defined so as to increase over time). It is to be noted that baselines for NTS entry capacity in the current price control period have been defined following the "profiling" approach (i.e. with baselines increasing over time).

3.52. As with all other aspects of this consultation document, Ofgem would welcome respondents' views on all of these issues, and in particular:

- the most appropriate methodology for the setting of baselines for NTS exit capacity and NTS exit flow flexibility;

[44]It is noted that not all offtake points have sufficient physical capability to accommodate an hypothetical movement of all interruptible capacity to firm. Therefore, the firm plus interruptible baseline in some cases is higher than the maximum physical baseline

[45]It should be noted that Figure 3.4 is only intended to illustrate the general relationship between the four different methodologies. It is worth noting that, in some instances, the relative sizes of the different approaches may differ to those illustrated. For example, in certain parts of the network (e.g. South West), the "firm + interruptible" methodology may deliver higher baselines than the "practical maximum physical capacity" methodology.

- the indicative baseline numbers for NTS exit capacity provided by Transco (see Appendix 1); and
- whether some growth in baselines over time should be assumed.

Allocation of NTS offtake rights in the enduring regime

3.53. Under the proposed enduring offtake arrangements (developed by Transco through the Exit Reform Forum consultation process), the allocation of firm NTS exit capacity and NTS exit flow flexibility rights will be undertaken at three distinct stages. These are:

- long term (unconstrained) sale;
- medium term (constrained) sale; and
- short term (constrained) sale.

3.54. Under the current proposals, the long term sale of NTS offtake rights will be held at three years ahead, and will enable bidders to make firm bids for capacity for a number of gas years at each offtake point. The NTS would be required to offer for sale all of the baseline NTS exit capacity and NTS exit flow flexibility. However, the allocation of NTS offtake rights at this point in time would not be constrained by the current size of the system, as the sale would take place sufficiently in advance of delivery as to allow the release of incremental NTS exit capacity and incremental NTS exit flow flexibility above baseline levels to be undertaken in response to market signals (i.e. the allocation would be "unconstrained").

3.55. Consistent with the entry auctions, it is proposed that the NTS will only be obliged to meet requests for incremental NTS offtake rights (i.e. above baseline levels) when these requests satisfy a "strength of signal" test (to be set out in a defined Incremental Exit Capacity Release (IExCR) methodology). Transco has proposed that this methodology should be relatively simple, consistent with the NTS being obligated to meet requests for incremental NTS offtake rights if these requests are made for at least three consecutive years.

3.56. At the year ahead (and potentially at the two year ahead) stage, Transco also proposes holding a "constrained" allocation process, at which any baseline NTS exit capacity and NTS exit flow flexibility left unsold following the long term allocation will be offered for auction again. It is proposed that this will be a pay as bid auction, and rights would be sold at each NTS offtake point (where available).

3.57. Finally, at day ahead (and within day), the system operator will offer any unsold baseline NTS exit capacity and NTS exit flow flexibility for sale, at each offtake point. Interruptible exit capacity will also be made available at the day-ahead stage.

3.58. The scope of incentive schemes will need to encompass NTS activities across all of these timescales.

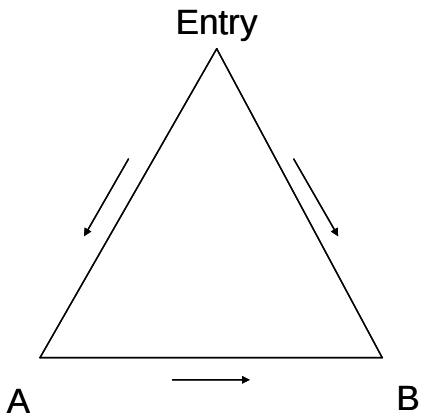
3.59. An issue that remains open to consultation concerns whether the NTS should be obliged to offer NTS exit capacity and NTS exit flow flexibility for sale in at least one "clearing allocation". Under the NTS entry capacity arrangements, Transco has a licence obligation to use all reasonable endeavours to ensure that NTS entry capacity is offered for sale in at least one clearing allocation (defined as being an allocation that either results in all baseline capacity that has been offered for sale being sold, or that has a reserve price of zero). Under the entry arrangements, however, Ofgem has stated that it is appropriate for non-zero reserve prices to apply at those entry terminals where there is insufficient competition for NTS entry capacity. Ofgem welcomes respondents' views on whether a similar obligation for the NTS to undertake a clearing allocation would be appropriate for the allocation of NTS exit capacity and NTS exit flow flexibility.

Treatment of substitution and investment

3.60. An important characteristic of the proposed arrangements is that, in providing offtake rights following the initial allocation, the SO is able to reallocate offtake rights between offtake points.

3.61. The potential to substitute rights between offtake points is illustrated in Figure 3.5 below.

Figure 3.5 Example of substitution



3.62. In this example assume:

- a simple network with a single entry point, and two offtake points (nodes A and B);
- that if connectees offtake at baseline levels at both nodes, then the flows of gas on the network are as indicated by the three arrows (i.e. gas flows to B both directly from the entry terminal, and via offtake point A); and
- that if connectees at both nodes A and B offtake at baseline levels, the pipelines connecting the entry terminal to nodes A and B are constrained, but that spare capacity exists in the pipeline connecting A and B.

3.63. The concept of substitution is that baseline NTS exit capacity and NTS exit flow flexibility can effectively be allocated from one offtake point to another. In this example, were connectee A to decide (at the long term allocation) that it required a level of offtake less than baseline (creating some spare offtake capacity), then connectee B would be able to increase offtake (above the level specified in the original baseline). Gas that would otherwise have exited the system at offtake point A can instead pass along the (unconstrained) pipeline to B. Therefore, in this example, following the substitution, the baseline at offtake point B would increase, and the baseline at offtake point A decrease.

3.64. For a given set of baseline NTS offtake rights, an efficient allocation of offtake rights involves substitution of NTS exit capacity and NTS exit flow flexibility

between offtake points in a manner which is consistent with users' revealed valuations. Failure to undertake such substitution could result in unnecessary (and therefore inefficient) investment being undertaken. Ofgem considers that investment should only be undertaken in response to a signal of market demand which *cannot* be addressed through efficient substitution of offtake rights. The substitution process might include the consideration of constraint management tools, where it is economic and efficient.

3.65. Ofgem considers that the NTS incentive schemes will therefore need to provide enduring incentives:

- to exploit fully any potential to substitute NTS offtake rights between offtake points to satisfy demand before undertaking any investment (resulting in a potential resetting of nodal baselines); and
- to undertake investment (between price control periods) where there is a signal of a need for new investment which cannot be met from substitution or efficient system operation (i.e. from constraint management, where it is economic and efficient to do so). This incentive will only be required for the unconstrained (long-term) allocations.

3.66. For the incentive regime to operate effectively, it will therefore be important to be able to identify where sales of NTS offtake rights above initial baseline levels are a result of baseline substitution, and where they are a result of planned new investment.

3.67. Ofgem would welcome respondents' views on the proposed treatment of substitution and investment as part of the enduring incentive schemes.

Unit Cost Allowances

3.68. A final element of the incentive schemes to be described in this chapter is the most appropriate way in which Unit Cost Allowances (UCAs) should be calculated under the proposed offtake arrangements.

3.69. As described above, NTS exit capacity and NTS exit flow flexibility under the proposed enduring offtake arrangements will be defined on a nodal basis.

Hence, for the purposes of determining the level of Transco's revenue allowance for the provision of incremental exit capacity, UCAs will also need to be defined for each NTS offtake point.

3.70. Ofgem's initial view is that UCAs at NTS offtake points should be calculated by Transco following a methodology agreed with Ofgem, and that these UCAs should be subject to final approval by Ofgem. Ofgem also considers that the methodology to be used for the calculation of offtake UCAs should reflect that followed at entry (where the average costs of increments of capacity at each entry point are over a 10 year period are calculated using Transcost[46]).

