

# Offtake Arrangements Regulatory Impact Assessment

Response by NGT, 9<sup>th</sup> July 2004

## Appendix 3

### Business separation

#### 1. Introduction

NGT recognises that, following network sales, Ofgem has to ensure that the new offtake arrangements deliver terms that are not unduly discriminatory to each DN.

In the consultation paper, Ofgem outlines its concerns that potentially NTS could, behave in a way that conferred an unfair commercial advantage on one or more RDN business, without objective reason, without making the same benefit available to each DN. Ofgem believes that the potential for this to occur arises in the following areas :

<b>Operational decisions</b> <ul style="list-style-type: none"><li>• allocating offtake rights, including Permitted Maximum Daily Quantity and pressure commitments</li><li>• contracting for flow rate flexibility and diurnal storage</li><li>• operational management of flow rate flexibility and diurnal storage</li><li>• contracting for and calling interruption</li><li>• scheduling of maintenance</li></ul>
<b>Sharing commercial information</b> <ul style="list-style-type: none"><li>• sharing of commercially sensitive information by the NTS with RDNs</li></ul>
<b>Cost allocations</b> <ul style="list-style-type: none"><li>• allocation of RDN costs to the NTS</li></ul>

In the RIA, Ofgem is examining what degree of business separation would be required to control the risk of the NTS unduly discriminating between RDNs and IDNs. In doing so, Ofgem is exploring the following 2 alternative options for business separation:

- Structural separation (Option 2), which includes operational, information and physical separation; and
- Structural and legal separation (Option 3).

#### 2. Summary

Full structural and legal separation are not “fit for purpose” measures to protect against the potential for any undue discrimination by NTS in favour of RDNs. NGT stresses that it is only “potential” and that it will continue at all times to have regard to the licence conditions which prohibit such conduct. Neither of these will achieve either the removal of any perceived potential or the addition of any additional protection to iDNs and ultimately consumers. The proposals made by NGT herein for partial structural separation between NTS and RDNs and other targeted measures will be entirely effective - while also being proportional to the true potential for undue discrimination. NGT’s proposals will also avoid inefficiencies in NGT’s business, the “ongoing” components of which would ultimately be passed on to consumers without any corresponding benefit.

Fundamentally, for undue discrimination to occur, NGT would have to be intent on acting contrary to the proposed licence conditions that will prohibit such action. NGT has every intention of acting in a manner that maintains compliance with the non-discrimination licence conditions. NGT does agree however, that some structural separation will be appropriate and is fully committed to delivering this.

NGT has assessed the risks of undue discrimination and concludes that the real scope for undue discrimination by NTS is very narrow and will be fully removed by :

- Prohibition in the licence held by NTS;
- Transparency in all areas in which any potential for undue discrimination by NTS could be considered to exist;
- Reporting requirements applicable to NTS;
- Accountability of NTS through internal and external audit, complaints from DNs, industry forums and ultimately complaint to Ofgem;
- All credible scenarios that have been proposed for reform of arrangements for NTS exit capacity, diurnal storage, operational flows and interruption;
- Structural separation where there is any risk of NTS information being shared inadvertently with RDNs outside of industry protocols (for example, we would not collocate NTS planning and RDN planning or the NTS control room and RDN staff together in the same office. Also, access by RDNs to commercially sensitive information held by NTS, via IS systems will not be possible;
- NGT contemplates interface staff and business services staff being subject to Code of Conduct guidelines;
- The role performed by the Compliance Officer;
- Licence conditions requiring the correct allocation of and reporting to Ofgem on the allocation of costs between NTS and RDNs.

These measures will act as adequate and effective safeguards against any potential for undue discrimination by NTS and therefore further structural and/or legal separation is not necessary or efficient, given the associated costs to NGT and consumers of implementing and operating under full structural and / or legal separation – neither of which will add any further protection to the measures that are outlined above.

NGT therefore believes that the decision on business separation between NTS and RDNs should accept the targeted measures proposed (consistent with, for example, BETTA) which will avoid the creation of extra inefficient costs, are proportionate to the issues in question and will provide adequate protection to consumers by removing any potential for undue discrimination.

In the remainder of this Appendix, NGT examines the true scope for undue discrimination by NTS and sets out its proposals on the various dimensions of separation identified in the RIA consultation document.

### **3. The scope of potential for undue discrimination**

Schedule 1 sets out the areas where there could be potential for the NTS to exercise undue discrimination and discusses the commercial and/or rule-based safeguards. An NTS licence condition requiring it to avoid undue discrimination as between DNs will reinforce these safeguards. Moving beyond these actions to full legal/structural separation would add significant costs to the industry with little or no benefit.

### **4. Operational separation**

There is already a substantial degree of organisational and operational separation in place today between Transmission and Distribution, which has existed since the merger between National Grid Group and Lattice in 2002. In particular:

- They each have a separate CEO and separate Directors who are responsible for all core business activities;
- Each entity is planned and operated as a separate entity; and
- All staff, with the exception of support functions (discussed below) are operationally and organisationally aligned to one of the two businesses;

There are two areas where NTS and the DNs have a degree of organisational or operational overlap:

- There are a number of non-core functions or “support” services that are shared across Transmission and Distribution; and
- NTS and RDNs provide services to each other in a number of areas.

Below we present an overview of the two areas of overlap between NTS and RDNs and the proposed measures to remove the potential for undue discrimination.

#### **4.1. Support functions**

As is the case for many utilities in the UK and elsewhere, NGT has over the years re-organised and re-structured its support functions in order to extract economies of scale and improve its efficiency and performance. As a result, most of NGT’s support services are currently shared across Transmission and Distribution, as this provides the most efficient platform for delivery under the current NGT structure.

These support services, which are set out in Schedule 2, are ‘indirect’ support. Support services staff rarely but in some cases have access to commercially sensitive information about NGT generally (legal and finance primarily), however, they rarely have access to or the ability to make use of any of the kind of information about NTS that would be beneficial to RDNs (or that is germane to offtake arrangements).

