Guidance on the Third Party Access regulatory regime for gas storage facilities in Great Britain

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Target audience: Suppliers, shippers, transporters, customer representatives, storage facility owners and operators, and other interested parties

Overview:

From 3 March 2011, Storage System Operators (SSOs) will have an obligation to comply with the EU Third Internal Energy Market Package (Third Package), and in particular the directly applicable provisions of the Gas Regulation and the relevant provisions of the Gas Directive, as transposed into domestic legislation.

Ofgem will be responsible for ensuring general compliance with requirements of the Third Package pertaining to gas storage. Given this, we have decided to develop guidance which addresses queries from industry stakeholders regarding how Ofgem may be minded to interpret provisions of the Third Package, particularly with respect to the directly applicable Gas Regulation.

This document sets out Ofgem’s preliminary views regarding compliance with negotiated third party access (nTPA) arrangements for gas storage facilities.

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Context

Gas storage plays an important role in facilitating the efficient functioning of the energy market in Great Britain (GB). Primarily, gas storage is used to provide an important source of flexibility that is needed to address differences in supply and demand. This can help contribute to security of supply and competition in the gas market.

From 3 March 2011, SSOs will have an obligation to comply with the provisions of Third Package, both the directly applicable Gas Regulation and the Gas Directive as implemented by DECC. Ofgem will be responsible for ensuring general compliance with requirements of the Third Package once it has been transposed into domestic legislation.

Associated Documents

- **Preliminary views on the Third Party Access regulatory regime for gas storage facilities in the GB market**, Ofgem, 18 May 2010
- **Note of DG Energy & Transport on Directives 2003/54/EC and 2003/55/EC on the Internal Market in Electricity and Natural Gas, Third Party Access to Storage facilities.**
- **Gas storage third party access (TPA) exemptions – minor facilities**, Ofgem, 16 June 2009.
- **Guidelines for Good TPA Practice for Storage System Operators (GGPSSO), ERGEG.**
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Summary

In this document we set out our preliminary views on how Ofgem will be minded to interpret provisions relating to third party access at gas storage facilities in light of recent European legislation.

Ofgem intends that the guidance provide greater clarity around the operation of the third party access framework. This potentially has wide ranging benefits. For potential investors, clarity around the regulatory framework should reduce uncertainty which otherwise might deter investment or increase the cost of capital. For gas storage customers, by supporting more transparent and non-discriminatory access arrangements, guidance can promote more efficient use of existing and planned storage facilities. For end consumers, benefits may accrue from increased security of supply and increased competition as gas storage capacity is brought to the market.

Ofgem is also providing this guidance in order to reduce the risk of non compliance with the new legal framework. The third party access framework in Great Britain provides storage system operators (SSOs) with significant scope to develop the access arrangements that will meet the needs of their customers (and end consumers). This document gives more detail on the measures SSOs should consider in relation to providing access.

This document also sets out some good practice safeguards that SSOs (and any related undertakings) with 'Significant Market Power' (SMP) may consider in order to reduce the risk of non compliance. Any market player (an SSO and any related undertakings) with SMP is more likely to have the ability and incentive to discriminate and restrict access to storage, potentially with detrimental effects on consumers. We also have set out our preliminary views regarding how SMP can be assessed.

Key features of the guidance

In this document we have set out our preliminary views regarding the measures that SSOs should consider in relation to meeting the requirements of the Third Package. The following is a summary of some of the key features of our guidance.

Allocating capacity: our preliminary view regarding allocating storage capacity is that SSOs should offer at least the maximum technical storage capacity from its facility (or group of facilities). We have also taken the preliminary view that auctions, particularly for standard services, increase the likelihood that the SSO's allocation mechanism will meet the requirements of the Gas Regulation. However, SSOs may consider alternative allocation mechanisms that deliver similar degrees of objectivity, transparency and non discrimination. For any market player with SMP, our preliminary view is that we would expect such players to use auctions to allocate standard services. We have also set out our preliminary views regarding the setting of reserve prices by SSOs (both those with and without SMP).
Main commercial conditions and mix of services: our preliminary view is that we would expect SSOs to conduct open and transparent processes for consulting the market when developing (or amending) their main commercial conditions and/or when determining the appropriate mix of services. We propose that SSOs should be responsible for determining the appropriate level of consultation/market testing, whilst setting out our expectation that more extensive consultation/market testing processes should be undertaken when an SSO has SMP, and/or when the changes to the main commercial conditions or the services offered are more significant. Examples of when more extensive processes may be needed include:

- when developing a new contract for services;
- when a significant amount of new capacity is being offered; or
- when changing the mix of services offered to address changes in supply and demand conditions.

In setting the mix of services, SSOs are also required to offer long term and short term services, firm and interruptible services and bundled and unbundled services.

Transactions with related undertakings: SSOs are required to allocate capacity to all market participants (including their related undertakings) via their primary allocation mechanism. However, our preliminary view is that there is a risk that any market player with SMP may have both the ability and incentive to use transactions between the SSO and its related undertakings to withhold capacity from the market or to sell capacity on a discriminatory basis on the secondary market. Given these potential risks, our preliminary view is that any market player with SMP should be able to justify that the amount of storage capacity that is retained by the group (ie purchased by the SSO's related undertakings) is consistent with the market player's requirements for flexible gas supplies, taking its other sources of flexibility into consideration. Further, we would expect that the related undertakings use the capacity in the same way as if the undertakings were not related to the SSO; and that any excess capacity is returned to the market on a non discriminatory basis.

Next steps

Ofgem is seeking stakeholder views on its proposed approach to guidance in this area. To this end, we have posed a number of specific questions to industry stakeholders. This provides some direction of the matters that Ofgem is seeking to clarify. However, respondents may wish to provide views on other matters they consider relevant to the provisions of the Third Package in relation to gas storage facilities.

The consultation period will run for six weeks. During this period we will meet with industry stakeholders to discuss the views set out in this document.

Ofgem will then develop and publish guidance based on consideration of views arising from this consultation.
1. Introduction

Context and purpose of this document

1.1. Gas storage plays an important role in facilitating the efficient functioning of the energy market in GB and across Europe more generally. Primarily, gas storage is used to provide an important source of the flexibility needed to address differences in supply and demand. In addition, storage can be used to reduce the impacts of supply disruptions and facilitate gas trading activities. The flexibility provided by gas storage benefits final consumers by helping to smooth and reduce the volatility of wholesale gas prices.

1.2. The benefits that gas storage provides to energy markets are most likely to be maximised when market participants that want to use gas storage facilities can obtain access on a transparent and non-discriminatory basis. For EU Member States the regulatory framework used to underpin Third Party Access (TPA) arrangements for gas storage facilities was set down in the First Gas Directive. This regulatory framework has been refined and strengthened in the two subsequent EU legislative packages for internal energy markets.

1.3. In September 2009, the EU Third Internal Energy Market Package (Third Package), which for the purposes of this document means the Gas Directive and the Gas Regulation, came into force. The Second Package which provided the

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4 The Third Package also comprises one other Directive and two other Regulations:
   • Regulation (EC) No 714/2009 on conditions for access to the network for cross-border exchanges in electricity and repealing Regulation (EC) No 1228/2003 (the “Electricity Regulation”); and
   • Regulation (EC) No 713/2009 establishing an Agency for the Cooperation of Energy Regulators (the “ACER Regulation”) (see list of Appendices).
basis for the current framework for negotiated TPA (nTPA) to gas storage in the GB market will be repealed by the Third Package when it applies from March 2011.

1.4. From 3 March 2011, SSOs will have an obligation to comply with the directly applicable provisions of the Gas Regulation and the relevant provisions of the Gas Directive, as transposed into domestic legislation. The Gas and Electricity Markets Authority (the Authority) will be responsible for ensuring general compliance with requirements of the Gas Regulation and of the Gas Directive once it has been transposed into domestic legislation. Further to our general duty to ensure compliance, Ofgem also has a specific enforcement role where there is a dispute regarding TPA to storage under sections 19B(8) of the Gas Act 1986 (the Gas Act) and 17D(8) of the Petroleum Act 1998 (the Petroleum Act).