3.71. Ofgem invites views of respondents on this proposed approach to calculating UCAs for NTS offtake points.

[46] Transcost is a model developed by Transco to support the setting of capacity charges paid by shippers for transporting gas on the NTS.

4. Proposed enduring incentive schemes

4.1. In Chapter 3, we described the enduring offtake arrangements that will be required in the event that the proposed sale of Transco's DNs goes ahead. These arrangements were most recently described in the Final IA, published in November 2004, and were endorsed in the Authority's January 2005 decision to grant conditional consent.

4.2. The Final IA presented more detail on the way in which the proposed arrangements would operate in practice, including an appendix illustrating how the arrangements could affect different groups of NTS connectees[47]. In Chapter 3 of this document, a number of more detailed aspects of the proposed offtake arrangements more directly relevant to the development of proposals for incentive schemes were also outlined.

4.3. The Final IA reiterated Ofgem's view that Transco's proposed sale of one or more DNs, and the proposed structure for enduring offtake arrangements that would be necessary to protect the interest of customers, would require the design of both NTS and DN incentive schemes[48]. As such, in the event of DN sales proceeding, incentive schemes will need to be implemented for both the NTS and the DNs (both Retained Distribution Networks (RDNs) and Independent Distribution Networks (IDNs)). The incentive regime will, among other things, need to ensure that the NTS is incentivised to release the maximum NTS exit capacity and NTS exit flow flexibility on the network and to ensure that the DNs book an efficient level of NTS exit capacity and NTS exit flow flexibility. This needs to be achieved through an efficient balance of risk and reward.

4.4. This chapter sets out Ofgem's initial thoughts on the proposed enduring incentive schemes supporting the enduring offtake arrangements to be implemented for the:

- NTS; and

[47] *National Grid Transco – Potential sale of gas distribution network business, Final Impact Assessment*, Ofgem, November 2004, Appendix 5, "A Day in the Life".
[48] *National Grid Transco – Potential sale of gas distribution network business, Final Impact Assessment*, Ofgem, November 2004, Page 67.

- DNs (both RDNs and IDNs).

4.5. Ofgem invites respondents' views on all of the initial thoughts on incentive schemes outlined in this chapter.

NTS enduring incentives

4.6. This section describes:

- the objectives of the proposed NTS incentive schemes; and
- the scope, form and duration of the proposed incentive schemes, in light of the proposed offtake arrangements as outlined in Chapter 3.

4.7. It is important to note that the proposals for incentive schemes relate to the treatment of both NTS exit capacity and NTS exit flow flexibility – and that separate incentive parameters and baselines **will be** defined for both NTS exit capacity and NTS exit flow flexibility under the proposed new incentive schemes.

Objectives

4.8. As noted in Ofgem's decision document on the allocation of roles and responsibilities of network owners, under the proposed divested industry structure, Transco NTS will act as the residual energy balancer for both the NTS and the DNs as at present, and will undertake system balancing activities for the NTS[49]. The DNs will undertake system balancing activities for their own networks which will principally relate to the management of congestion and the management of gas lost whilst being transported over the DN network (i.e. shrinkage).

4.9. Under its NTS GT licence, Transco is funded through its NTS TO price control to provide a series of baseline NTS exit capacity output measures (TO output measures) which are currently specified by LDZ (but which in future will be

[49] *National Grid Transco – Potential sale of network distribution businesses, Allocation of roles and responsibilities between transmission and distribution networks,* Ofgem, May 2004

defined by offtake point). The TO price control also provides for a series of baseline NTS entry capacity output measures.

4.10. The proposed enduring offtake arrangements are designed to ensure that the interface between the NTS and DNs is operated in both a manner that satisfies the GT statutory duties and licence obligations[50], and to be consistent with the proposed allocation of roles and responsibilities. The proposed offtake arrangements should therefore ensure that the NTS allocates NTS exit capacity and NTS exit flow flexibility in a not unduly discriminatory manner. Equally, they should enable NTS connectees to signal their (financially firm) long term requirements for NTS exit capacity and NTS exit flow flexibility.

4.11. A number of the principles on which the proposed offtake arrangements are based are similar to those which underpin the entry arrangements, although in a number of areas make allowances for the physical differences between entry and exit capacity (such as the potential greater scope for substitution between offtake points than between entry points). In considering the overall objectives of the incentive regime for NTS exit capacity and NTS exit flow flexibility, Ofgem have therefore sought to draw on the regime in place for entry capacity, wherever appropriate.

4.12. In light of the proposed offtake arrangements, Ofgem believes that the high level objectives of the NTS incentive schemes should be as follows:

- **to ensure that the NTS has incentives to deliver the full physical capability of the network**: the NTS is funded through the TO price control to deliver a baseline level of output measures. However, since the physical capability of the system on any given day will actually depend upon a range of detailed operating characteristics, it is important (as is the case under the entry arrangements) that the NTS has the proper incentives to provide users with all physically available offtake rights which are available;

[50] In particular to provide non-discriminatory access and to develop and maintain an efficient and economical pipeline system.

- **to ensure that the NTS has sufficient funds within the price control period to undertake appropriate incremental investment (in response to enduring demand signals)**: the offtake arrangements have been designed to enable NTS connectees to signal their long term requirements for NTS exit capacity and NTS exit flow flexibility. Hence, where there are enduring signals from the market indicating demand for NTS offtake rights *which cannot be satisfied through baseline volumes*, it is important that the NTS incentives provide adequate rewards to allow investment or expenditure on system management tools to be undertaken to meet this demand in an efficient and economic manner within the price control period. At the time of the next price control review, provided that capital expenditure associated with the additional NTS exit capacity and/or NTS exit flow flexibility was efficiently incurred, these assets will subsequently be remunerated through the TO control[51]; and

- **to ensure that the NTS has an incentive to buy back NTS offtake rights in order to relieve network constraints in an efficient and economic manner**: to the extent that the network is unable to deliver the level of NTS offtake rights sold, the NTS should have incentives to trade off in an efficient and economic manner the possibility of buying back rights as against other actions such as undertaking further investment to relieve network constraints or through expenditure on congestion management contracts. Such incentives should be consistent with the approach taken by Ofgem in relation to the arrangements for entry capacity and in relation to the SO incentives in electricity.

4.13. Note that Ofgem's statutory duties with respect to developing enduring offtake, and interruption arrangements and the enduring incentive schemes required to support a multi gas transporter environment are set out in Appendix 2.

Scope, form and duration of the proposed schemes

4.14. Ofgem's initial thoughts on the proposed scope, form and duration of incentive schemes are set out below for:

[51] Subject to the normal check at the time of the price control that the construction costs incurred were

- long term;
- medium term; and
- short term.

Long term incentive schemes

4.15. The long term incentive schemes relate to the sale of NTS offtake rights three years ahead and beyond. Consistent with the arrangements at entry, it is proposed that revenue from the sale of rights up to baseline levels is treated as TO revenue (with requests for NTS exit capacity and NTS exit flow flexibility above baseline being termed requests for "incremental NTS exit capacity" and "incremental NTS exit flow flexibility").

4.16. Ofgem's initial thoughts on the enduring long term NTS incentive schemes are described below in terms of:

- scope;
- form; and
- duration.

Scope

4.17. Consistent with the principles for enduring NTS incentive schemes outlined above, Ofgem's initial view is that, for the long term, the NTS incentive schemes should have two distinct revenue streams:

- **Incremental NTS exit capacity and NTS exit flow flexibility release provided by investment**. Ofgem considers that, should the NTS decide to meet demand for incremental capacity and/or flow flexibility, then it should receive incentive payments similar in form to those that apply to "obligated incremental entry capacity" under the entry arrangements. Meeting demand for incremental NTS exit capacity and/or NTS exit flow flexibility in this manner will eventually result in a (permanent) increase

in baselines at the relevant offtake point. Note that (consistent with the arrangements for provision of incremental NTS entry capacity) the NTS will be able to deliver this increase in baselines through a number of ways (including, but not limited to, either new investment or through long term buy-backs).