NGT also expects to apply a Code of Conduct to support services staff requiring that NTS and RDN information is used only for the purpose of providing the service and is not communicated to any other part of the company. In practice many of these functions are professional or quasi professional in nature where part of the job requires a high degree of observance of confidentiality (particularly lawyers, accountants, human resources professionals and communications experts) and so there is additional assurance in that a high degree of professional integrity on confidentiality can be expected.

Additionally, all support services staff would continue to be governed by existing Licence conditions, which will forbid conduct such as the sharing of NTS commercial information with RDNs and cost allocations other than in accordance with the licence.

On this basis NGT considers that it should be allowed to maintain its support functions as a shared infrastructure that serves both Transmission and Distribution. This is consistent with the way that other UK utilities are currently allowed to organise their business.

#### **4.2. Services provided between NTS and RDN businesses**

There are a limited number of areas where NTS and RDNs do and to a lesser extent will continue to provide services to each other. The table below summarises these activities, and defines how these will be treated following network sales.

The table below illustrates that:

- Many of the services provided between NTS and DNs are non-sensitive and should not raise any concerns for undue discrimination: they are mostly the result of NGT aiming to perform work on the most efficient basis;
- Existing Licence conditions and the proposed regulatory and commercial framework (UNC, Offtake Code, etc.) will in most cases provide a robust framework for removing potential risks of undue discrimination; and
- For all other cases NGT is proposing to adopt additional measures to guard against the potential for undue discrimination including the application of transparent arrangements (e.g. SOMSA), the transfer of staff, offer of service provision to all DNs on an equitable basis, and implementation of the Code of Conduct where appropriate.

Directorate	Description of Activity for/from DNs	Measures ensuring no undue discrimination
<b>Commercial</b>	UKT assists DNs in generating demand forecasts	None: data not sensitive: summarised in Ten Year Statement
<b>Engineering Services</b>	DNs conduct UKT pipeline maintenance DNs maintain full offtakes at UKT direct connects UKT provides Pipeline Maintenance Centre services to DNs DNs provide first line emergency service for UKT public reported escapes DNs provide third-party enquiry (site plans) service to UKT	Transfer function (and staff) to UKT None in long term: benefit is economies of scale. In short term, service continues from iDNs under contract None in long term: benefit is economies of scale. In medium term, service provision to iDNs continues under contract Licence conditions will ensure continuation of uniform national model None: benefit is economies of scale. Will continue for RDNs only.
<b>Network Strategy</b>	UKT project-manages certain DN transmission pipeline construction projects UKT provides physical capacity to DNs at NTS/DN offtakes	None: project management skills available in the open market. UKT will consider request to continue service provision to iDNs for projects already underway. Offtake arrangements (see RIA)
<b>Operations and Trading</b>	UKT performs remote daily operation of DNs from Area Control Centres UKT purchases shrinkage gas for DNs UKT and UKD liaise at the NTS/DN boundary UKT performs role of NEC UKT conducts Energy Balancing UKT allocates consumption to Very Large Daily Metered Connections UKT supports certain processes for Scottish Independent Undertakings	SOMSA for iDNs; RDNs treated similarly, each DN sets own operating philosophy None: benefit is economies of scale. Will continue for RDNs only. Offtake arrangements (see RIA) None: required for safety. NEC safety case likely to perpetuate current arrangements Enshrine in Uniform Network Code as UKT role Enshrine in Uniform Network Code as UKT role Transfer LNG capacity booking function to Scotland DN; others functions largely execution-only and provided under Scotland SOMSA
<b>Finance</b>	UKT handles recharges relating to services to/from DNs UKD Finance handles general ledger & statutory accounts for Transco plc UKD Finance handles income accounting for Transco plc UKD Finance handles preparation, regulatory filings and audit for Transco plc UKD Finance handles monthly cost allocation of shared services	Mechanistic process in accordance with Licence condition Align with corporate structure Align with corporate structure Align with corporate structure Mechanistic process using Ofgem-audited transaction model and in accordance with Licence condition

The above illustrates that the necessary aspects of operational separation have or will be complied with in a targeted and proportional manner.

## 5. Information separation

Information separation in this context involves ensuring that RDNs cannot access information that could potentially confer an undue competitive advantage on their business relative to an IDN business and that NTS refrains from communicating such information to RDNs.

Below we have outlined the existing degree of information separation between the NTS and the DNs and the separation measures that NGT proposes in order to remove the potential for undue discrimination in this area.

### 4.1. Current access to information systems

Although substantially separate from an operational perspective, as an integrated transmission and distribution company, Transco currently has no requirement for information separation. Some incidental information separation exists where, for example, employees do not have access to certain systems because the information is not required in order to perform their job. Obviously, there has not been to date any deliberate information separation, as there has been no need for this. Recognising that this is a new requirement, arising from network sales, NGT has considered in some detail what the requirement will be and how this will be achieved.

An initial review of the set of systems that are currently shared between NTS and the DNs has been completed. Based on this review, approximately 20 systems have been identified which are used jointly by these entities. This list of systems is attached hereto as

Schedule 3 and contains a description of the systems as well as an assessment of their potential for undue discrimination, based on whether the information on the system is made available equally to RDNs and IDNs, and whether the information could confer an undue competitive advantage on the RDNs.

The attached list illustrates that:

- Access to most of the systems would not confer an undue competitive advantage on the RDNs or NTS;
- Many of the systems do not hold any commercially sensitive information;
- NGT will continue to provide the IDNs access to many of these systems under the proposed Front Office Managed Service Agreement (FOMSA) for a period of 18 months after completion of the sale, at which time IDNs are expected to migrate onto their own systems. The FOMSA exit arrangements will ensure that IDNs have enduring access to all relevant data;
- There are also a number of smaller applications that hold asset data and attributes used for HSE and regulatory compliance and copies of these are used in NTS and DNs. It is proposed that copies of these will be shared with all DNs and NTS.