1.5. Member States have some discretion in relation to how the provisions of the Gas Directive are transposed into domestic legislation. Market participants have raised queries regarding how Ofgem may be minded to interpret provisions of the Third Package. They have suggested that the current uncertainty associated with the Third Package could delay investment decisions for new storage projects.

1.6. In response, Ofgem committed to providing the market with guidance. This consultation document forms part of Ofgem's commitment and expands on the preliminary views we expressed in our open letter on access arrangements for and of the Council of 28 September 2005 on conditions of access to the natural gas transmission networks ("Second Gas Directive").

6 Ofgem is the office of the Authority. The terms 'Ofgem' and the 'Authority' are used interchangeably in this document.

7 The Department of Energy and Climate Change (DECC) is primarily responsible for the implementation of the Third Gas Directive. DECC has indicated that it intends to designate Ofgem as the national regulatory authority under the Third Package. However, as the enforcement provisions of the Gas Regulation need to be transposed into domestic law, Ofgem is waiting to see how the Government proposes to transpose these provisions.

8 On 22 January 2010, the European Commission published its 'Note of DG Energy & Transport on Directives 2003/54/EC and 2003/55/EC on the Internal Market in Electricity and Natural Gas, Third Party Access to Storage facilities'. This note provides Member States with information to guide the implementation of the measures in the Gas Directive relating to TPA to storage.

gas storage facilities. In so doing, it is intended to provide greater clarity around the operation of the nTPA framework.

1.7. This document provides guidance in relation to compliance with relevant legislation for TPA to gas storage facilities; and measures that SSOs could adopt in order to reduce the risk of non compliance, including in the case of a dispute over access. Further, this document seeks to illicit stakeholder views on a range of specific issues associated with our proposed approach to interpreting the provisions of the legislation for the GB market.

1.8. While this document highlights our preliminary views on some of the issues to which the Authority is likely to have particular regard when considering compliance with the legislation relating to access to storage, it is by no means definitive or exhaustive. The objective of this workstream is to provide general guidance to SSOs and storage facility users. However, we will consider each case on its merits.

Existing legislation for gas storage services

1.9. The main regulatory requirements for nTPA for gas storage facilities are set down in section 19B of the Gas Act and section 17D of the Petroleum Act. The provisions in the Gas Act and the Petroleum Act reflect the requirements of the Second Gas Directive and of the Gas (Third Party Access) Regulations 2004, which came into force on 26 August 2004. The requirements for nTPA set down in the Gas Act and the Petroleum Act apply to those storage facilities for which access is economically and/or technically necessary for providing efficient access to the system for the supply of customers.

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11 In certain circumstances, an SSO will not be required to offer nTPA at a specific facility. This may be due to the facility not being considered technically and/or economically necessary for providing efficient access to the system for the supply of customers. In such circumstances a Minor Facility Exemption (MFE) can be sought from the Authority. Such exemptions can be granted under s.19A (6)(a) of the Gas Act and s.17C (5A)(a) of the Petroleum Act. Ofgem has set out its views on the criteria that we use to determine whether a MFE should be granted in our ‘Gas storage third party access (TPA) exemptions – minor facilities’ open letter of 16 June 2009.

12 Exemptions for major new gas storage facilities can also be considered under s.19A(6)(b) of the Gas Act and s.17C(5A)(b) of the Petroleum Act.
1.10. The main provisions of the Second Gas Directive relating to nTPA arrangements for gas storage require:

- storage operators not to discriminate between parties or classes of parties (Article 8);
- negotiations for access to be conducted in good faith (with any disputes relating to the negotiations for access to be settled by a competent authority) (Article 19); and
- storage operators to publish their main commercial conditions on an annual basis (Article 19).

1.11. There are currently two storage facilities in the GB market that are subject to TPA requirements, the Hornsea storage facility operated by SSE Hornsea Limited (SSEHL); and the Rough storage facility operated by Centrica Storage Limited (CSL).

1.12. In relation to Hornsea, SSEHL is subject to nTPA requirements set down in the Gas Act. In addition, Centrica plc (Centrica) (and CSL) must operate Rough subject to statutory undertakings (the Rough Undertakings) that were set down by the Competition Commission when Centrica acquired the facility from Dynegy Ltd in 2002. The Rough Undertakings place a range of additional requirements on Centrica in addition to those required under the existing nTPA legislated requirements.

**Changes resulting from the Third Package**

1.13. The Third Package is intended to build on the previous EU legislative packages for the internal energy market. In relation to gas storage, the Third Package aims to promote more transparent and non discriminatory arrangements for TPA.

1.14. Under Article 33 of the Gas Directive, Member States may again choose either nTPA or regulated TPA (rTPA) or both. In its consultation of 27 July 2010, DECC has indicated that it supports the continuation of nTPA for gas storage

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13 Other storage facilities in the GB market do provide access to third parties. However, these SSOs are exempt from the nTPA requirements for storage operators set out in GB legislation.
14 In April 2010, Centrica submitted a request to the Office of Fair Trading for a review of the Rough Undertakings by reason of change of circumstances. In September 2010 the OFT concluded that Centrica's request should be granted. The Competition Commission is currently considering this matter.
facilities for which access is considered technically and/or economically necessary.\textsuperscript{15}

1.15. DECC noted in its initial Call for Evidence\textsuperscript{16} on the implementation of the Third Package that while there is a great deal of consistency between the existing GB legislation and the Third Package (particularly where the provisions of the Third Package mirror provisions in the Second Package), there are some important new elements of the Third Package that will need to be implemented.

1.16. In relation to access to gas storage facilities, the Third Package introduces a number of additional requirements. These include:

- strengthening provisions to prevent discrimination in respect of TPA to storage facilities;
- requiring the unbundling of SSOs from vertically integrated companies;
- increasing information provision and transparency requirements; and
- enhancing monitoring duties and enforcement powers of the National Regulatory Authority (NRA).

1.17. In relation to the implementation of the Third Package, a significant change from the Second Package is that the Gas Regulation provides increased direction regarding the:

"...basic principles and rules regarding network access, third party access services, congestion management, transparency, balancing and the trading of capacity rights." (Preamble, recital (4))

1.18. In particular, the Gas Regulation sets out specific requirements on the services SSOs should provide in Article 15; capacity allocation mechanisms and congestion management procedures in Article 17; information provision and transparency in Article 19; and trading of capacity rights in Article 22.

\textsuperscript{15} DECC ‘Consultation on the Implementation of the EU Third Internal Energy Package’, July 2010. In this document DECC stated that Ofgem will continue to be responsible for defining and publishing the criteria used to assess whether access to storage is technically and/or economically necessary.

\textsuperscript{16} DECC ‘Call for Evidence — Implementation of the EU Third Internal Energy Package’, 1 April 2010. This document includes a consideration of third party access for gas storage facilities (section 4.10).
Structure of this document

1.19. In the following chapter, Ofgem's approach to guidance is outlined in further detail. In Chapter 3, we outline our proposed approach to assessing significant market power. Chapters 4 through to 7 set out our preliminary views regarding different aspects of the legislation including capacity allocation mechanisms and congestion management procedures; service specification; transactions with related undertakings; and information provision. The final chapter sets out our next steps.
2. Overall approach to guidance

Approach to developing guidance

2.1. The provisions of the Third Package relating to TPA to gas storage facilities are intended to ensure that SSOs provide TPA on an objective, transparent and non-discriminatory basis.

2.2. Ofgem intends that our guidance provide greater clarity around the operation of the nTPA framework. This potentially has wide ranging benefits. For potential investors, clarity around the regulatory framework should reduce uncertainty which otherwise might deter investment or increase the cost of capital. For gas storage customers, by supporting more transparent and non-discriminatory access arrangements, guidance can promote more efficient use of existing and planned storage facilities. For end consumers, benefits may accrue from increased security of supply and increased competition as gas storage capacity is brought to the market.

2.3. SSOs are responsible for developing access arrangements that are compliant with the Gas Regulation and relevant provisions of the Gas Directive, as transposed into domestic legislation. We recognise that nTPA provides SSOs with significant scope to develop the access arrangements that will meet the needs of their customers (and end consumers). Given this, an objective of providing this guidance is to assist SSOs in developing access arrangements that are likely to comply with the relevant legislation.