- **Incremental NTS exit capacity and NTS exit flow flexibility release provided by substitution**. Should the NTS decide to meet requests for incremental capacity and/or flow flexibility at any given offtake point through substituting spare capacity and/or flow flexibility from other offtake points, Ofgem's initial view is that the NTS should be allowed to retain a proportion of the resulting auction revenue. It should be noted that Ofgem considers that changes to baselines resulting from substitution should only occur following the long term allocation process (and not following medium or short term allocations).

4.18. Additionally, it should be noted that this approach differs to that currently in place at entry, in which the NTS is subject to a single incentive mechanism, irrespective of whether incremental NTS entry capacity is met through investment or substitution. A different approach is proposed in this document for exit arrangements on the basis of differences in the physical characteristics of entry and exit – namely that there is likely to be a greater degree of substitutability between offtake points at exit than at entry. As such, it is more important to differentiate the level of incentive payments at exit depending upon whether incremental NTS exit capacity and/or NTS exit flow flexibility is delivered through investment or substitution.

4.19. Finally, baselines at entry have been defined consistent with the (theoretical) maximum physical capability methodology, which has resulted in high baseline levels being set for each entry terminal. The assumption at the time of developing the entry arrangements was therefore that incremental capacity provided at entry terminals would generally be delivered through investment rather than substitution of entry capacity between terminals. As a consequence, there was felt to be no need to incorporate different incentives for incremental capacity at entry, according to how Transco opted to deliver incremental capacity.

Form

4.20. In terms of the **incremental rights provided by investing,** Ofgem considers that the NTS should retain incremental SO auction revenue for a five year (rolling) period based on a fixed rate of return on the nodal UCA. Ofgem considers that the most appropriate fixed rate of return to use is the relevant cost of capital (i.e. currently 6.25%).

4.21. Ofgem's initial view is that, similar to the entry arrangements, a test of "sustained demand" is incorporated into the arrangements. As explained in Chapter 2, at entry, a net present value test is specified, which, if met, automatically triggers Transco to release permanent obligated incremental entry capacity, attracting incentive revenue for a minimum of five years. Ofgem considers that, at exit, this test is simplified into a check of whether requests for incremental demand exist for at least three years. Ofgem would welcome respondents' views on the most appropriate test for sustained demand in the enduring NTS incentive schemes supporting the proposed enduring offtake arrangements.

4.22. Where there are enduring signals for incremental investment above baseline levels, Ofgem considers it appropriate for the NTS to retain incremental SO auction revenue for a five year period based on a fixed rate of return on the nodal UCA. Any under/over recovery on this level of return could then be recovered from customers through an appropriate mechanism (such as for example the SO commodity charge). Following this five year period, efficiently incurred investment could then enter the RAV, and attract TO revenue at a rate of return equal to the relevant cost of capital[52]. Ofgem invites the views of respondents on this proposed approach to designing incentives relating to incremental NTS exit capacity and NTS exit flow flexibility rights provided through investment.

4.23. Where **incremental NTS exit capacity and/or NTS exit flow flexibility is provided by substitution**, Ofgem's initial view is that the NTS should retain auction revenue for only one year. This reflects the relatively low risk faced by the NTS in meeting demand for offtake rights in this manner, yet provides the

[52] Subject to the normal check at the time of the price control that the construction costs incurred were efficient.

NTS with an incentive to address locational variations in firm demand as efficiently as possible. This therefore balances the interests of customers with those of the NTS's shareholders. Following each long term allocation, Ofgem considers that baselines should be capable of being adjusted to reflect the substitution of NTS exit capacity and NTS exit flow flexibility undertaken by the NTS between offtake points (i.e. adjusting one offtake point upwards consistent with the request for incremental NTS exit capacity and/or NTS exit flow flexibility, and another offtake point downwards, where there was unsold NTS exit capacity and/or NTS exit flow flexibility).

4.24. Ofgem's initial view is that the incentive revenue received by Transco through this mechanism should be a percentage of the auction revenue received for the sale of incremental NTS exit capacity and/or NTS exit flow flexibility. Ofgem initially considers that this percentage is set at 50%, consistent with the (upside) sharing factor currently in place for the NTS entry capacity buy-back incentive (into which sales of non-obligated incremental firm NTS entry capacity in the long / medium / short term are included). However, Ofgem recognises that the level of this sharing factor should be set with regard to both the need to give the NTS a significant incentive to provide incremental rights through substitution of baselines between offtake points, and the cost that the NTS incurs in undertaking substitution, which could also include the cost of buy-backs.

4.25. At least initially, Ofgem considers it appropriate to place a cap on the maximum level of incentive payments that may be earned by the provision of incremental NTS offtake rights through substitution. Given uncertainty over the way in which this incentive will operate in practice (arising from the absence of data regarding the extent to which the NTS may be able to satisfy requests for incremental NTS exit capacity and/or NTS exit flow flexibility through substitution), Ofgem considers that this approach will best ensure that the interests of customers are protected.

4.26. Ofgem's initial view is that the separate treatment of incremental NTS exit capacity and/or NTS exit flow flexibility delivered by substitution, and the potential for baselines to be revised will lead to potential efficiency gains from three main areas:

- providing separate incentives for incremental NTS exit capacity and/or NTS exit flow flexibility delivered through substitution will encourage the NTS to exploit the maximum (economic) amount of substitution from the system before undertaking new investment (with subsequent efficiency gains for customers);

- by enabling baselines to be reduced at offtake points where long term demand for NTS exit capacity and/or NTS exit flow flexibility is low, NTS connectees will face a strong incentive to book their NTS exit capacity and NTS exit flow flexibility requirements into the long term. This will lead to clearer investment signals being provided to the NTS, enabling the NTS to plan any necessary investment as efficiently as possible; and

- Ofgem considers that this approach will tend to lead to the true amount of substitutability on the network being revealed as transparently as possible.

4.27. Ofgem's initial view is that the remainder of auction revenues received for the provision of incremental NTS exit capacity and/or NTS exit flow flexibility through substitution will be passed back to customers. One possible way in which this could be achieved would be through an appropriate adjustment to the commodity charge.

4.28. Respondents' views are invited on all of the initial proposals regarding the form of NTS enduring incentive schemes outlined in this subsection.

Duration

4.29. One of the underlying objectives of the proposed incentives is to give the NTS a relatively stable regulatory environment, in which it is prepared to invest in the network in response to sustained requests for incremental NTS exit capacity and/or NTS exit flow flexibility received through the long term allocation process. This is unlikely to happen unless the NTS considers that it faces a relatively stable regulatory regime for a number of years.

4.30. Longer duration schemes would give the NTS a clearer incentive framework under which to operate and would enhance its ability to consider undertaking investments for its activities that would only reduce costs over the course of

several years. As a result, this approach would provide the NTS with increased freedom and flexibility within which to carry out economically its role as SO and in doing so would be expected to reduce SO costs over time, to the benefit of present and future customers.

4.31. As a consequence, Ofgem's initial view is that parameters for NTS offtake rights incentives should be designed for five years (from the start of the enduring arrangements). This is consistent with the duration of the TO price control, and is also consistent with NTS entry incentives. Ofgem would welcome views from respondents on the most appropriate duration for the NTS enduring incentive.

Medium / short term incentive schemes

4.32. In shorter timescales, Ofgem considers that the schemes should provide the NTS with an incentive to ensure that all NTS exit capacity and NTS exit flow flexibility is made available to users, and to relieve any constraints that arise on the system as efficiently as possible. Again, in presenting these initial thoughts, Ofgem has sought to draw on the arrangements in place at entry, where appropriate.

4.33. Ofgem's initial thoughts on the enduring medium and short term NTS incentive schemes are described below in terms of:

- scope;
- form; and
- duration.

Scope

4.34. It is proposed that the medium/short term incentive schemes (i.e. those that relate to the allocation of NTS exit capacity and NTS exit flow flexibility in constrained allocations) should provide the NTS with incentives to:

- release additional NTS exit capacity and NTS exit flow flexibility which becomes available as a result of unexpected changes in the forecast or actual operation of the network; and

- buy back NTS offtake rights in an efficient manner.