#### **4.2. Proposed level of incremental information separation**

Our review has also found 4 systems areas where work is envisaged to remove the potential for undue discrimination between RDNs and IDNs:

- SAP/SAP Offline Systems – because NTS and DNs are currently part of one legal entity, current back office systems are shared between NTS and the DNs. It is proposed that NTS back office data will be separated from RDN data in a similar way to that proposed for the IDNs and to separate out NTS data from the offline back-office systems.
- Desktop and Shared Drive Areas – this is currently shared across NGT. It is proposed that NTS and RDN shared storage areas be segregated and appropriate access restrictions implemented.
- HPMIS – a database holding high pressure metering site and quality data. It is proposed that access to commercially sensitive data is restricted to the DN to which it relates
- Intranet – Both NTS and RDNs will have access to NGT's corporate Intranet. Restrictions to commercially sensitive areas will be applied to NTS and RDN users.

#### **4.3. Code of Conduct for employees at the NTS/DN interface**

Recognising that network sales creates a new human interface between NTS and DNs, in addition to addressing access to IS systems (above), NGT also proposes to implement a Code of Conduct, which will restrict the communication of information from NTS to all DNs.

This Code of Conduct would apply to:

- all NTS employees who operate at the NTS/DN interface: this is actually a small group of people in NTS investment planning, finance and gas operations; and to
- all 'support services' staff that are shared between NTS and RDNs,

and would be reinforced with guidance, briefings and a robust compliance regime. The focus of the Code will be on instilling non-discriminatory behaviours in all aspects of employment and emphasising the particular need to operate to agreed protocols on what information can be communicated, to who and at what times.

Transco has in the past demonstrated successful implementation of such Codes of Conduct, for example with the separation of supply from transportation.

## **6. Physical separation**

NGT appreciates that some physical separation will be required between NTS and RDNs within shared offices and where identified, these will not be co-located. Further physical separation is not justified as :

- It is not necessary to do so;
- the costs involved would be significant; and
- it is not justified considering the other measures proposed in this paper.

Below we set out the current degree of physical separation between Transmission and Distribution, and costs involved in implementing physical separation.

### 6.1. Current degree of physical separation

In view of the fairly high degree of separation in organisational design, employees are currently almost invariably grouped in areas that are dedicated to NTS, distribution or support services. However, as there is currently no requirement to do so, there has been no intentional access controlled segregation of employees within NGT buildings other than to provide security to control rooms and associated areas.

The table below provides an overview of the four key offices that are currently shared by NTS and Distribution staff.<sup>1</sup> It indicates the numbers of staff from the DN, NTS and support functions in each and also states what functions they are performing so that the degree of sensitivity can be observed.

Shared Building / Location	Allocation of seats and key functions by building (as at June 2004)					
	Key UKD functions	No of UKD staff	Key UKT functions	No of UKT staff	Key Support functions	No of support staff
<b>HOC, Hinckley</b>	Call Centre & Despatch Network Strategy Distribution Support	667	Operations+Trading Engineering Services	117	Comms, HR, IS SHE, Insurance Property	511
<b>Horgas House, Killingworth</b>	Call Centre & Despatch	391	Area Control Centre	33	Finance, Comms, HR, IS, Legal	295
<b>Glevum House, Gloucester</b>	Call Centre & Despatch	334	Area Control Centre	40	Comms, HR, IS, Legal Procurement and Logistics	21
<b>HGT House, Warwick</b>	Network Strategy Safety & Engineering Finance Construction Commercial Operations	321	Eng Services Operations+Trading Network Strategy Commercial Finance	885	Comms, HR, IS, Legal Regulation Procurement and Logistics SHE, Property	324

A few observations can be made on the above table:

- Transco is currently planning to consolidate its Area Control Centres and relocate them to HOC Hinckley by Q2 2006: at such time NTS will no longer share the Killingworth and Gloucester sites with Distribution. Also, the Distribution staff in both sites are involved in call centre and work dispatch activities which does not raise any concerns on potential for undue discrimination and
- This effectively leaves two buildings that will be shared by NTS and DNs, namely the Hinckley and Warwick sites. In assessing the implications of physical separation, we have therefore focused on these buildings only.

Only a relatively small number of people in the Hinckley and Warwick offices are dealing with the kinds of information about NTS that would be useful to parts of the

<sup>1</sup> We have focused on administrative offices that are shared by NTS and Distribution staff. In doing so we have excluded NTS or Distribution staffs that are working on IT delivery projects. We have also excluded a number of dispersed operational sites where activities are conducted that do not offer scope for undue discrimination (e.g. pipeline maintenance regional offices).

RDN business. These are NTS investment and Gas Operations. These functions would need to be separate from LTS planning and LTS Investment Management (part of Network Strategy).

## **6.2. Impact of physical separation**

As stated above, NGT considers that there should be only the necessary degree of physical separation within shared offices, otherwise space allocation would be unmanageable. Further, the associated costs would not be justified.

Physical separation could take the following forms:

- restricting access to NTS and DN staff in different parts of shared offices (e.g. through separate security access to different parts of the buildings); or
- separate buildings for NTS and DN staff.

Based on an initial analysis, we consider that the costs associated with physical separation of the Hinckley and Warwick offices would be significant under each of the above options, although a significantly higher cost is likely to be incurred under the separate buildings option. A comprehensive property restructuring study would need to be undertaken to develop a full picture of the feasibility, cost and timescales of physical separation.