2.4. Further, the guidance suggests some good practice safeguards, particularly where a market player has SMP. Any market player with SMP is more likely to have the ability and incentive to discriminate and restrict access to storage, potentially with detrimental effects on consumers. The good practice safeguards outlined in the guidance are designed to reduce these risks.

2.5. Finally, Ofgem intends that the guidance provide the market with direction as to the matters we are likely to consider in the case of a dispute.

Approach to monitoring and enforcement

2.6. Under the existing legislative framework for nTPA for gas storage facilities Ofgem has a specified role in relation to settling disputes regarding TPA. In Ofgem’s also has powers under the Competition Act 1998. Any abuse of dominance or anticompetitive behaviour will still be investigated under competition law where it is appropriate.
addition, Ofgem has responsibility for monitoring Centrica and CSL’s compliance with the Rough Undertakings.

2.7. Under the Third Package, Ofgem’s role in relation to monitoring and enforcing compliance with nTPA requirements should be strengthened. In particular, Article 24 of the Gas Regulation requires the NRA to ensure compliance with the Gas Regulation. Further, Article 41(1)(i) of the Gas Directive requires the NRA to monitor the level of transparency and ensure compliance of natural gas undertakings with the transparency obligations.

2.8. In its consultation document on the implementation of the Third Package, DECC has stated that it needs to ‘decide how to implement the requirements of the Directive while ensuring that Ofgem as the NRA has access to appropriate powers of enforcement’. In particular, DECC has sought stakeholder views regarding whether the provisions of the Gas Directive and Gas Regulation should be implemented via a licensing regime for gas storage operators or primary legislation.

2.9. It is not possible for Ofgem to provide guidance on its approach to enforcement prior to having information regarding how the relevant provisions of the Third Package will be transposed into GB legislation and the legislative framework for monitoring and enforcing those provisions. However, we can outline a general approach to monitoring and enforcement based on our interpretation of the enforcement provisions in the Gas Directive and Gas Regulation and DECC’s stated position.

2.10. In relation to determining the relevant level of monitoring and enforcement activity, we consider that there are two important questions that need to be considered. The first is, what is the likelihood that market participants will be able to observe non compliance with the regulatory requirements? The second is, what is the likely impact on the market when the SSO does not comply with regulatory requirements?

2.11. Ofgem has taken the view that for many of the provisions, particularly those pertaining to information provision and transparency, and consulting the market, any non compliance is likely to be highly visible to the market. Given this, Ofgem may be able to adopt a mix of monitoring and industry engagement (ie concerns or complaints raised by market participants) to determine whether or not SSOs are complying with the regulatory requirements.

2.12. However, there are aspects of the regulatory framework where compliance will be less evident to the market, and the impacts of any non compliance are likely to be greater. In particular, Ofgem considers that it will be more difficult for market participants to determine whether the SSO is discriminating in the allocation of capacity (particularly when the capacity allocation mechanism is not sufficiently transparent). Similarly, it will be more difficult for the market to determine whether SSOs are complying with the unbundling provisions of the Gas Directive. In relation to these aspects of the Third Package, we will need to engage with the relevant SSOs to determine what information SSOs should provide to Ofgem in order for us to be satisfied that the SSO is compliant.
3. Access to gas storage and market power

Chapter Summary

This chapter sets out Ofgem's preliminary views on how to assess significant market power (SMP). It concludes that pivotality analysis should be a major analytical tool for assessing SMP. It proposes ten per cent of pivotal gas volume as a threshold for SMP. However, other structural elements (such as elasticity of demand) and market outcomes (such as price outcomes) may be assessed to determine whether a market player with lower pivotality has SMP.

Question 1: Should pivotal gas volume be used when assessing SMP? If no, please explain why.
Question 2: Is the proposed figure of ten per cent of pivotal gas volume an appropriate threshold for defining SMP? If no, what is an appropriate threshold?
Question 3: Is it appropriate to also consider market outcomes to assess whether a market player may have SMP at lower levels of pivotality?
Question 4: Are there any additional factors that should be used when considering if a market player has SMP?

3.1. As noted in Chapter 2, Ofgem has taken the view that there could be cause for concern where any market players (SSOs and any related undertaking) have SMP. One concern is that any market player with SMP may have the ability and incentive to discriminate and restrict access to storage. This ability to restrict access to storage could have detrimental effects on consumers. Restricting access conflicts with the aim of the Third Package that SSOs provide access on an objective, transparent and non-discriminatory basis. Any market player with SMP also may face a greater risk of being found non-compliant with the nTPA regime.

3.2. Given the level of competition in the GB gas market, particularly in relation to the diverse range of sources for gas supply, we do not currently expect there to be many cases of SMP. However, it is important that our guidance covers a spectrum of possibilities (both now and in the future) so as to be as comprehensive as possible. This chapter sets out Ofgem's preliminary views regarding how Ofgem would assess market power. In particular, we set out our proposed approach for assessing SMP, and discuss when Ofgem might be concerned that a market player has SMP.

Gas storage and the market for flexibility

3.3. Gas storage is used to meet load variation. Gas is injected into storage when demand is low and withdrawn when demand is peaking. The most significant load variation tends to be seasonal, with load tending to be high in the winter but low in summer. In addition, load variations can be material in
shorter periods such as within weeks, with load being higher on weekdays than on the weekend.

3.4. Gas storage is not the only instrument available to meet load variation. Other instruments also exist. These other instruments may include flexibility in production, interconnectors, pipeline imports, demand side response (and response from international LNG markets).

3.5. Ofgem accepts the view that gas storage and other flexibility sources can potentially act as substitutes, albeit the degree of flexibility between different sources might vary. In identifying SMP in the gas market Ofgem will consider all sources of flexible gas supply, not just gas storage. While we will consider all sources of gas supply in assessing whether a market player has SMP, the extent to which other sources of supply can provide flexibility over different timeframes will be a key consideration.

What is significant market power in relation to gas storage?

3.6. Market power is, by and large, the ability of a market player to raise prices above a competitive level.

3.7. In relation to gas storage, the market value of gas storage services is driven by the spread between prices at times of injection and at times of withdrawal. A storage operator will be successful in raising storage prices above some competitive level only if it can raise peak gas prices and/or lower off peak gas prices. Market power in the gas market could manifest itself in a market player withholding some of its storage capacity from the market in order to raise peak gas prices (as less storage is available to withdraw gas from) and/or reduce off peak prices (as less storage is available to inject gas into).

3.8. Market power may also have a vertical aspect. That is, market power may reflect an ability of vertically integrated market players to affect competition in related markets. In relation to gas storage, SSOs provide services to gas shippers and also to upstream producers. Therefore an SSO might be able to

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19 The extent to which gas storage and other sources act as substitutes is discussed in Ofgem’s final decisions with respect to: (i) EDF Energy Plc’s application for an exemption from section 19B of the Gas Act 1986 for Hill Top Farm storage facility; (ii) Storengy UK Limited’s application for an exemption from section 19B of the Gas Act 1986 for Stublach storage facility; and (iii) SSE Hornsea Ltd’s application for an exemption from section 19B of the Gas Act 1986 for Aldbrough storage facility. These are available at [http://www.ofgem.gov.uk/Markets/WhlMkts/CompandEff/TPAccess/Pages/TPAccess.aspx](http://www.ofgem.gov.uk/Markets/WhlMkts/CompandEff/TPAccess/Pages/TPAccess.aspx)
affect competition in related markets by restricting access to gas storage services.

3.9. For consumers, the key concern is whether a market player has both the ability and incentive to increase wholesale gas prices for a sustained period of time. Given this, in this document, we define SMP as the ability of a market player to affect the wholesale price of gas in a way that is profitable for the market player for a sustained period of time.

3.10. Ofgem is of the view that any market player with SMP is more likely to have the ability and incentive to affect gas prices. A market player with SMP may have the ability to discriminate and restrict access to storage to an extent that it could affect the wholesale price of gas and thus have detrimental effects on consumers. A market player with SMP may also affect the wholesale prices in a way that increases price volatility and therefore raises the value of storage.