4.35. This approach would be broadly consistent with the incentive schemes in place at entry. As described in Chapter 2, under the current entry capacity buy-back incentive Transco is incentivised to reduce the costs associated with buying back firm entry capacity that it is unable to make available on the day. The performance measure is calculated, in general terms, as buy back costs less the revenue earned through the sale of some types of shorter term entry capacity products.

Form

4.36. Ofgem's initial view is that:

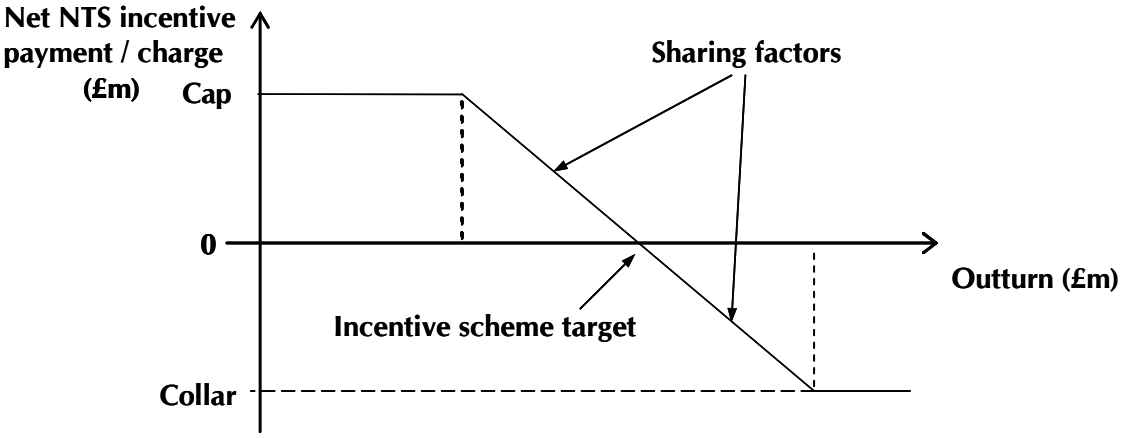
- revenue from the sale of rights up to baseline levels (ahead of the day) should be treated as TO revenue (consistent with arrangements at entry); and

- the NTS should be allowed to retain a percentage of the revenue of all sales of all offtake rights sold above baseline through the constrained allocations.

4.37. In addition, Ofgem considers it appropriate for a cap to be placed on the maximum level of incentive revenue payments that may be earned through this incentive (each year), and that the cost of any NTS offtake right buy-backs are included within the scope of this incentive regime.

4.38. In terms of the form of the medium/short term NTS incentive schemes, Ofgem's initial preference is for a sliding scale set of incentives, with a cap and collar set around a target (set with reference to expected costs of buy backs). This is illustrated in Figure 4.1.

Figure 4.1 Form of NTS incentive



4.39. Table 4.1 describes the set of parameters that will need to be defined as part of the development of Initial Proposals for the incentive schemes (i.e. a separate set of parameters will be required for both NTS exit capacity and NTS exit flow flexibility). It should be noted that the parameters for the incentive scheme target and caps and collars will require more detailed analysis (once policy issues such as appropriate methodology for setting of baselines as discussed in Chapter 3 have been determined).

4.40. Ofgem's initial view is that symmetric sharing factors are implemented in the incentive scheme (given that these represent a balance between the potential rewards that can be earned by Transco, and the interests of present and future customers). Ofgem's initial view is that these sharing factors are set at +/- 50%, consistent with the (upside) sharing factor currently in place for the entry capacity buy-back incentive.

Table 4.1 Medium/short term NTS incentive parameters (£m)

Target	Cap and collar		Sharing factors	
	Cap	Collar	Upside	Downside
To be defined	To be defined	To be defined	50%	50%

4.41. An additional issue that will need to be addressed before these parameters are set will be the way in which maintenance costs are handled in the incentive

schemes. There are a number of approaches that could be taken to maintenance in the context of the incentive schemes. In the entry arrangements, the buy-back incentive is calculated to include the cost of capacity associated with maintenance (hence Transco is required to either buy-back entry rights from connectees to undertake maintenance, or manage its network in a way to undertake maintenance at times when the potential for buy backs is limited).

4.42. One alternative approach would be to assign an amount of maintenance access to the NTS, with only any additional maintenance requirements necessitating buy-backs. A final alternative would be for network operators to work together to coordinate maintenance requirements, again excluding cost of NTS exit capacity and NTS exit flow flexibility associated with maintenance from the incentive schemes. Ofgem would welcome respondents' views on the most appropriate way of handling the cost of NTS exit capacity and NTS exit flow flexibility relating to maintenance activities in the incentive schemes.

4.43. Respondents' views are invited on all of the initial proposals regarding the form of NTS enduring incentives outlined in this subsection.

Duration

4.44. Consistent with the duration of the long term incentive schemes, Ofgem's initial view is that medium/short term incentive parameters should be set for five years from the start of the enduring offtake arrangements (with the potential for a reopener after one year in the event that parameters require recalibration).

4.45. The views of respondents are invited on the proposed duration of the NTS enduring incentive schemes.

Views invited

4.46. Views are invited on all aspects of the NTS enduring incentive schemes outlined in this section, and in particular regarding Ofgem's initial thoughts on:

- the proposed separate treatment of incremental rights, depending upon whether they are provided by investment or substitution;
- the proposed duration of the NTS incentive schemes; and

- the way in which maintenance cost should be handled in NTS enduring incentive schemes.

DN enduring incentives

4.47. Unlike the NTS incentive schemes (which are primarily designed to give the NTS an incentive to release the maximum volume of NTS exit capacity and NTS exit flow flexibility in response to signals from market participants), as explained earlier, the DN incentives are primarily designed to remove a potential rational tendency for the DNs to overbook NTS exit capacity and NTS exit flow flexibility (in the absence of such incentives). This is a direct result of the externalisation of the NTS-DN interface that arises in a divested industry structure.

4.48. This section describes in more depth:

- objectives of the enduring DN incentive schemes; and
- scope, form and duration of the proposed schemes.

Objectives

4.49. As described more fully in Chapter 3, under the proposed enduring offtake arrangements, DNs (i.e. both Transco's RDNs, and the IDNs) will have responsibility for requesting a level of NTS offtake rights at each NTS/DN offtake point consistent with the 1 in 20 obligation. The proposed offtake arrangements have been designed to ensure that the interface between the NTS and DNs is operated in a manner consistent with GT statutory duties and licence obligations. These obligations include, without limitation, the requirements to provide non-discriminatory access and to develop and maintain an efficient and economical pipeline system.

4.50. Given these arrangements, the key objective of the enduring DN incentive schemes should be to incentivise the DNs to meet the 1 in 20 obligation through an efficient balance of booking NTS offtake rights, contracting for interruption and DN-related investment. This objective is also relevant to the NTS exit flow flexibility product (which is directly substitutable for investment in DN storage facilities). It should also encourage DNs to book NTS exit capacity (and NTS

exit flow flexibility) at the NTS offtake points on their networks where this is cheapest.

4.51. Ofgem considers that it is of particular importance that DNs have an incentive to book an efficient amount of NTS exit capacity and NTS exit flow flexibility. Without this incentive, DNs would tend to overbook NTS exit capacity and NTS exit flow flexibility relative to their requirements (and pass through the additional costs) rather than undertake an efficient level of DN-related investment. In addition, the DNs would potentially have an incentive to reduce the capability of their networks to manage diurnal swing, relying instead on the NTS to provide replacement flexibility.

4.52. In addition, it is proposed that the enduring DN incentive schemes should include the greater than 15 day interruption payment incentive (that is included in Transco's current NTS exit incentive, as described in Chapter 2). It is also important to note that the conclusions document on the interruptions framework stated the indicative conclusion of the Authority that reform of the interruption arrangements at the DN level should be implemented "no later than April 2006"[53]. This reform, however, will not be linked to the delivery of these arrangements.