Any physical separation necessarily implies both upfront and ongoing costs:

- **Additional upfront costs**
  - Building modifications such as partitions, security access, changes to air conditioning, etc. to suit the new offices layout;
  - Work associated with re-configuring desktops, network and telephony configurations and IT networks;
  - Preparation of new office space (mainly applicable to separate buildings option)
  - People relocation costs, and costs associated with losing and re-hiring staff who choose not to relocate (mainly applicable to separate buildings option).
- **Incremental operating costs**
  - Incremental property rental/usage costs: physical separation of properties would require a major review of NGT's property consolidation strategy, which is a complex programme that is aiming to generate approximately significant benefits (through savings on property rental/usage costs). It is likely that physical separation will put some of those savings at risk because it will slow down and/or make impossible the implementation of part of this property consolidation. It is also likely that property rental/usage costs will increase because of sub-optimum utilisation of existing property;
  - Operational inefficiencies: Currently office space is designed in a way that recognises work and communication patterns between support functions and the core business departments. If physical separation is introduced, additional operational inefficiencies are likely to be introduced (especially if separate buildings are required), as important support functions such as finance, HR, legal and regulation risk being physically removed from some of their key customers.

In summary, NGT proposes to separate the key departments identified in 5.1 above. Any further separation is not necessary and therefore would represent unjustified cost.

## **7. Legal separation**

NGT considers that there should be no requirement for legal separation between NTS and RDNs as:

- the costs involved would be significant, and
- there is no incremental benefit to consumers associated with potential for NTS to unduly discriminate against DNs.

We therefore believe that a requirement for legal separation would not be consistent with the statutory duties on gas transporters to develop and operate the transmission and distribution system in the most economic and efficient manner and in enacting the current legislation, Parliament clearly saw no case to require separation of these, unlike electricity transmission and distribution and unlike gas transportation and supply.

### 7.1. Costs of legal separation

NGT estimates that legal separation between NTS and RDNs would trigger significant upfront and ongoing costs. Considering the confidential nature of these considerations, this information will be provided confidentially to Ofgem under separate cover.

The key cost drivers of legal separation are:

- Debt restructuring costs;
- Property related costs;
- Operational inefficiencies associated with regulatory compliance and incremental accounting, contract management and administration costs; and
- Costs associated with changing IT systems.

Legal separation of NTS and RDNs would trigger significant **debt restructuring costs**, both up front costs associated with reorganising NGT's debt book and increased cost of capital. Actual debt restructuring costs will depend on:

- the separation model: the increase in debt costs will be significantly lower if the RDNs remain in Transco, and the NTS are incorporated as a separate company, than if the NTS remains in Transco, and the RDNs are incorporated as separate companies; and
- the degree of ring-fencing between the companies: the increase in debt costs will be lower if unlimited upstream guarantees are allowed and a single ring-fence is applied around the NTS and RDN companies than if upstream guarantees are restricted to existing Transco debt only.

Based on an initial review, we estimate that legal separation could also trigger significant **property related costs**. Actual costs will depend on:

- the separation model: incorporation of 4 RDNs as separate companies would involve 8,000 to 12,000 properties and 50,000 to 75,000 easements, whereas incorporation of the NTS as a separate company is thought to involve only 10-20% of this number.
- the approach to transfer of property: whereas the legal transfer of properties and easements would be a significant undertaking that would take 5-7 years to complete, NGT is currently exploring an alternative approach, which could reduce costs significantly. Under this approach Transco would retain the legal title to all current properties but would to transfer the beneficial interest in all relevant sites to the appropriate legal entity. Contractual arrangements would be made to ensure that the hived down entity assumes all liabilities and benefits (in case of disposal) of those properties. NGT is currently still considering the feasibility of this alternative route. This will, among other things, depend on Ofgem being satisfied that it is consistent with Amended Standard Condition 29 and 47, and Special Condition 5.

Furthermore, separation could also lead to significant **operational inefficiencies** within NGT (especially if all RDNs need to be hived down into separate legal entities). The key considerations here are:

- Regulatory compliance costs: each legal entity would need to have its own Safety Case and Licence. For an entity to be granted a Safety Case, each legal entity will need to demonstrate to the HSE that it has the appropriate capability in terms of governance, people, know how, processes, etc. If all RDNs need to be hived down into separate legal entities, this could cause a significant duplication of costs and put at risk the benefits from NGT's current (Way Ahead) business transformation

programme, which is predicated on being able to centralise functions across all RDNs and reduce costs. Discussions with the HSE would be required to understand their requirements and confirm the cost impact for NGT. In addition to Safety Case related costs, NGT would also incur additional costs in terms of managing separate licences;

- The creation of different legal entities will also require additional resources in company secretariat & governance, accounting & financial management, contract management and general administration.
- To maintain current economies of scale, NGT assumes that all support services staff would remain together and be transferred into a separate entity that would serve the NTS and RDN businesses under a General Services Agreement. For similar reasons, substantially all RDN employees would remain in one legal entity;
- Transco currently has an obligation under GS(M)R to provide the 0800 emergency call number for the whole of Great Britain. This is a requirement that is associated with, and funded through, the Distribution business. A requirement to separate the RDNs into separate legal entities would therefore create significant organisational, legal and regulatory issues. The costs and feasibility of these changes has not yet been assessed.

Furthermore, NGT would also need to incur significant **IT costs** as its information systems would need to be able to cope with additional statutory accounting and management information requirements for different legal entities. These costs are expected to be significant if all RDNs need to be hived down into separate legal entities.

Finally legal separation could also cause some issues from a **pensions** perspective. Transco's pension trustees are expected to require confirmation from Ofgem that future LGPS deficits associated with non-actives would be allocated to the NTS business and funded through the NTS price control, and that NTS/RDN separation is a 'Permitted Reconstruction' under the Letters of Credit Agreement between Trustees and Transco.

## 7.2. Incremental benefits of legal separation

If NGT were to incur the abovementioned costs no incremental benefit would be achieved through legal separation associated with any potential for the NTS to unduly discriminate. The alternative measures proposed in this paper avoid the majority of cost and deliver the appropriate arrangements.