**Proposed approach for the assessment of Significant Market Power**

3.11. There a number of ways in which SMP could potentially be measured. Our preliminary view is that Ofgem should assess SMP in the gas market based on:

- Structural measures of market power (primarily based on pivotality analysis);
- Other relevant structural elements (such as demand elasticity); and
- A direct assessment of market outcomes (such as price outcomes).

3.12. This ‘hybrid approach’ of assessing market power based on an assessment of these three factors is consistent with the approach adopted by other authorities.\(^{20}\)

3.13. We propose to use pivotality analysis as the main structural measure of market power. Pivotality analysis identifies the market players that are ‘pivotal’ by using demand and supply data. When a market player is pivotal, total demand cannot be met from the total supply from all other sources of supply. Therefore, the market player will not face material competitive constraints for its pivotal volume of supply, ie it is guaranteed a certain market share as a result of the lack of competing supply. The degree of a market player’s market power can

\(^{20}\) See for example the approach of Ofcom (2010) 'Review of the wholesale broadband access markets – Consultation on market definition, market power determinations and remedies', March 2010.
be assessed by looking at the pivotal volume of supply as a percentage of total demand, over a range of timeframes.\textsuperscript{21}

3.14. In relation to the GB gas market, a market player will be considered pivotal if market demand cannot be met without the deployment of some of that player's supply sources (including storage). A pivotal player and its related undertakings have the potential to significantly raise peak wholesale prices and/or reduce off peak prices as gas demand is relatively price inelastic.\textsuperscript{22}

3.15. Pivotality analysis is a well recognised method of assessing market power in the energy sector.\textsuperscript{23} Pivotality tests have been used to assess market power in other countries such as the USA and by the European Commission in the 2007 Sector Inquiry.\textsuperscript{24}

3.16. There are other ways to assess market power. Indeed, Ofgem uses market shares and market concentration analysis (eg HHIs\textsuperscript{25}) as indicators of market power. While market shares and market concentration analysis can provide useful insights on the extent of market power, if used in isolation these approaches have some shortcomings.

3.17. First, the gas market is characterised by differentiated goods, ie different degrees of substitutability. This makes the market definition challenging, as it is not clear which products should be included or excluded from the market definition. Therefore, the information derived from market shares and market concentration analysis can be less useful, making it problematic to solely rely on these measures.

3.18. Secondly, market shares and HHIs may not always be a good indicator of market power. In the gas market, at times when demand is high a player with a small market share may be required to meet prevailing demand and may therefore have the ability to affect market prices. In these circumstances, market shares may not be a particularly useful measure of the ability to exercise market power.

\textsuperscript{21} A model of pivotality needs to take into consideration a range of timeframes because the substitutability of different sources of gas supply can vary over different timeframes. This is discussed in more detail in Appendix 2.

\textsuperscript{22} Inelastic demand refers to a situation where the demand for a product does not decrease (increase) proportionately with a rise (fall) in its price.

\textsuperscript{23} See for example Newbery, Green, Neuhoff and Twoney (2004), "A Review of Monitoring of Market Power", Report prepared at the request of ETSO.


\textsuperscript{25} The Herfindahl-Hirschman Index (HHI) is a measure of the size of firms in relation to the industry and an indicator of the potential competition between them.
3.19. Given the potential shortcomings of market shares as a measure of market power, we propose to generally use pivotality analysis to test for SMP, while still considering market shares as a supporting tool for our analysis.

3.20. In assessing their own market power, market players may determine the level of their own pivotality. In particular, market players may want to look at the 'pivotal volume' indicator (i.e., the amount of supply that must be provided by the market player in order for demand to be met, assuming that the maximum available amounts of supply are being provided from all other sources) expressed as a percentage of total demand.

3.21. Ofgem believes that a player with a 'pivotal volume' in excess of ten per cent will generally be deemed to have SMP. A high pivotal volume of gas means there is a greater likelihood that the market player can significantly affect prices. We note that at pivotal volumes of in excess of ten per cent, the market player can profitably affect prices across a broad range of elasticity of demand forecasts. Therefore, Ofgem believes that it is very unlikely that a market player with pivotality levels in excess of ten per cent would not have SMP.

3.22. In addition, it is our view that for a market player to have SMP it is likely that it would need to be pivotal for a sustained period of time. We expect market players to consider the possible different timeframes, i.e., daily, weekly, monthly, quarterly, and seasonal. For example, a player will generally be deemed to have SMP if it is found to be pivotal for more than 28 separate days, or four separate weeks, or a month, or a quarter, or a season out of a year.

3.23. However, we note that the 'pivotal volume' test is a conservative test for market power, as it assumes competitive behaviour by all other players in the market. Hence, a pivotal volume test may underestimate a player's degree of market power. Therefore, it is possible that a market player may still have SMP even if its pivotal volume of gas is less than ten per cent.

3.24. Similarly, there may be reasons why different durations than those specified in paragraph 3.22 may lead us to consider a market player as having SMP. For example, a market player may have SMP if it is pivotal over a shorter period of time.

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26 For example, Ofgem’s analysis suggests that across the range of elasticity forecasts noted by the Competition Commission in its review of Centrica’s acquisition of Rough (i.e., from -0.1 to -0.3), pivotality of in excess of ten per cent would appear to allow a market player to profitably increase prices.

27 This recognises that there may be instances where a market player’s pivotality is transitory rather than sustained, e.g., as a result of a one-off, short-term shock (such as a pipeline outage or extreme weather), which are likely to give less cause for concern.
duration for a particularly high volume of gas and the nature of its pivotality can reasonably be predicted.

3.25. As a result, we propose that other structural factors and market outcomes also be considered to assess whether a player with lower volumes of pivotal gas, or which has pivotal volumes of gas over shorter periods could be deemed to have SMP.

3.26. The other structural factors that could be considered to determine whether a market player with lower volumes of pivotal gas has SMP could include an assessment of:

- elasticity of demand;
- the market player’s contracted position;
- the market player’s position across all related markets; and
- evidence of supply side substitution.

3.27. For example, other things being equal, a market player is more likely to have SMP at a given pivotality level where demand is inelastic (ie demand is not responsive to changes in price).

3.28. The assessment of market outcomes will involve an observation of market prices and profits. In particular, it will be important to consider whether a player which passes the tests above nonetheless has the ability and incentive to unduly affect market prices.

**Question 1:** Should pivotal gas volume be used when assessing SMP? If no, please explain why.

**Question 2:** Is the proposed figure of ten per cent of pivotal gas volume an appropriate threshold for defining SMP?

**Question 3:** Is it appropriate to also consider market outcomes to assess whether a market player may have SMP at lower levels of pivotality?

**Question 4:** Are there any additional factors that should be used when considering if a market player has SMP?
Chapter Summary

Ensuring that all the available storage capacity is offered to market participants in a transparent and non-discriminatory manner is fundamental to meeting the objectives of the Third Package in relation to TPA for gas storage facilities. This chapter provides Ofgem's preliminary views on capacity allocation mechanisms and on congestion management procedures including secondary markets and anti-hoarding arrangements.

Question 1: What factors should be taken into consideration when defining the maximum capacity of a group of facilities?

Question 2: What concerns, if any, do market participants have with Ofgem's preliminary views on capacity allocation? What concerns, if any, do storage users have with the use of allocation mechanisms other than auctions to allocate capacity, particularly standard services?

Question 3: Does the use of auctions provide market participants with sufficient safeguards that any market player with SMP will provide standard services to the market on a non-discriminatory basis? What other measures/safeguards in relation to how any market player with SMP allocates capacity could be considered?

Question 4: Do market participants consider that the prevailing anti-hoarding arrangements currently in place at GB storage facilities that are subject to the TPA regime are appropriate and compatible with the requirements of the Gas Regulation? If no, please explain why.

Question 5: Do market participants consider that the mix of interruptible and firm storage services is appropriate and compatible with the requirements of the Gas Regulation? If no, please explain why.

Question 6: Do market participants consider that the existing arrangements for the secondary trading of storage capacity are appropriate and compatible with the requirements of the Gas Regulation? If no, please explain why.