Scope, form and duration of the proposed schemes

4.53. Ofgem's initial thoughts on enduring DN incentive schemes are described below in terms of:

- scope;
- form; and
- duration.

[53] National Grid Transco Potential sale of gas distribution network businesses, Interruptions arrangements, Conclusions document on framework, Ofgem, August 2004, page 77.

Scope

4.54. In order to deliver a scheme capable of incentivising DNs to efficiently trade-off requests for NTS offtake rights, contracting for interruption, and DN investment to meet their 1 in 20 obligations, it is proposed that a single incentive mechanism is designed for the enduring arrangements. Ofgem considers that this mechanism should cover:

- the cost of booking NTS offtake rights (i.e. for both NTS exit capacity and NTS exit flow flexibility);
- the cost of buying back rights to offtake gas from the DN under the present interruption arrangements (at present, this would be achieved by interrupting customers, with a payment from the DNs applying where interruption is greater than 15 days in duration[54]); and
- revenue from the sale of NTS offtake rights back to the NTS.

4.55. In the event that, for example, a DN considers the cost of booking NTS offtake rights to be relatively expensive when compared to the cost of undertaking directly substitutable investment projects or contracting innovatively with users for interruption, then Ofgem would expect the incentive schemes to encourage DNs to make the most efficient choice (for example, by allowing the DNs to retain a proportion of the reduced cost of purchasing NTS offtake rights). The DNs would then share the benefits of their actions with customers.

Form

4.56. Given the scope of the DN incentives outlined above, Ofgem's view is that the form of the incentive should be similar to that originally described in the Offtake Arrangements RIA. In principle, an incentive scheme such as this would therefore require the specification of "expected" levels of NTS offtake rights requested by the DNs at each NTS/DN offtake point.

[54] As noted above, a review of DN interruption arrangements is currently planned for 2006, outside of the DN sales timetable. Any changes to DN interruptions arrangements emerging from this review will need to be reflected in the enduring DN incentive schemes.

4.57. Ofgem therefore considers that the structure of the enduring DN incentives should follow a standard "sliding scale" form, with a defined incentive cost target and a cap and collar (similar to that illustrated in Figure 4.1). Under these proposals, the incentive payment / charge made to the DNs through these incentive schemes would be the difference between the "target" and "actual" level of charges for NTS offtake rights, subject to a sharing factor.

4.58. Ofgem's initial view therefore is that the cost performance targets defined for NTS exit capacity and NTS exit flow flexibility should be calculated as follows, for each DN (over the period 2008/9 to 2012/13):

- expected volume of NTS offtake rights; multiplied by
- expected price of these rights (which will vary by offtake point for the DN); plus
- the expected cost of >15 day interruption of DN connectees.

4.59. There are a number of ways in which the volume and price components of this cost performance target may be calculated.

4.60. The volume component of the cost performance target is the element over which DNs will have most control. For example, the DNs will reduce the volume of NTS offtake rights purchased if they consider that they can satisfy their 1 in 20 obligation more efficiently through demand management, or through undertaking substitutable investment. As such, Ofgem considers it to be important that the "expected volume" of NTS offtake requested by DNs is calculated prior to setting of the target and included in *absolute terms* in the cost performance target.

4.61. A complicating issue, however, relates to the way in which growth of demand on the DN is accommodated in the enduring DN incentive schemes. There are two ways in which this could be approached. Firstly, an expectation of demand growth on the DN could be formed *ex ante*, and the anticipated consequential impact on the volume of NTS exit capacity (and/or NTS exit flow flexibility) required for each DN included in absolute terms in the cost performance target. Under this approach therefore, target volumes would increase in line with the expected growth of each DN's NTS exit capacity (and/or NTS exit flow

flexibility) requirements. This would have the advantage of delivering a relatively simple target, yet would have the disadvantage of placing the risk that actual demand growth varies significantly from these forecasts on the DNs. An alternative approach would be to include a variable growth term in the cost performance target, hence the target would only be set *ex post* once actual demand growth was known. This approach would remove uncertainty relating to within-DN demand growth from the DNs, yet would complicate the definition of the target significantly.

4.62. Ofgem welcomes views of respondents on the most appropriate way of including demand growth in the incentive schemes defined for the DNs.

4.63. The expected price term of the cost performance target (i.e. the anticipated price at which DNs will secure NTS offtake rights) could also be defined in a number of ways. One approach would be to forecast the price of NTS offtake rights in advance of setting the target, and include these forecasts, in absolute terms, in the target. This would produce a relatively simple cost performance target, yet in order for DNs to mitigate the risk that prices could vary from forecast levels, would require DNs to purchase NTS offtake rights in the long term. An alternative approach would be to include a variable price term in the cost performance target. This would mean that the monetary value of the target would only be set *ex post*.

4.64. Ofgem considers that DNs should be exposed to the overall value of NTS exit capacity and NTS exit flow flexibility. This is appropriate as, to some extent, additional DN investment and additional NTS exit capacity (and/or NTS exit flow flexibility) are substitutes. For instance, if a DN is required to service additional load at a remote part of its network, it may be able to do so through reinforcement of its own network allowing it to transport gas from less remote NTS offtake points across its DN network to the new load. Alternatively, it may be more appropriate to offtake from a more remote NTS offtake point, and therefore undertake less DN investment but more NTS investment. By exposing DNs to the price of NTS exit capacity and NTS exit flow flexibility, DNs should consider this interaction when making decisions relating to investment on their networks, and when determining their requirements for NTS exit capacity and NTS exit flow flexibility.

4.65. Given that NTS reserve prices for exit capacity will reflect location, it is Ofgem's initial view that exposing DNs to the price and to the volume of NTS exit capacity would encourage efficient decision making across both transmission and distribution networks. Furthermore, Ofgem's initial view is that, in order to encourage DNs to book NTS exit capacity and NTS exit flow flexibility in the long term, it would be preferable for DN cost performance targets to be defined in fixed monetary terms on an *ex ante* basis.

4.66. Ofgem welcomes the views of respondents on the most appropriate form of the volume and price elements of the cost performance target.

4.67. Ofgem's initial view is that caps and collars for DN cost performance measures should be defined, and that these should be calculated as a fixed percentage of each DN's cost performance target. This will mean that the absolute level of DN caps and collars are likely to vary significantly across each network (for example being lower in Scotland than in the South West). Ofgem considers that this approach would better reflect the locational nature of both exit charges and forecast demand and would ensure that incentive schemes are accurately targeted across the network. Ofgem's initial view is that these caps and collars should be symmetric around defined targets.

4.68. It is important to note that the intent is that DNs will be revenue neutral to outturns in the cost performance measure above the cap and below the collar. It is therefore envisaged that these outturns in the cost performance measure are passed through to DN shippers and customers through an appropriate mechanism.

4.69. As the incentive is designed to enable the DNs to trade-off efficiently the cost of requests for NTS exit capacity and NTS exit flow flexibility with directly substitutable investment and the use of buy-backs, a key issue relates to the way in which this investment is treated in the DN price control review. It is envisaged that the incentive schemes will reward the DNs if they opt to reduce the level of NTS exit capacity and NTS exit flow flexibility they request in the long term allocation. The resulting incentive revenue will then allow the DNs to undertake substitutable investment in the DN.

4.70. The key issue therefore concerns the way in which incentive revenue for NTS offtake related investment[55] by DNs interacts with more general funding for investment determined through the DN price control. Ofgem considers there to be two main ways in which this interaction could be addressed in the incentive schemes:

- inclusion of investment in incentive parameters; or
- exclusion of investment from incentive parameters.

4.71. Following the "inclusion" approach, NTS offtake related investments by DNs could be identified on a periodic basis (e.g. annually), with the efficient cost of these investments being explicitly included as a term in the incentive target. These costs would then be offset against incentive revenues earned from (reduced) requests for NTS offtake rights. Those NTS offtake related investments by DNs could then be treated in a different manner to other investments in the DN price control (although all investments would ultimately enter the DN RAV).