NGTs views on the potential legal separation benefits identified in the RIA are:

- **Robust approach to corporate governance:** we recognise that legal separation would give each business a separate board of directors that would have a legal obligation to act in the interests of that company when making decisions. However, as the NTS and RDNs would still be part of the same group (and answerable to the same shareholders), we struggle to see how legal separation in itself would give additional protection beyond what can be achieved through licence obligations, Codes of Conduct and the other measures proposed in this paper.
- **Level playing field for comparative regulation:** NTS has no comparator and under the separate distribution price controls introduced in April 2004, each RDN will be required to produce separate audited accounts. It is difficult to see therefore that legal separation adds anything more. Moreover, Ofgem already has substantial powers in the current Licence to require a wide range of information from Transco, including financial information. It is therefore unclear how legal separation would provide Ofgem with additional financial information about the cost levels of the DNs beyond what is available today.
- **Reduces the need for complex regulatory rules:** increased regulatory scrutiny is an inevitable consequence of additional DN operators. Legal separation would not remove this or add protection against the potential for undue discrimination.

- **Consistency with models adopted for other energy groups:** NGT considers that mandating full structural and legal separation to deal with concerns over undue preference or discrimination in a monopoly-monopoly arrangement would run counter to Ofgem policy in dealing with issues based on proportionality. It would introduce unnecessary cost and inefficiency, when targeted regulatory solutions such as those adopted for other monopoly-monopoly arrangements (and even existing monopoly-competitive arrangements) would seem sufficient:
  - In **monopoly–monopoly arrangements** such as the NTS/DN relationship, the risk of undue discrimination is actually very limited (even before the measures proposed in this paper are implemented. If undue discrimination were to occur it would become immediately apparent, especially as there is a high degree of transparency in the NTS/DN arrangements. This visibility itself, together with the consequences of any Ofgem enforcement action resulting from discriminatory behaviour, would provide a strong incentive for NTS to treat all DNs equally and ensure a level playing field. This is not dissimilar to the SO/TO arrangements under BETTA<sup>2</sup>, where the scope for the GBSO favouring a retained TO over a Scottish TO are limited, because TOs occupy different geographic areas and their incomes are largely fixed. Under BETTA, Ofgem considered each area of discrimination separately and identified targeted regulatory solutions instead of requiring full structural or legal separation. A table summarising the discrimination issues and solutions is contained in Schedule 4.
  - In **monopoly-competitive** arrangements, where a monopoly business is in a position to commercially benefit an affiliated competitive undertaking, the scope for undue discrimination becomes very real. Examples include electricity distribution and supply, Transco’s monopoly transportation business and its competitive LNG business, its competitive metering business, and EnMo prior to its sale<sup>3</sup>. In all such cases, rather than mandate structural or legal separation to deal with concerns over undue discrimination, Ofgem has instead chosen to implement targeted regulatory solutions involving informational ring-fencing obligations. Companies have sometimes chosen to introduce structural separation in order to discharge these obligations, but Ofgem have not directed companies to undertake inefficient business separation to deal with these issues.
  - In **competitive-competitive** arrangements, such as Centrica/SSE and offshore storage, the scope to gain unfair commercial advantage by leveraging limited storage resources is much more significant than for the NTS/DN relationship. Hence, it would appear appropriate to require a greater degree of separation for competitive-competitive arrangements.

## 8. Cost Allocations between NTS and RDNs

Any allocation of cost to the NTS rather than RDNs would be to the disadvantage of NTS and therefore it is not clear that there is any incentive to do this. More importantly, this is prohibited by the licence conditions and wrongful allocation of any significance would be evident in the regulatory accounts.

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• <sup>2</sup> An analogy can be drawn between BETTA where a single regulated system operator is dealing with in-house and independent regulated Transmission Owners and the NTS/DN relationship, where a single regulated Transmission owner/operator will deal with regulated RDNs and IDNs (cfr. the second consultation on electricity transmission licences under BETTA – June 2003).

• <sup>3</sup> In the case of EnMo, access to information in the OCM could have placed Transco at a significant advantage in terms of the incentives under system operator activities, and also distort the wholesale gas market.

## 9. Summary NGT proposal and conclusion

NGT has assessed the risks of undue discrimination and recognises that if there was intent to breach the licence conditions, there is potential for undue discrimination by NTS in favour of RDNs, but the scope is narrow and can be addressed through a combination of targeted 'fit for purpose' measures:

- Prohibition in the licence held by NTS;
- Transparency in all areas in which any potential for undue discrimination by NTS exists;
- Reporting requirements applicable to NTS;
- Accountability of NTS through internal and external audit, complaints from DNs, industry forums and ultimately complaint to Ofgem;
- All credible scenarios that have been proposed for reform of arrangements for NTS exit capacity, diurnal storage, operational flows and interruption [Mark and Russell to comment];
- Structural separation where there is any risk of NTS information being shared inadvertently with RDNs outside of industry protocols (for example, we would not collocate NTS planning and RDN planning or the NTS control room and RDN staff together in the same office. Also, access by RDNs to commercially sensitive information held by NTS, via IS systems will not be possible);
- NGT contemplates interface staff and business services staff being subject to Code of Conduct guidelines;
- The role performed by the Compliance Officer;
- Licence conditions requiring the correct allocation of and reporting to Ofgem on the allocation of costs between NTS and RDNs.

NGT's proposed approach of targeted measures would be consistent with recent Ofgem policy in dealing with network monopolies with what could be regarded as comparable scope for undue discrimination.

We consider that there should be no requirement for full structural separation (Option 2), or for full structural and legal separation between NTS and RDNs (Option 3) as the costs would be extremely significant, and the incremental benefits and protection to consumers marginal considering the other measures proposed in this paper.

Schedule 1: Scope for undue discrimination at the NTS/DN interface

Schedule 2: Overview of shared support services

Schedule 3: Overview of shared information systems

Schedule 4: Treatment of discrimination risks for BETTA

## **Schedule 1: Scope for undue discrimination at the NTS/DN interface**

### **Introduction**

In the Offtake arrangements RIA, Ofgem identified a list of areas where it believed there was scope for NGT, through its operation of the National Transmission System (NTS), to unduly discriminate in favour of retained Distribution Networks (RDNs) at the expense of independent Distribution Networks (IDNs). This paper explores the potential areas where there could be potential for undue discrimination, and sets out the proposed commercial, rule-based, and licence-based safeguards.