4.1. The European Commission has stated that TPA arrangements must operate in accordance with the specific requirements of the Gas Regulation and be objective; transparent; and non-discriminatory.28

4.2. The precise requirements regarding offering nTPA services are outlined in Articles 15, 17, 19, 20 and 22 of the Gas Regulation. In this chapter, we primarily consider the requirements associated with Article 17 of the Gas Regulation which sets out the requirements for capacity allocation mechanisms and congestion management arrangements for gas storage facilities.

4.3. In summary, under this article, SSOs are required to make the maximum storage facility capacity available to market participants, taking into account system integrity and operation. SSOs are also required to implement and publish non-discriminatory and transparent capacity allocation mechanisms, which provide appropriate economic signals for the efficient and maximum use of capacity and facilitate investment in new infrastructure. Further, the allocation mechanism should be compatible with the market mechanism including spot markets and trading hubs; be flexible and capable of adapting to evolving market circumstances; and be compatible with the connected network access systems.

4.4. In addition, the storage facility contracts should include measures to prevent capacity hoarding in cases where there is contractual congestion. Under Article 17(3), the SSO must offer unused storage capacity on the primary market without delay; and storage facility users who wish to re-sell their contracted capacity on the secondary market must be entitled to do so.

4.5. The requirements of Article 17 are supported by other provisions within the Gas Regulation including the requirement to offer services on a non-discriminatory basis in Article 15(a); the information provision requirements in Article 19; and the requirements for the trading of capacity rights specified in Article 22.

4.6. This chapter provides Ofgem's preliminary views on capacity allocation mechanisms and congestion management procedures. In the following section, we consider issues associated with defining the maximum capacity. This is followed by a consideration of the choice of capacity allocation mechanism. The final section provides Ofgem's views on anti-hoarding arrangements and secondary markets.

**Defining the maximum capacity**

4.7. Article 17(1) of the Gas Regulation requires 'that the maximum storage facility capacity shall be made available to market participants, taking into account system integrity and operation'.

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29 For storage facilities this must be done at least on a day-ahead and interruptible basis.
4.8. Under the Gas Regulation:

- 'storage capacity' is defined as ‘any combination of space, injectability and deliverability’ (Article 2(28));
- space is defined as 'the volume of gas which a user of a storage facility is entitled to use for the storage of gas' (Article 2(25));
- injectability is defined 'as the rate at which the storage facility user is entitled to inject gas into the storage facility' (Article 2(27)); and
- deliverability is defined as the rate at which the storage facility user is entitled to withdraw gas from the storage facility (Article 2(27)).

4.9. Under Article 19(2) of the Gas Regulation, SSOs are required to 'make public information on the contracted and available storage facility capacity on a numerical basis on a regular and rolling basis and in a user friendly standardised manner'.

4.10. Under Article 19(4) of the Gas Regulation, the SSO is required to 'make public the amount of gas in each storage facility, or group of storage facilities if that corresponds with the way in which access is offered to system users, inflows and outflows and the available storage capacity, including those for facilities exempted from third party access'.

4.11. In practical terms, the objective of these provisions is to ensure that storage capacity is not withheld from market participants, and that the available capacity can be utilised.

**The maximum storage capacity**

4.12. As recognised in Article 17(1) of the Regulation, the maximum storage capacity of a facility will reflect the maximum technical capacity of the infrastructure such as the dimensions of the vessel storing the gas, the capacity of associated pipework, the number and operational constraints of compressors, and the effect of the system integrity and operational requirements of the systems that the facility is connected to.

4.13. In practice, there will be a significant number of factors that SSOs will need to consider when determining the maximum storage capacity of the facility. Further, many of these factors will result in variance to the maximum technical storage capacity. For example, changes in the pressure of the connected network and the gas pressure within the storage facility may have implications for the injectability and deliverability of the facility. In addition, the specific technical attributes and characteristics of the facility can have implications for the extent to which the storage capacity may vary. For example, the storage capacity of large underground off shore facilities may be more difficult to quantify than for smaller, above ground on shore facilities.
4.14. Defining the maximum storage capacity is a complex issue and therefore Ofgem's preliminary view is that we would expect that any quantification of maximum storage capacity and associated variations to it to be justifiable and fully consistent with the SSO's technical parameters, operational processes, procedures and guidelines. Further, the operator should have records of such operating parameters and maintain associated documentation to enable it to retrospectively justify any determinations and declarations of the storage capacity of a facility (or group of facilities).

4.15. In addition, in line with the requirements of both Articles 19(2) and 19(4) of the Gas Regulation, we would expect SSOs to inform market participants of the maximum technical storage capacity of their facility(s). The SSO should provide market participants with information on and justification for any material variations in the maximum storage capacity.

4.16. Further, where practicable, SSOs could also consider making available information that assists market participants to understand the methodology for determining the maximum technical storage capacity and parameters which cause it to vary.\(^{30}\)

4.17. Providing market participants with information about the factors that influence the maximum technical storage capacity should provide greater certainty that SSOs are making the maximum technical capacity available to the market.

4.18. In the case of a dispute, Ofgem would expect SSOs to be able to demonstrate that they have been making at least the maximum technical storage capacity available to market participants. Under Article 20 of the Gas Regulation, SSOs are required to keep the relevant information for five years.\(^{31}\)

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\(^{30}\) Both Articles 19(2) and 19(4) require SSOs to make public information about the available capacity. The available capacity should be the residual between the maximum capacity and the capacity that has been contracted (19(2)) or that is being utilised (19(4)). Given this, market participants will require information about the maximum technical storage capacity.

\(^{31}\) Ofgem understands that SSOs may be able to offer more than the technical maximum capacity that is available under normal operating conditions. The SSO can manage the risk of potential excess demand on the technical capacity of the facility by engaging in some trading activities and/or varying the way the facility is operated.
Multiple facilities

4.19. In some cases, SSOs may operate a group of storage facilities and may offer services that utilise the combined storage capacity from more than one facility. For example, the SSO may offer storage services that utilise capacity at multiple facilities by both taking and delivering gas at the national balancing point (NBP) rather than at a facility's entry point. In such cases the gas could be stored at any of the storage facilities within the SSO's portfolio.

4.20. Ofgem would not expect that the operation of multiple facilities should have a significant impact on an SSO’s ability to determine the technical maximum storage capacity that it makes available to market participants. SSOs would be expected to be able to define the maximum technical storage capacity of each individual storage facility then aggregate to determine the maximum technical capacity available across the group of storage facilities.

4.21. In cases where the SSO offers services that utilise the storage capacity from more than one of its storage facilities, Ofgem's preliminary view is that the maximum available capacity may be made available with reference to the group of storage facilities.

4.22. In such cases, the SSO must ensure that the manner in which access is offered should be equivalent to at least the maximum technical storage capacity available to system users. That means that the mix of services offered by the SSO should exhaust the aggregate available capacity technically available across the group of storage facilities.

4.23. Given the requirements of Article 17 of the Gas Regulation that require SSOs to be able to demonstrate that they are making the maximum capacity available, Ofgem has taken the preliminary view that if an SSO proposes to offer services that utilise the storage capacity of more than one facility, ie at a portfolio level, that all the facilities are expected to be subject to the same regulatory arrangements.32

**Question 1:** What factors should be taken into consideration when defining the maximum capacity of a group of facilities?

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32 For example, the SSOs could operate one facility that has a minor facility exemption and another that must comply with the nTPA requirements. In such a case, the requirement to offer maximum capacity would apply only to the facility operated under the nTPA regime. If the SSO offers storage services that do not refer specifically to the facility operated under nTPA, it will be difficult for the SSO to demonstrate that the maximum technical capacity has been offered to the market.
4.24. In addition to offering access to the group of storage facilities, some SSOs offer services where the contracted capacity is 100 per cent firm — i.e. the customer can nominate its contracted capacity (injections, withdrawals and space) and the SSO will always make that capacity available to the customer irrespective of any technical constraints on the facility(s). An example of this is CSL's V-store services.33,34

4.25. Ofgem recognises that in order for an SSO to provide such services they may be required to buy (and sell) gas from other sources. For example the SSO might purchase gas at the NBP or have contractual arrangements with other providers of flexible gas.