4.72. This approach would have the advantage of enabling caps and collars to be set at a level consistent with *net* incentive revenues. Furthermore, it would have the advantage of allowing the DN to trade off the full cost of NTS exit capacity and NTS exit flow flexibility with the full cost of investment on its own network. However, the significant disadvantage of this approach is that it would involve the (ongoing) specific identification, or "tagging", of two types of interaction with the DN price control. These are:

- investment on the DN that was not allowed for in the price control and that was undertaken instead of purchasing NTS exit capacity and/or NTS exit flow flexibility; and
- investment that was allowed for in the price control that was subsequently not undertaken and, instead, additional NTS exit capacity and/or NTS exit flow flexibility was purchased.

[55] For the purposes of this document, NTS offtake related investment are defined as being those DN investments that are wholly substitutable for NTS exit capacity rights or NTS exit flow flexibility rights.

4.73. An alternative approach would be not to include the cost of NTS offtake related investments in the DN incentive schemes. Instead, the incentive could be designed in such a way that would give DNs sufficient *gross* incentive revenue to give DNs an incentive to invest or not to invest in NTS offtake related investments. Consideration of incentive revenues received by DNs for NTS offtake related investments would then have to be left until the time of the next price control.

4.74. The significant advantage of this approach is that it be considerably simpler to administer, as there would be no need to identify investments on an ongoing basis. Instead, those investments made, or not made, in response to the incentive scheme would need to be identified at the time of the DN price control, and considered appropriately at that time. The significant disadvantage of this approach however, is that it could significantly complicate the price control process (requiring the *ex post* "tagging" of NTS offtake related investments as described above).

4.75. An associated issue is the selection of sharing factor for the DN incentive schemes – i.e. the extent to which the difference between the "target" and "actual" level of charges for NTS offtake rights should be borne by DNs. At one extreme, this sharing factor could be set at 100%, in which case DNs would have a perfect incentive to trade-off efficiently the cost of NTS exit capacity and NTS exit flow flexibility for NTS offtake related investment and cost of demand management (assuming that the cap and/or collar of each DN's incentive is not breached).

4.76. An alternative approach would be to select a sharing factor that is less than 100%. Some DNs (i.e. those that are relatively more risk averse) may favour this approach, on the basis that they would face less exposure to the cost of NTS offtake rights that differ from target levels. A sharing factor lower than 100% may also represent a more pragmatic approach in the event that issues relating to the tagging of NTS offtake related investment described above prove excessively complex. This approach, however, would be likely to distort the trade-off decision faced by DNs, given that the cost of NTS offtake related investment, NTS offtake rights and demand management would no longer be equally weighted.

4.77. Finally, Ofgem's initial view is that DN incentives include an element of incentive revenue considered sufficient for the DNs to pay for the cost of demand management. Ofgem considers that the level of this payment should be calculated on the basis of the current DN allowance for the cost interrupting DN connectees greater than 15 days.

4.78. For the purposes of illustration, Table 4.2 presents indicative DN incentive targets for NTS exit capacity that have been calculated following the methodology outlined above. It is important to note that these targets do not constitute proposed targets, but are instead provided to give an indication of the level and range of targets across DNs that may result were this methodology to be adopted in the calculation of enduring NTS exit capacity incentive targets for DNs.

4.79. In calculating these illustrative targets, we have assumed the expected cost of NTS exit capacity rights is the same across the entire duration of the incentive scheme (i.e. NTS exit capacity price levels are assumed to be constant, at forecast 2005/6 levels). We have also assumed that annual growth rates in the volume of NTS exit capacity rights requested by DNs are consistent with those presented in Transco's ten year statement.

Table 4.2 Illustrative enduring DN incentive targets for NTS exit capacity (£m) 2008/9-2012/13[56]

Component	2008/9	2009/10	2010/11	2011/12	2012/13
Cost performance target (Scotland)	0.5	0.5	0.5	0.5	0.5
Cost performance target (North of England)	1.0	1.0	1.0	1.0	1.0
Cost performance target (North West)	16.8	17.1	17.3	17.6	17.8
Cost performance target (East of England)	23.6	23.9	24.4	24.7	25.1
Cost performance target (London)	28.2	28.6	29.0	29.4	29.8
Cost performance target (West Midlands)	13.2	13.3	13.5	13.7	13.9
Cost performance target (Wales and the West)	37.1	37.6	38.2	38.7	39.2
Cost performance target (South of England)	53.2	54.0	54.7	55.5	56.3

4.80. Table 4.3 outlines the set of incentive parameters that would need to be specified for the enduring DN incentive schemes, consistent with the initial thoughts described above.

Table 4.3 Proposed enduring DN annual incentive parameters (2008/9 to 2012/13)

Cap and collar (% of individual DN target)		Sharing factors	
Cap	**Collar**	**Upside**	**Downside**
To be defined	To be defined	100%	100%

[56] Illustrative targets presented in this table equal forecast demand on each DN (GWhs), multiplied by indicative firm exit capacity prices for 2005/6, plus an assumed cost of > 15 day interruption.

Duration

4.81. Ofgem considers there may be considerable uncertainty surrounding the appropriate target cost levels in any incentive scheme on DNs. Ofgem also notes that other network owner incentive schemes have exhibited levels of uncertainty as to the appropriate target level of costs for the scheme, particularly in the early years of such schemes. For example, in setting Transco's NTS System Operator incentives for April 2002, Ofgem stated that there was a degree of uncertainty with respect to the likely level of costs that an efficient operator would incur. Ofgem therefore set a number of the parameters (e.g. target costs, caps and collars) of these schemes for two years on the expectation that experience with the incentives would allow a more accurate determination in the future[57].

4.82. Generally however, Ofgem considers that longer duration incentive schemes provide a clearer incentive framework under which to operate (and therefore enhance the potential benefits to customers). As such, Ofgem's initial view is that the enduring DN incentive scheme should have duration of 5 years (from 1 October 2008), but with the opportunity to be reopened after one year. This would give Ofgem, network owners and interested third parties the opportunity to reconsider the target levels of costs of the schemes at a relatively early stage and in light of further information arising from the first year of operation of the scheme.

4.83. Furthermore, it may be appropriate to review the incentive schemes applying to the DNs in light of the reform of the interruption arrangements, planned for implementation in April 2006.

Views invited

4.84. Views are invited on all aspects of the DN enduring incentive schemes outlined in this section, and in particular regarding Ofgem's initial thoughts on:

[57] *Transco's National Transmission System, Review of System Operator incentives 2002-7, Proposals Document*, Ofgem, February 2004.

- the most appropriate way of ensuring consistency between the enduring DN incentive schemes and the DN price control review;
- whether DN cost performance targets should be expressed in fixed monetary values, or whether the exit price and volume elements should be permitted to vary in line with actual exit prices, and demand growth respectively;
- whether it is appropriate to express DN caps and collars in terms of a percentage of the cost performance target; and
- the proposed duration of the enduring DN incentive schemes.

5. Way forward

5.1. This section provides a summary of views invited to this document and outlines the next steps.

Summary of views invited

5.2. As noted in Chapter 1, Ofgem welcomes views on all aspects of this consultation. In particular, Ofgem invites views on:

- the proposed form, scope and duration of the NTS and DN enduring incentive schemes;
- the appropriate methodology to be used in defining baselines for both NTS exit capacity, and NTS exit flow flexibility;
- whether baselines should be defined as a constant, or whether these should increase over time;
- the indicative baseline numbers provided by Transco (see Appendix 1);
- the proposed treatment of substitution and investment as part of the enduring incentive schemes;
- the proposed approach to the setting of UCAs for NTS offtake points;
- the way in which maintenance costs should be handled in NTS enduring incentive schemes;
- the most appropriate way of ensuring consistency between the enduring DN incentive schemes and the DN price control review;
- whether DN cost performance targets should be expressed in fixed monetary values, or whether the exit price and volume elements should be permitted to vary in line with actual exit prices, and demand growth respectively; and
- whether it is appropriate to express DN caps and collars in terms of a percentage of the cost performance target.