### **Allocation of offtake rights**

Appendix 1 to NGT's response to the RIA sets out its proposals for the implementation of arrangements for the booking of NTS Exit Capacity in line with Ofgem's Option 2B. Under this model, DNs will obtain the capacity which they elect to book. All DNs, whether retained or independent, will participate on an equal footing within this process. Overrun charges and licence conditions will incentivise the DNs to make accurate bookings. Ofgem's other options for NTS Exit Capacity have equally been specifically designed to counter undue discrimination.

It is proposed that Diurnal Storage could be treated in the same way, namely that the DNs specify the requirements and face an incentive to do so accurately.

The arrangements adopted will be enforced as contractual commitments between NTS and DNs in the Offtake Code.

### **Flow Rate Flexibility**

Appendix 2 to NGT's response to the RIA sets out its belief that an Operational Flow product could be defined and implemented. Pricing of such a product would ensure equal treatment of all DNs. To the extent the NTS retained discretion in determining availability, a rule-based, equitable approach would be followed.

### **Interruption**

To the extent that the interruption regime is developed to take greater account of price signals for interruptibility, commercial signals will dictate load to be interrupted. Otherwise the current equitability standard will apply, supplemented by Offtake Code rules requiring NTS-exercised interruption to be equitable as between NTS connected load (both DNs and direct connects).

### **Scheduling maintenance**

NGT proposes that the Offtake Code will govern NTS-DN coordination and cooperation with respect to maintenance of their respective systems. The Offtake Code Business Rules propose that both the NTS and the DNs cooperate in developing their maintenance plans and there is provision for discussion and agreement between the two parties. To the extent that the NTS Exit Capacity regime is developed on a basis that unavailable capacity must be bought back, the regime itself would cater for circumstances where capacity is temporarily unavailable, irrespective of cause.

### **Licence condition**

In addition to the above measures which feature in industry commercial arrangements, the NTS will be subject to a condition in its gas transporter's licence requiring it to avoid undue discrimination as between DNs, whether retained or independent. This condition will reinforce the measures described above, and afford protection in any period of transition to new arrangements.

## **Schedule 2: Overview of shared support services**

<b>Shared support function</b>	<b>Outline of service</b>
Finance	<ul style="list-style-type: none"> <li>Claims Handling</li> <li>Banking Services and Controls (incl. set up of new contractors in SAP)</li> <li>Purchase to Pay – Procurement</li> <li>Purchase to Pay – Accounts Payable</li> <li>Debt collection process</li> <li>Miscellaneous Billing</li> <li>Public Liability Claims Handling</li> <li>Employers Liability Claims Handling</li> <li>Company Property Claims Handling</li> <li>Management of Motor Own Damage Claims</li> <li>Motor Third Party Claims Management</li> <li>General Claims Handling</li> <li>Placement of Insurance</li> <li>Period End Routines</li> <li>Central Journals</li> <li>SAP Processes</li> </ul>
Procurement & Logistics	<ul style="list-style-type: none"> <li>Procurement planning</li> <li>Tender processes</li> <li>Post tender negotiations/contract award</li> <li>Contract management and implementation</li> <li>Supplier contact</li> <li>Logistics services</li> <li>Stock Management</li> <li>Material and other requests</li> <li>Fleet management commercial vehicles / services</li> <li>Management of company car scheme</li> </ul>
Legal	<ul style="list-style-type: none"> <li>General litigation, employment litigation, and dispute resolution</li> <li>Legal support for commercial and construction agreements</li> <li>Property advice</li> <li>Gas industry agreements and uniform network code</li> <li>Competition, regulation and procurement</li> <li>Health Safety and Environment</li> <li>New road and street works act</li> <li>Intellectual property</li> </ul>
Regulation	<ul style="list-style-type: none"> <li>Project and operational support</li> <li>Regulatory support</li> <li>Compliance support</li> <li>Regulatory Operations, co-ordination &amp; communication</li> </ul>
NGT UK Property	<ul style="list-style-type: none"> <li>Facilities management</li> <li>Repair and maintenance of company office premises</li> <li>Estates management</li> </ul>
Human Resources	<ul style="list-style-type: none"> <li>General HR services</li> <li>HR consultancy services</li> <li>Learning and development</li> </ul>
Communications	<ul style="list-style-type: none"> <li>External Communications</li> <li>Internal Communications</li> </ul>
Information Systems	<ul style="list-style-type: none"> <li>Back office system support services</li> <li>Data centre and application servers</li> <li>Application management</li> <li>Help desk</li> <li>Security management</li> </ul>
Safety, Health and Environment (SHE)	<ul style="list-style-type: none"> <li>SHE strategy / standards</li> <li>SHE support</li> <li>SHE Assurance</li> <li>SHE Performance</li> <li>SHE contacts</li> </ul>