4.26. Ofgem's preliminary view is that the ability for SSOs to provide innovative services, such as virtual storage services, is beneficial for the GB gas market. However, for SSOs that are part of a vertically integrated undertaking, it is important that such arrangements are consistent with the unbundling provisions of Article 15 of the Gas Directive. In such cases, Ofgem's preliminary view is that the SSOs can engage in the activities of buying and selling gas as long as there is a sufficient nexus between these activities and the provision of storage services.

4.27. In addition, any trading activities undertaken by the SSO in relation to delivery storage services must be completely ring fenced from any trading activities undertaken by the SSO's related undertakings.

**Allocation mechanisms - primary market**

4.28. The main requirements relating to capacity allocation mechanisms are set out in Article 17(2) of the Gas Regulation.

4.29. Under Article 17(2) SSOs are required to implement and publish non-discriminatory and transparent capacity allocation mechanisms which shall:

- provide appropriate economic signals for the efficient and maximum use of capacity and facilitate investment in new infrastructure (17(2)(a));

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33 More information on V-store products can be obtained from the CSL website (http://www.centrica-sl.co.uk)
34 Similarly, some SSOs have a contractual obligation to 'deliver whole' a customer's nominated firm capacity. In cases where there are technical capacity constraints at the storage facility, the SSO may need to procure gas from other market players in order to meet its contractual obligations.
be compatible with the market mechanisms including spot markets and trading hubs, while being flexible and capable of adapting to evolving market circumstances (17(2)(b)); and

be compatible with the connected network access systems (17(2)(c)).

4.30. In addition, Article 15(1)(a) of the Gas Regulation requires SSOs to offer services on a non-discriminatory basis to all network users that accommodate market demand; offering the same services to different customers under equivalent terms and conditions.

4.31. As noted in the previous section, the allocation mechanism should also be consistent with making the maximum capacity available to market participants.

4.32. These provisions are intended to ensure that storage services are allocated to the market participants that place the highest valuation on the capacity irrespective of who the customer is. Further, these provisions promote dynamic efficiency by requiring the allocation mechanisms to provide the appropriate economic signals for facilitating investment.

4.33. For most market players, the requirements set out in these provisions should generally be consistent with profit maximising behaviour. In general, market players without SMP have an economic incentive to maximise the number of participants that compete for their services, and to provide all available capacity to the market. This is because these players can not have a significant and sustained impact on wholesale gas prices (and thereby on the price for storage services), and therefore, would be unlikely to find a withholding strategy profitable. Similarly, any attempts by such players to discriminate between customers (or restrict access in order to increase the costs for competitors in related markets) should also not be profitable because of the availability of close substitute services.

4.34. In contrast, any market player with SMP could potentially benefit from withholding capacity from the market and/or discriminating between customers. As noted in Chapter 3, any market player with SMP may find it profitable to withhold gas from the market and/or discriminate between customers. Given this, any market player with SMP may face a higher risk of non-compliance with the requirements of the legislation.

Choice of allocation mechanism

4.35. Currently, there are two mechanisms that are primarily used for allocating storage capacity in the GB market. At Hornsea and the LNG facilities operated by
National Grid Gas auctions are used to allocate primary capacity. At Rough, CSL has adopted a first-come-first-served (FCFS) negotiation process for allocating capacity. However, CSL's allocation mechanism is also subject to a number of safeguards intended to ensure access is provided on a non discriminatory basis.\(^{35}\)

4.36. The Third Package does not stipulate a specific allocation process. However, both the legislation and subsequent guidance provided by the European Commission has stated the view that the process for allocating capacity must be objective, transparent and non discriminatory.

4.37. In cases where capacity is scarce (ie demand for storage services exceeds supply) and there is sufficient competition between customers for storage services, a market based approach to allocating capacity, such as auctions, is more likely to result in the efficient allocation of storage services. This is because auctions should result in capacity going to the customer who places the highest value on the storage, as reflected in the ultimate auction price.

4.38. Auctions may also make it easier for SSOs to demonstrate that the allocation process is free from discrimination. This is because the methodology for allocating capacity under auctions can be clearly specified, thereby reducing the potential for SSOs to use their discretion when accepting or rejecting bids. Similarly, it should be relatively straightforward to audit auction results to determine whether capacity has been allocated appropriately.

\(^{35}\) Under the Rough Undertakings, CSL is permitted to use allocation mechanisms other than auctions to allocate capacity. However, CSL (and Centrica) are subject to a number of additional requirements including:

- CSL must auction all 'Minimum Rough Capacity' and 'Additional Space' for the Storage Year which has not been sold (or reserved to Centrica) no less than 30 days before the start of that Storage Year. The Minimum Rough Capacity and Additional Space are defined in the Rough Undertakings.
- the amount of capacity that can be reserved by Centrica is capped;
- Centrica is not permitted to purchase capacity from CSL's primary allocation mechanism above the current 15 per cent reservation; and
- CSL must provide Ofgem with detailed sales reports on a monthly basis.

Under the Rough Undertakings Ofgem also has the power to investigate breaches of the Undertakings and provide CSL and Centrica with directions.

\(^{36}\) It could be possible that in a market where there is only a single or small number of (large) customers, that the customers will have the market power. In such cases it might be possible for such customers to use their position in the market to make the SSO sell capacity at a price that is insufficient for them to generate a return on its investment. The presence of buyer power does not currently appear to be a significant concern for participants in the GB gas market.
4.39. Further, auctions may also provide better signals for new investment as they should give the SSO more information about the level of demand for the storage services (for example whether there is excess demand for storage) and in relation to the value that market participants place on those services.

4.40. However, other open and transparent allocation mechanisms may achieve similar outcomes to auction processes. For example, alternative allocation mechanisms may be appropriate in the following circumstances:

- The market player does not have SMP. In such cases the risk to market participants that the market player might withhold capacity and discriminate between customers is reduced as such strategies are unlikely to be profitable.

- There is no scarcity of supply for the services being offered by the SSO. In cases where demand for contracting the SSO’s services (particularly standard products) is likely to be less than the technical capacity of the storage facility the risks that the allocation of capacity will be inefficient or that SSOs could discriminate between customers are low.

- The SSO is selling new or innovative products. In such cases, demand for the products is likely to be low and therefore there is an insufficient level of customer demand to make running an auction practical.37

4.41. Given the above, Ofgem's preliminary view is that using auctions to allocate capacity (particularly for standard services38) will generally lower the potential risk of an SSO being found non compliant with the Gas Regulation. However, SSOs may consider alternative allocation mechanisms.

4.42. In cases where allocation mechanisms other than auctions are used, the SSO will need to demonstrate that the mechanism for allocating capacity deliver a similar degree of objectivity, transparency and non discrimination.39 Some of the factors that the SSO should consider include ensuring that:

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37 SSOs may face a greater risk of non compliance with the nTPA regulatory regime if a high proportion of capacity was used to offer innovative services, or services were differentiated to the extent that there would be low demand for the capacity.

38 'Standard services' are considered further in chapter 5.

39 For example, for a new facility, SSOs could consider a process for allocating capacity such as that defined in ERGEG’s (non-binding) "Guidelines for Good Practice on Open Season Procedures (GGPOS)" (http://www.energy-regulators.eu/portal/page/portal/EER_HOME/EER_PUBLICATIONS/CEER_ERGEG_PAPERS/Guidelines%20of%20Good%20Practice/Gas/C06-GWG-29-05c).
all market participants are aware of how the available capacity is to be offered to the market (ie some form of public notification that includes information about the types of services that are available and the timing for the allocation process);

all market participants have the relevant information to determine how they can become a customer;

all market participants have information about the capacity allocation process (ie the process for accepting or rejecting bids/offers); and

it can demonstrate that both systems for accepting bids and process for allocating the capacity are non discriminatory.

4.43. In contrast, a bilateral negotiation which is not part of an objective, transparent and non discriminatory process will not meet the requirements of the Gas Regulation.

4.44. For any market player with SMP, Ofgem has taken the view that, given the additional risks associated with demonstrating compliance, we would generally expect such market players to use auctions to allocate standard services. As will be discussed in more detail below, Ofgem would expect that the SSO sets the reserve price for the auction(s) based on the relevant marginal cost reference.