Next steps

5.3. This document sets out Ofgem's initial thoughts on a wide range of issues relating to the development of enduring incentive schemes for the NTS and the DNs.

5.4. Following consideration of respondents' views to this document (and consistent with the Authority's recent decision to give its conditional consent) Ofgem intends to publish Initial Proposals for these enduring incentive schemes (including both proposed incentive parameters, and initial drafting of the licence changes necessary to implement the proposed incentive schemes) in Spring 2005 (subject to respondents' views to this consultation).

5.5. Following consideration of respondents' views to this Initial Proposals consultation, Ofgem envisages publishing Final Proposals on enduring incentive schemes in July 2005. This document will include a final consultation on proposed licence amendments necessary to implement these proposals, allowing the enduring incentive schemes to be finalised by 1 September 2005.

Appendix 1 : Indicative baseline data

Summary of Exit Capacity in GWh/d					Comments
Offtake node	Firm	Firm + interruptible	Practical Max Phys	Theoretical Max Phys	
Bacton	3.28	3.60	3.55	4.76	
Brisley	2.79	3.06	3.02	4.04	
Great Wilbraham	31.97	35.06	34.55	46.31	
Matching Green	88.05	96.58	95.16	127.57	
Peterborough Tee	23.20	25.45	25.07	33.61	
Roudham Heath	11.45	12.56	12.37	16.59	
Royston	2.19	2.40	2.37	3.17	
West Winch	10.27	11.26	11.10	14.88	
Whitwell	143.73	157.64	155.33	208.24	
Yelverton	65.19	71.50	70.45	94.45	
Alrewas	77.98	93.79	82.15	101.46	
Blaby	14.62	17.58	15.40	19.02	
Blyborough	73.48	88.37	77.41	95.60	
Caldecott	10.37	12.47	10.92	13.49	
Drointon	117.36	141.14	123.63	152.69	
Gosberton	15.91	19.14	16.76	20.71	
Kirkstead	1.11	1.34	1.17	1.45	
Market Harborough	8.75	10.53	9.22	11.39	
Silk Willoughby	3.25	3.91	3.43	4.23	
Sutton Bridge	1.06	1.27	1.12	1.38	
Thornton Curtis	87.91	105.72	92.60	114.37	
Tur Langton	75.80	91.16	79.85	98.62	
Walesby	0.87	1.04	0.91	1.13	
Horndon	46.34	50.66	46.34	64.62	
Luxborough Lane	163.25	178.47	163.25	227.68	
Peters Green	179.58	196.33	179.58	250.45	
Peters Green South Mimms	122.54	133.97	122.54	170.90	
Winkfield	13.64	14.91	13.64	13.64	
Bishop Auckland	64.83	73.64	65.84	99.15	
Coldstream	2.10	2.39	2.13	3.21	
Corbridge	0.06	0.07	0.06	0.09	
Cowpen Bewley	52.81	59.99	53.64	80.78	
Elton	39.45	44.81	40.07	60.34	
Guyzance	2.05	2.33	2.08	3.14	
Humbleton	0.24	0.27	0.24	0.37	
Keld	2.06	2.34	2.09	3.14	
Little Burdon	18.06	20.52	18.34	27.62	
Melkinthorpe	0.34	0.39	0.35	0.52	
Saltwick Pressure Controlled	8.84	10.04	8.97	13.51	
Saltwick Volumetrically Controlled	64.83	73.64	65.84	99.15	
Thrintoft	5.69	6.46	5.78	8.70	
Towlaw	0.56	0.64	0.57	0.86	
Wetheral	25.01	28.41	25.41	38.26	
Audley	7.60	8.65	7.77	9.88	
Blackrod	202.23	229.99	206.69	262.82	
Eccleston	24.07	27.38	24.61	31.29	
Holmes Chapel	19.41	22.08	19.84	25.23	
Lupton	15.07	17.14	15.41	19.59	
Malpas	0.44	0.50	0.45	0.58	

Summary of Exit Capacity in GWh/d					Comments
Offtake node	**Firm**	**Firm + interruptible**	**Practical Max Phys**	**Theoretical Max Phys**	
Mickle Trafford	28.58	32.50	29.21	37.14	
Partington	18.77	21.35	19.18	24.39	
Samlesbury	132.84	151.07	135.77	172.64	
Warburton	115.18	130.99	117.72	149.69	
Weston Point	4.04	4.59	4.13	5.25	
Aberdeen	21.29	24.77	23.50	31.08	
Armadale	2.22	2.58	2.45	3.24	
Balgray	11.51	13.39	12.71	16.80	
Bathgate	22.50	26.17	24.83	32.84	
Broxburn	57.40	66.78	63.35	83.79	
Careston	3.08	3.58	3.40	4.49	
Drum	71.46	83.14	78.87	104.31	
Glenmavis	143.37	166.80	158.23	209.27	
Hume	0.78	0.91	0.87	1.15	
Kinknockie	2.38	2.76	2.62	3.47	
Langholm	0.14	0.17	0.16	0.21	
Lockerbie	5.43	6.31	5.99	7.92	
Mosside	14.14	16.45	15.61	20.64	
Nether Howcleugh	0.18	0.21	0.20	0.27	
Pitcairngreen	1.62	1.88	1.79	2.36	
Soutra	8.24	9.59	9.10	12.03	
St. Fergus	0.89	1.03	0.98	1.29	
Stranraer	0.49	0.57	0.54	0.71	
Farningham	139.08	155.02	140.37	193.56	
Shorne	72.41	80.71	73.08	100.78	
Tatsfield	210.51	234.63	212.46	292.97	
Winkfield	110.30	122.94	110.30	110.30	
Braishfield A	90.59	99.35	90.59	90.59	
Braishfield B	47.93	52.57	47.93	47.93	
Hardwick	119.55	131.11	124.87	172.73	
Ipsden 1	12.32	13.51	12.32	12.32	
Ipsden 2	15.15	16.61	15.15	15.15	
Mappowder	47.56	52.16	47.56	47.56	
Winkfield	80.72	88.52	80.72	80.72	
Wych Farm	0.00	0.00	0.00	0.00	
Aylesbeare	23.23	25.87	23.23	23.23	
Cirencester	9.33	10.39	9.33	9.33	
Easton Grey	31.87	35.50	31.87	31.87	
Evesham	6.71	7.48	7.16	10.53	
Fiddington	27.31	30.41	29.13	42.82	
Ilchester	33.18	36.96	33.18	33.18	
Kenn	72.34	80.56	72.34	72.34	
Littleton Drew	2.90	3.23	2.90	2.90	
Pucklechurch	28.08	31.27	28.08	28.08	
Ross on Wye	4.37	4.86	4.66	6.85	