### Schedule 3: Overview of shared information systems

Applications	Description	NTS-DN Usage (How Shared)	Type of Data	Sensitivity of Data	Separation activity required	Proposed Separation Changes
<b>CPBASE (ARES)</b>	A standalone PC based system designed to aid the collection, storage and monitoring of data relating to Cathodically Protected pipelines. This system is required by Transco to comply with ECP1	NTS and all DNs get access to all the data. NTS does not enter data into this system, but can look at historical records. Used primarily by corrosion experts.	Historical cathodic protection readings.	Not commercially sensitive	No	No specific action will be required: equal treatment for access will be given to iDNs and rDNs post network sales: iDNs will be provided a copy of CPBASE
<b>Desktop Environment</b>	NGT will be rolling out a new desktop infrastructure between Q4 2004 and Q2 2005. The current desktop infrastructure is common throughout Transco and there are also common shared file storage areas, with potentially some information shared between NTS and the DNs.	Common NGT desktop used in NTS and all DNs, with some common shared areas.	Desktop and Shared Areas	Potentially commercially sensitive	Yes	NTS-DN desktop configuration access will need to be changed to 'ring-fence' NTS and restrict access to iDN/rDN data. This will involve some user data migration. Assuming that this can be accommodated within current desktop rollout plan and will be delivered by Q2 2005.
<b>GL5</b>	GL5 handles the raising & monitoring of all repair and modifications to all plant & equipment covered by the Pressure Systems Safety Regulations and produces GL5 documentation. It needs to be retained to ensure compliance to the pressure systems safety regulations.	Data are not shared between NTS and DNs.	Pressure Systems data GL5 Documentation	Not commercially sensitive	No	No action required.
<b>Graphical Falcon (gF)</b>	A network analysis tool used by gas engineers to simulate steady state and long-term transient effects on high pressure gas transmission systems. It allows users to create and modify models of gas	Tool is used by DNs and NTS. iDNs will be given access under the FOMSA.	Network analysis and modelling data	Commercially Sensitive but all DNs have equal rights	No	No action required. iDNs/rDNs will be provided equal access under the FOMSA. Arrangements for enduring access/functionality will be finalised as part of transition planning with iDNs.
<b>GTMS/iGMS</b>	Used in the monitoring and control of the physical gas network. Also known as Area Gas Management System. GTMS access is limited to System Operations and DNs only, via dedicated terminals.  GTMS is to be replaced by iGMS in a phased approach by Q3 2005.	GTMS/iGMS terminals located in DN offices. All DNs will have equal access in line with SOMSA. Once iGMS is installed all DNs will see data relevant to their own DN.	Network Control data across DNs	Possibly Commercially Sensitive but all DNs are treated equally under SOMSA	No	No action required. All DNs to be treated equally in line with SOMSA.
<b>HPMIS (High Pressure Metering Information System)</b>	Compliance d/b of all high pressure metering sites giving gas quality information. Contains audit info about the installed equipment at each site including metering accuracy uncertainty analysis and metering design for FWACV charging policies.	Database used by DNs, National and Area Control Centres, System Operations and NTS. iDNs will be given access under FOMSA.	High Pressure Meter Sites, Gas Quality Information, and CV data	Potentially some commercially sensitive data	Yes	Equal iDN/rDN access to be provided under the terms of FOMSA.  Some additional security access restrictions may be required to ensure separation of iDN/rDN data.  Alternatively an upgrade of the infrastructure may be required to provide security restrictions.
<b>Internet/ Intranet</b>	NGT corporate Intranet currently accessible by all NGT staff.	NTS and DNs all have access to corporate Intranet	Internal company communications and information	Potentially some commercially sensitive data	Yes	Minor configuration changes required to restrict access to certain 'sensitive' Intranet sites
<b>Landowner Database</b>	A number of standalone databases holding owner, occupier and land details. It includes compensation details to be able to comply with covenants in deeds of easement and Maint 5.	Technically not shared - all DNs have copy of this spreadsheet.	Land Ownership Details	Not commercially sensitive	No	NTS, iDNs and rDNs will be provided copies of the database.
<b>MAPS</b>	MAPS reads data from ESRI and outputs it graphically.	NTS and all DNs have equal access to the data. iDNs will be given system access under FOMSA. Map digitisation service to be provided to iDNs under separate agreement.	Digitised maps via EDMS	Not commercially sensitive	No	No action required: iDNs/rDNs will be provided equal access in line with FOMSA. Arrangements for enduring access/functionality will be finalised as part of transition planning with iDNs.

Applications	Description	NTS-DN Usage (How Shared)	Type of Data	Sensitivity of Data	Separation activity required	Proposed Separation Changes
<b>MIMS v4.3</b>	Asset repository holding above ground and >7 bar Transco assets data. System is used to maintain asset data, create maintenance schedule for each asset and work orders for all the assets at different time intervals defined by the maintenance schedule. NTS pipeline and AGI data remain in MIMS.	NTS and all DNs have equal access. IDNs will be given access under FOMSA.	Above ground installations and >7bar pipeline assets Work Schedules Job data	Not commercially sensitive	No	No action required: iDNS/RDNs will be provided equal access in line with FOMSA. Arrangements for enduring access/functionality will be finalised as part of transition planning negotiations with IDNs.
<b>Operational Data Store</b>	ODS is a management reporting system for the production of operational reports for Network Code and the calculation of liabilities to Shippers. The Data warehouse system requires inputs from several other systems including AT Link, Sites & Meters Database and SC95.	NTS and all DNs have equal access to the data.	Extracts of data from UK-Link Systems (e.g. Sites & Meter, AT-Link, SC95 plus others).	Potentially some commercially sensitive data but held within Xoserve.	No	Changes to Business Object used to access ODS will restrict access by DN.
<b>Pressure Systems DB (PSDB)</b>	PSDB holds all installations and relevant component parts that require examinations under PSSR, schedules when examinations are due and completed examinations data.	Standalone database, data not shared between NTS/DNs.	Pressure Systems data	Not commercially sensitive	No	No specific action will be required. iDNs will be provided a copy of PSDB as part of network sales.
<b>PSR (Pipeline Safety Regulation) Notification</b>	This database records details of all Transco >7 bar pipelines (pressure, diameter, stress levels etc.) for the purposes of notifying the HSE as part of pipeline safety regulations.	NTS and all DNs have equal access to the data. IDNs are given access under FOMSA.	Pipeline safety regulation reports	Not commercially sensitive	No	No action required: iDNS/RDNs will be provided equal access in line with FOMSA. Arrangements for enduring access/functionality will be finalised as part of transition planning with IDNs.
<b>QB-MARS / Network Services</b>	A mobile work management and field working solution used by Network Service for asset related  NTS jobs are administered manually on the whole with the exception of some emergency jobs passed through QB-MARS.	NTS and all DNs have equal access. IDNs will be given access under FOMSA.	Work management and job data	Not commercially sensitive	No	No changes required, since NTS jobs handled manually or through QB-MARS in the case of emergency. QB-MARS is to be provided under FOMSA to all IDNs.  Arrangements for enduring access/functionality will be finalised as part of transition planning negotiations with IDNs.
<b>SAP</b>	Transco's backoffice system used for HR, Finance, Procurement and Logistics across Transmission and DNs. Includes some related applications such as ESSBASE (budgeting / forecasting), Hyperion (consolidation of reports)	Backoffice systems shared across NGT	Information related to HR, Financials, Procurement and Stores Mgt are handled for NTS and DNs in this single SAP system	Commercially Sensitive	Yes	NTS back-office data will be separated from RDN data by having separate NTS data in a similar way to that proposed for the IDNs.
<b>SAP Offline Systems</b>	A number of offline backoffice systems are used for both NTS and DNs	Backoffice systems shared across NGT	Financial, Procurement, HR data	Potentially some commercially sensitive data	Yes	Migration of NTS specific data out of offline systems. iDN/iDN data is being separated as part of Network Sales changes.
<b>SRP (Surveillance Reporting for Pipelines)</b>	SRP holds data regarding potential 3rd party interference and other sources of damage for the entire Transco pipeline network, including NTS and LTS, which are routinely patrolled by helicopters.	NTS and all DNs have equal access to the data. IDNs will be given system access under FOMSA.	Ordnance survey data NTS and LTS pipeline data	Not commercially sensitive	No	No action required: iDNS/RDNs will be provided equal access in line with FOMSA. Arrangements for enduring access/functionality will be finalised as part of transition planning with IDNs.
<b>THESIS</b>	A repository for recording and reporting on health and safety incidents and near misses. Required by Transco's HS&E.  H&S data not to be shared between iDNs/RDNs.	NTS and all DNs have equal access to the data. Assumption is that iDNs will maintain their own health and safety incident reporting tools.	Health and Safety Incident data	Not commercially sensitive	No	No action required as iDNs will have their own incident reporting systems.
<b>TPFD (Transmission Pipeline Fault Database).</b>	This database holds locations and nature of reported faults on pipes 7-80 bar, as well as basic data on pipeline assets.	Not a shared system, but a service provided by Advantica. This service will continue to be available on request to all DNs post sale.	Fault and damage data	Not commercially sensitive	No	No action required. RDNs and IDNs will have access to this service from Advantica on request.