Question 2: What concerns, if any, do market participants have with Ofgem's preliminary views on capacity allocation? What concerns, if any, do storage users have with the use of allocation mechanisms other than auctions to allocate capacity, particularly standard services?

Question 3: Does the use of auctions provide market participants with sufficient safeguards that any market player with SMP will provide standard services to the market on a non-discriminatory basis? What other measures/safeguards in relation to how any market player with SMP allocates capacity could be considered?

4.45. Further, in order to meet the requirements of Article 17(1), Ofgem would also expect that SSOs will be able to demonstrate that the maximum available storage capacity is offered to market participants a sufficient amount of time before the start of each storage year (1 May). In cases where the capacity remains unsold (or is not nominated), Ofgem would expect this capacity to be offered in the next allocation round, or continue to be offered via the open, transparent and non discriminatory negotiation process.

Setting reserve prices

4.46. Setting an appropriate reserve price is important because it helps address the risk that market players, particularly those with SMP, could use the reserve price as a means of withholding storage capacity and/or discriminating between customers.
4.47. For market players that do not have SMP the potential incentives for using reserve prices to withhold gas or discriminate against some customers is low. Given this, Ofgem does not intend to define methodologies for how SSOs that do not have SMP should set their reserve prices. However, such SSOs would be expected to be able to demonstrate that the reserve prices they set are not being used to withhold capacity from the market or discriminate against some customers.

4.48. In contrast any market player with SMP may have an incentive to use reserve prices to withhold capacity or discriminate against some customers. For example, a market player with SMP might ensure that the reserve price for the storage capacity is set at a level that either prevents or makes it expensive for its competitors in related markets to buy storage services. Alternatively, a market player could potentially vary the reserve price applied to different customers (such as related undertakings) or at different points in time in order to increase costs for some competitors in the related markets.

4.49. For any market player with SMP, Ofgem has taken the view that we would expect these players to set the reserve price for their standard storage services based on the relevant marginal cost reference. As stated above, Ofgem's preliminary view is that the short run avoidable cost\(^{40}\) should be used for short term services; and the long run marginal cost\(^{41}\) should be used for long term services.\(^{42}\) Setting reserve prices on this basis should ensure that SSOs do not have to sell services at a loss. For example, for the short run, prices above the short run avoidable cost ensure that the SSO's revenues exceed its operating costs; while long run marginal costs ensure that the SSO is covering the costs of any additional investment which is needed to deliver long term services (which includes a rate of return which is adjusted for risk).

4.50. Setting reserve prices on this basis should reduce the risk that the SSO (which has SMP) could be deemed to be not offering all the available capacity to the market; and reduce the variability of the reserve prices and thereby lower

\(^{40}\) Short run avoidable costs are generally defined as the costs that could be avoided if the service was no longer provided. Avoidable costs can include both variable costs associated with the particular service as well as some fixed costs that could otherwise be avoided.

\(^{41}\) Long run marginal cost is generally defined as the cost of supplying an additional unit of a good or service when capacity can be varied. It comprises not only operating costs, but also the capital costs (including a risk adjusted rate of return on the investment) associated with increasing productive capacity to deliver the additional unit. Note that the long run marginal cost is equivalent to the long run avoidable cost.

\(^{42}\) In cases where capacity is scarce, it is likely that the prices paid for storage services will exceed a reserve price based on the reference marginal cost.
the risk that market participants could suggest that the reserve price is being used to discriminate between customers.

**Congestion management procedures**

4.51. In situations where capacity is scarce, it is particularly important that unused capacity is returned to the market and that there are sufficient procedures in place to prevent capacity holders and/or SSOs from hoarding capacity. Article 17(3) of the Gas Regulation sets out the principles that should apply in the case of 'contractual congestion'.

4.52. Under this article, storage facility contracts are required to 'include measures to prevent capacity hoarding, by taking into account the following principles, which shall apply in cases of contractual congestion: the SSO must offer unused storage capacity on the primary market without delay; for storage facilities this must be done at least on a day ahead and interruptible basis' (Article 17(3)(a)); and 'storage facility users who wish to re-sell their contracted capacity on the secondary market must be entitled to do so' (Article 17(3)(b)).

4.53. The following section outlines Ofgem's preliminary views on anti hoarding arrangements. We then provide our views on secondary markets.

**Anti hoarding arrangements**

4.54. In addition to the requirements of Article 17(3)(a), other provisions of the Gas Regulation also have implications for the arrangements SSOs put in place to prevent capacity hoarding. For example, the mechanism for allocating interruptible capacity must also meet the requirements of Article 17(1) and 17(2) of the Gas Regulation and be objective, transparent and non-discriminatory.

4.55. Other provisions of the Gas Regulation that are also relevant for how the anti hoarding arrangements are put in place include Article 15(2)(a) which requires SSOs to 'offer both firm and interruptible access to services; the price of the interruptible capacity shall reflect the probability of interruption'; and Article 15(2)(c) which states that the SSO shall offer 'storage facility users both bundled and unbundled services of storage space, injectability and deliverability.'

4.56. The objectives of these provisions are to ensure that those parties that value the capacity most can gain access to it; and to limit the potential for

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43 Article 2(1) paragraph 19 of the Gas Regulation defines contractual congestion as a 'situation where the level of firm capacity demand exceeds the technical capacity'.
capacity holders to withhold capacity in order to limit competitors' access to storage or increase wholesale gas prices (and price of storage services).

4.57. Currently, SSOs that are subject to the nTPA regime in the GB market return firm capacity that has not been nominated to the market via Use It or Lose It (UIOLI) arrangements. In particular, SSOs offer a range of interruptible services that allow storage system users to purchase such capacity.

4.58. While the specific arrangements for offering interruptible capacity vary across SSOs, there are some common elements. For example, both CSL and SSEHL offer services with different levels of interruption, the prices of these services also decreases as the likelihood of interruption increases. These services also appear to be offered on at least a day ahead basis. In both cases, information on the interruptible capacity is provided via the SSO's internet based platform for managing nominations. Both SSOs also allow customers that do not hold firm capacity to purchase interruptible services (as long as they sign the standard services contract and meet the credit requirements).

4.59. Ofgem understands that interruptible services from Rough and Hornsea are heavily utilised by customers.

4.60. Ofgem’s preliminary view is that the anti hoarding arrangements that are currently in place at the GB storage facilities that are subject to the nTPA regime are generally consistent with the requirements of the Gas Regulation.

4.61. As the legislation requires that the unused capacity be returned to the primary market, Ofgem would also expect that SSOs adhere to the principles outlined in the choice of allocation mechanism section above when allocating interruptible services.

4.62. In line with the requirements of the Gas Regulation, Ofgem would expect the methodology used for pricing interruptible services to result in lower prices for services with a higher probability of interruption.

4.63. In order to make such arrangements function, it will also be important that SSOs meet the requirements of Articles 19(2) and 19(4) and provide market participants with sufficient information about the available capacity and that such information is made available on a daily basis. Customers will require this

44 Customers that hold capacity rights at a storage facility must inform the SSO before they intend to utilise their contracted capacity (ie inject or withdraw gas). This is referred to as the nomination process. The deadline for when customers can nominate to use their capacity will vary across SSOs and across different types of services.
information in order to make decisions about purchasing capacity. In addition, such information will provide market participants with a better basis for determining whether SSOs are making the maximum capacity available.

**Question 4:** Do market participants consider that the prevailing anti hoarding arrangements currently in place at GB storage facilities that are subject to the TPA regime are appropriate and compatible with the requirements of the Gas Regulation? If no, please explain why.

**Question 5:** Do market participants consider that the mix of interruptible and firm storage services is in line with the requirements of the Gas Regulation? If no, please explain why.

**Secondary markets**

4.64. In addition to the requirements of Article 17(2)(c) of the Gas Regulation, Article 22 of the Gas Regulation requires SSOs to 'take reasonable steps to allow capacity to be freely tradable on and to facilitate such trade in a transparent and non discriminatory manner. Every such operator shall develop harmonised ... storage contracts and procedures on the primary market to facilitate secondary trade of capacity and shall recognise the transfer of primary capacity rights where notified by system users'.