Summary of Exit Capacity in GWh/d					Comments
Offtake node	Firm	Firm + interruptible	Practical Max Phys	Theoretical Max Phys	
Seabank	59.82	66.62	59.82	59.82	
Alrewas	147.54	159.04	158.33	207.31	
Aspley	37.12	40.01	39.84	52.16	
Audley	19.77	21.31	21.22	27.78	
Austrey	71.19	76.74	76.40	100.03	
Leamington Spa	3.86	4.17	4.15	5.43	
Lower Quinton	27.77	29.93	29.80	39.02	
Milwich	22.00	23.72	23.61	30.92	
Ross on Wye	14.97	16.14	16.07	21.04	
Rugby	85.66	92.33	91.92	120.35	
Shustoke	40.74	43.91	43.72	57.24	
Stratford-upon-Avon	4.24	4.57	4.55	5.95	
Maelor	56.58	65.58	58.82	300.67	
Dowlais	99.75	114.88	99.75	199.45	
Dyffryn Clydach	45.07	51.90	45.07	90.10	
Gilwern	66.22	76.26	66.22	132.39	
Asselby	2.98	3.42	3.06	4.97	
Baldersby	1.20	1.37	1.23	1.99	
Burley Bank	18.20	20.87	18.67	30.31	
Ganstead	20.62	23.65	21.16	34.35	
Pannal	143.16	164.19	146.87	238.45	
Paull	34.23	39.26	35.12	57.02	
Pickering	8.20	9.40	8.41	13.66	
Rawcliffe	3.05	3.50	3.13	5.08	
Towton	61.18	70.16	62.76	101.90	
British Sugar Cantley	4.20	4.20	4.80	6.09	Planned offtake, but no ARCA agreed
Enfield Energy Centre	19.70	19.70	19.70	28.54	
Great Yarmouth	20.40	20.40	20.40	29.56	
Interconnector (Europe)	172.50	623.58	172.50	340.10	
Kings Lynn	18.40	18.40	18.40	26.66	
Little Barford	35.90	35.90	35.90	52.01	
Peterborough	0.00	25.00	0.00	0.00	
Ryehouse	39.50	39.50	39.50	57.23	
Brigg	0.00	18.20	0.00	0.00	
Corby	21.50	21.50	21.50	27.97	
Cottam	0.00	20.40	0.00	0.00	
Hatfield Moor Max Refill	0.00	30.00	0.00	0.00	
Keadby	36.90	36.90	36.90	48.01	
Keadby B/S	0.00	2.60	0.00	0.00	
Killingholme A NP PH1	37.10	37.10	37.10	48.27	
Killingholme B PG	0.00	48.30	0.00	0.00	
Spalding	37.60	37.60	42.40	48.92	
Stallingborough ph1 & ph2	68.00	68.00	68.00	88.47	
Staythorpe PH1 & 2	39.20	39.20	40.40	51.00	
Staythorpe PH2	39.20	39.20	39.50	51.00	
Sutton Bridge	38.30	39.27	38.30	49.83	
Barking	0.00	63.00	0.00	0.00	
Coryton	33.70	33.70	36.60	47.00	

Summary of Exit Capacity in GWh/d					Comments
Offtake node	Firm	Firm + interruptible	Practical Max Phys	Theoretical Max Phys	
Purfleet	10.80	10.80	10.80	15.06	Planned offtake, but no ARCA agreed
BASF Teesside	9.90	9.90	9.90	15.14	
Humber Refinery & Humber Refinery 2	42.30	42.30	42.30	64.69	
ICI Billingham	44.40	44.40	44.40	67.91	
Phillips	7.20	7.20	7.20	11.01	
Teesside Enron	0.00	130.50	0.00	0.00	
Teesside Hydrogen	6.70	6.70	6.70	10.25	
Zeneca	0.10	0.10	0.10	0.15	
AES Partington	16.10	16.10	16.10	20.92	Planned offtake, but no ARCA agreed
AM Paper	1.10	1.10	1.10	1.43	
Bridgewater Paper	5.30	5.30	5.30	6.89	
British Salt - Powergen	1.90	1.90	1.90	2.47	Planned offtake, but no ARCA agreed
Connah s Quay	0.00	78.60	0.00	0.00	
Deeside	22.40	39.37	22.40	29.11	
Fleetwood	19.20	19.20	19.20	24.95	Planned offtake, but no ARCA agreed
Hays Chemicals	0.00	3.50	0.00	0.00	
Hole House Max Refill	0.00	120.00	0.00	0.00	
ICI Runcorn	4.60	12.23	4.60	5.98	
Kemira CHP	4.50	4.50	4.50	5.85	Planned offtake, but no ARCA agreed
Partington Max Refill	0.00	2.40	0.00	0.00	
Rocksavage	37.00	39.15	37.00	48.09	
Roosecote	0.00	15.80	0.00	0.00	
Sappi Paper Mill	4.60	4.60	4.60	5.98	
Sellafield	0.00	13.20	0.00	0.00	
Shellstar	11.90	14.37	11.90	15.47	
Shotton	11.80	11.80	11.80	15.34	
Winnington	15.70	15.70	15.70	20.40	
BP Grangemouth	14.20	28.60	14.20	20.73	
Glenmavis Max Refill	0.00	1.60	0.00	0.00	
Ireland (North & South)	290.90	350.01	290.90	363.31	
Longannet	44.20	44.20	44.20	64.52	
Peterhead (DS)	110.60	110.60	110.60	161.45	
Damhead Creek	41.80	41.80	41.80	58.17	
Isle of Grain Max Refill	0.00	0.00	0.00	0.00	
Medway	0.00	40.90	0.00	0.00	
Barton Stacey Max Refill	0.00	78.00	0.00	0.00	
Didcot A	0.00	78.70	0.00	0.00	
Didcot B	65.80	65.80	65.80	65.80	
Avonmouth CHP	6.00	6.00	6.00	6.00	Planned offtake, but no ARCA agreed
Avonmouth Max Refill	0.00	2.30	0.00	0.00	
ICI Severnside	0.60	14.67	0.60	0.60	
Langage ph1	17.70	17.70	17.70	17.70	
Langage ph2	17.70	17.70	17.70	17.70	
Seabank PH2	18.10	18.10	18.10	18.10	
Seabank Int.	28.40	67.72	28.40	28.40	
Baglan Bay	27.40	27.40	27.40	54.78	
Dynevor Max Refill	0.00	2.60	0.00	0.00	
BP Saltend HP	9.30	9.30	9.30	15.49	
British Sugar York	4.20	4.20	4.80	7.00	Planned offtake, but no ARCA agreed
Garton Max Refill	0.00	211.00	0.00	0.00	
Goole Glass	1.60	1.60	1.60	2.66	
Hornsea Max Refill	0.00	22.00	0.00	0.00	
Rough Max Refill	0.00	160.00	1284.20	0.00	
Saltend	53.90	53.90	57.80	89.77	

Appendix 2 Objectives

2.1 This appendix sets out Ofgem's statutory duties with respect to developing enduring offtake, interruption and flexibility arrangements and the enduring incentive schemes required to support the offtake arrangements required in the context of a multi gas transporter environment.

2.2 Ofgem considers that both its principal objective and the general duties as set out in the Gas Act 1986 (the Act), as well as its general public administrative law duties, have direct relevance to the development of incentive schemes in a divested industry structure, as well as to the development of the form and content of the underlying offtake, interruptions and flexibility arrangements.

2.3 In addition to meeting Ofgem's (and the Authority's) statutory duties, and in order to protect the interests of customers, the post-sale industry structure must also establish a relationship between the NTS, the RDNs and the IDNs that permits each network owner to fulfil its own statutory and licence obligations.

2.4 These include, without limitation:

- the duty of each GT to develop and maintain an efficient and economical pipeline system (Section 9(1)(a) of the Act);
- the duty of each GT to facilitate competition in the supply of gas (Section 9(1)(A) of the Act); and
- the duty of each GT to avoid any undue preference or undue discrimination in the terms on which it undertakes to convey gas (Section 9(2)(b) of the Act).

2.5 Further, and as set out in Standard Condition 4D of the GT licence[58], each GT has an obligation to ensure that it conducts its transportation business in a manner best calculated to secure that neither it nor its affiliates or related undertakings, nor any gas shipper or supplier obtains any unfair commercial

[58] This is amended standard condition 4D in Transco's GT licences.

advantage, including any advantage from a preferential or discriminatory arrangement.

2.6 A further licence condition relevant to this consultation document is the requirement for the GT to charge on a cost reflective basis. This is outlined in paragraph (5) (a) of standard licence condition 4A of the GT licence[59], which states that the GT must use a charging methodology that reflects the costs incurred by the licensee in its transportation business. In addition, the post-sale (divested) industry structure must be consistent with European law.

2.7 Finally, Special Condition 27 of Transco's GT licence places an obligation on Transco to operate the NTS in an efficient, economic and coordinated manner. Without limitation, Ofgem considers this licence condition to be of direct relevance to the development of the incentive schemes. In particular, other than in exceptional circumstances, Ofgem would normally expect this obligation to be satisfied where Transco is responding to the commercial incentives in its incentive schemes.

[59] This is amended standard condition 4D in Transco's GT licences.