## Schedule 4: Treatment of discrimination risks in BETTA

Under the British Electricity Trading and Transmission Arrangements (BETTA) programme NGT will become the GB System Operator (GBSO). NGT, as GBSO, will interface with all GB transmission owners: NGT, Scottish Power and Scottish & Southern. The two Scottish companies have expressed concern that the GBSO would favour its own “in house” transmission over theirs. This is analogous to the relationship in gas following network sales with the National Transmission System (NTS) interfacing with both retained and independent distribution networks (DNs). In both cases all the organisations concerned are, at least locally, effective monopolies with their income regulated under a price control. It follows that the scope for discrimination is limited to GBSO/NTS showing bias at the interface or in the provision of information.

The following table summarises how Ofgem propose to address the discrimination issues under BETTA as stated in their second consultation on electricity transmission licences under BETTA issued in June 2003.

**Table 1: Areas of potential discrimination under BETTA and Ofgem’s proposed solutions**

Broad Areas of Discrimination	Specific Areas	Ofgem’s Proposed Solutions							
		None Required	Covered by existing Non-discrimination obligations	Obligation to declare interest	Cover in SO/TO Code	Oblige GBSO to inform connectee of alternative providers of design	Connectee seek Ofgem Determination	Deal with under TNUoS Methodology	Incentive scheme design
<b>Indirect</b> Discrimination Prior to Connection Agreement	Biased Pre-application Consultancy			X			X		
	Biased information to TOs				X		X		
	Bias in identification of connection options					X	X		
	Bias in identification of reinforcement options	X					X		
<b>Indirect</b> Discrimination After Connection Agreement	Bias in setting locational Tx charges							X	
	Bias in selection of Balancing Services		X						
	Bias in commercial management of connection		X						
<b>Indirect</b> Discrimination Via SYS	SYS could overstate benefits of E & W sites				X				
<b>Direct</b> Discrimination against TOs	Impose costs on TOs to ease balancing							X	X
Provision of information	Provide better/faster information to own TO				X				
Discrimination in services to users									
	Prohibit discriminating between users	X							

It can be seen that, under BETTA, Ofgem have identified the individual areas of concern and proposed specific actions to address them, backed up with licence obligations and the ability of a connectee to seek a determination from Ofgem. We support this approach under BETTA and believe that it could form an effective and economic approach under network sales.

The following table demonstrates the analogous nature of the concerns under BETTA and network sales. The entries in the table indicate where an area of concern under network sales can be considered to be equivalent to one under BETTA. The strong correlation is further evidence that the approach taken to discrimination under BETTA should be considered for network sales.

**Table 2: Mapping between areas of Potential discrimination under BETTA and network sales**

Broad Areas of Discrimination	Specific Areas	Analogous Blackwater Areas of Discrimination						
		Offtake rights allocation	Contracting for flow rate flexibility/storage	Operational management of flows/storage	Contracting/calling for interruption	Scheduling Maintenance	Unequal sharing of information	Misallocation of costs to NTS
<b>Indirect</b> Discrimination Prior to Connection Agreement	Biased Pre-application Consultancy							X
	Biased information to TOs							X
	Bias in identification of connection options				X			
	Bias in identification of reinforcement options				X			
	Bias in formal offer terms							
<b>Indirect</b> Discrimination After Connection Agreement	Bias in setting locational Tx charges							
	Bias in selection of Balancing Services		X	X	X			
	Bias in commercial management of connection		X		X			
<b>Indirect</b> Discrimination Via SYS								
	SYS could overstate benefits of E & W sites							
<b>Direct</b> Discrimination against TOs								
	Impose costs on TOs to ease balancing				X			
Provision of information	Provide better/faster information to own TO							X
Discrimination in services to users								
	Prohibit discriminating between users							