4.65. From a practical perspective, secondary trading is important because it allows storage capacity to be transferred to market participants that place a higher value on the capacity at different points in time. In addition, secondary trading provides market participants with the ability to adjust their position in the market and respond to changes in their circumstances.

4.66. For example, a market participant may not have needed the storage capacity when it was initially being allocated, but changes in its market position result in it subsequently placing a higher value on the storage services than other market participants that purchased the storage services in the primary allocation process.

4.67. The provisions of the Third Package are intended to ensure that SSOs have in place arrangements which facilitate the trading of capacity.

4.68. Currently, capacity holders at the GB storage facilities subject to the TPA requirements are able to trade capacity under the terms of the relevant standard services contracts. Further, both CSL and SSEHL facilitate the trading process via a trading platform which allows capacity holders to notify other system users that they have capacity for sale.

4.69. Despite the fact that SSOs currently do facilitate the secondary trading of storage capacity, Ofgem understands that secondary trading is not heavily utilised in the GB market. This may reflect the availability of services on a year
ahead basis and the availability of interruptible services. However, it may also be the case that other contractual, structural or other impediments reduce the level of secondary trading of storage capacity in the GB market.

4.70. Ofgem’s preliminary view is that the arrangements for secondary trading of storage capacity that are currently in place at the GB storage facilities that are subject to the nTPA regime are generally consistent with the requirements of the Gas Regulation.

4.71. This view has been reached on the basis that SSOs are providing platforms that allow customers to trade their contracted capacity; to offer both bundled and unbundled services; and to purchase capacity on the secondary market without needing to be a primary capacity holder.

4.72. To further facilitate secondary trading, SSOs may also consider allowing customers to offer their capacity via the primary market (by requesting that the SSO offer the capacity on the customer’s behalf). In cases where the customer returns capacity to the SSO to sell via the primary market, the customer should receive the revenue from the sale of that capacity. 

4.73. In addition, Ofgem would expect that primary capacity holders would also have the ability to trade their capacity for different timeframes. For example, a market player may have contracted firm capacity rights for five years. The market player should have the ability to either transfer that capacity to another party for the balance of the contracted period, or for a period of time within the five years. Such arrangements would be particularly important in circumstances where a large proportion of the capacity is sold under long term contracts.

4.74. Finally, in developing arrangements for secondary trading, all SSOs will need to ensure that contractual requirements (such as credit arrangements) do not unduly act as a barrier to the secondary trading of capacity.

**Question 6:** Do market participants consider that the existing arrangements for the secondary trading of storage capacity are appropriate and compatible with the requirements of the Gas Regulation? If no, please explain why.

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45 However, the SSO may charge a cost reflective fee for providing the service.
5. Main commercial conditions and service specification

Chapter summary

Under the Third Package, SSOs are required to provide a mix of services to the market under non-discriminatory terms and conditions. This chapter outlines Ofgem's preliminary views regarding how SSOs could consult the market to reduce the risk that their main commercial conditions and the services they provide do not discriminate against system users or classes of user.

Question 1: What levels of consultation should SSOs undertake when developing main commercial conditions for the first time and when proposing amendments to the standard terms and conditions?

Question 2: Are there aspects of an SSO’s main commercial conditions where small changes are likely to have a significant impact on system users?

Question 3: Should SSOs be expected to formally consult or test the market before changing existing services or offering any new services to the market? If no, please explain why.

Question 4: Should SSOs be expected to offer a minimum threshold of capacity on a short term basis? How should SSOs determine the minimum proportion of capacity that should be sold on a short term basis?

Question 5: Should SSOs be expected to offer bundled capacity as part of their ‘standard services’? Should SSOs be expected to also offer unbundled capacity as part of their ‘standard services’? Please explain your views.

5.1. Under the Third Package, SSOs are required to provide market participants with a mix of services under non-discriminatory terms and conditions. These requirements are set out in Article 15 of the Gas Regulation and Article 33 of the Gas Directive.

5.2. This chapter outlines Ofgem’s preliminary views regarding how SSOs could consult the market in order to reduce the risk that either their contractual arrangements or the mix of services offered could be deemed to be discriminatory against system users or classes of user.

Consulting the market

5.3. Article 33(3) of the Gas Directive requires SSOs to publish the main commercial conditions for the use of storage annually. Further, this article requires SSOs to consult system users when developing the main commercial conditions.
5.4. DECC will implement the requirements of Article 33(3) of the Gas Directive and is currently consulting on whether these provisions will be implemented through legislation or included in a licence for gas storage operators.\(^{46}\) Ofgem’s views on consulting the market may need to be further refined once the provisions have been implemented.

5.5. From an economic perspective, the requirement to consult the market when developing main commercial conditions is intended to mitigate the risk that SSOs could use contractual arrangements to discriminate between facility users (or potential facility users).

5.6. In the case of the market players that are currently subject to TPA requirements in the GB market, the main commercial conditions are set down in the standard service contract (SSC) and in some cases other associated documents (for example, standard credit agreements). In line with Section 19B(1) of the Gas Act and 17D(1) of the Petroleum Act both CSL and SSEHL publish their SSCs annually on their respective websites.\(^{47}\)

5.7. Ofgem understands that the main commercial conditions used by both CSL and SSEHL, in large part, reflect the outcome of an Ofgas\(^{48}\) led consultation process in 1998 and 1999. That workstream established the framework which allowed storage services in the GB market to be removed from the regulated asset base.

5.8. Since that time, the commercial arrangements for selling capacity at Rough and Hornsea have been reviewed and consulted on by Ofgas, Ofgem and the Competition Commission when the ownership of these assets have changed hands.\(^{49}\)

5.9. Currently, only CSL is obliged to consult the market before it makes changes to its main commercial conditions as set out in its SSC. The process, which is set down in the Rough Undertakings, requires CSL to conduct a formal consultation


\(^{47}\) CSL also publishes its main commercial conditions (contract) for its V-store services annually. V-store services are not covered by the SSC and the capacity used to offer these services is not subject to the Rough Undertakings.

\(^{48}\) Ofgas refers to the Office of Gas Regulation. Ofgas and Offer (Office of Electricity Regulation) were merged to form Ofgem in 2000.

\(^{49}\) In its submission to the Competition Commission in 2003, Centrica argued that the SSC had been developed following an extensive consultation process and provided protection to both the SSO and customers. Given this, it requested that the SSC (which was set to expire in 2004) be extended indefinitely.
lasting at least one month. CSL must then seek agreement from Ofgem before amending its SSC.\textsuperscript{50}

5.10. SSEHL is not required to formally consult the market (or seek Ofgem’s approval) before amending its SSC. Ofgem understand that SSEHL has not made any substantive changes to the main commercial conditions of the original SSC. However, SSEHL notifies the market of all the minor amendments it has made, and notifies the market when it publishes its main commercial conditions each year.

5.11. Under the requirements of the Third Package, all SSOs that are subject to the nTPA regime are required to consult system users when developing their main commercial conditions services offered from their facilities. Ofgem has also taken the view that these provisions include circumstances in which the SSO is amending the existing main commercial conditions.\textsuperscript{51}

5.12. Article 33(3) of the Gas Directive does not indicate the level of consultation SSOs should undertake. However, we consider that there are some principles that SSOs would generally be expected to demonstrate when developing or amending their main commercial conditions. These include that:

- all market participants are made aware of the proposed main commercial conditions, or proposed amendments to the main commercial conditions. For example, the SSO must publish all relevant information on its website and could also notify all market participants via the trade press.

- market participants are provided with both a sufficient amount of time to consider the proposed commercial conditions and respond to the SSO. For example, developing the SSCs for Rough and Hornsea involved multiple consultations, while the Competition Commission requires a minimum of a month for consulting on changes to CSL’s SSC.

- the SSO has clear criteria for assessing responses to the consultation and can justify that its final main commercial conditions are not intended to discriminate against facility users. For example, the SSO should be able to justify why it has

\textsuperscript{50} CSL last amended its SSC in 2008. The amendments sought to allow CSL to increase the number of services that it could offer under its SSC. As part of its month long consultation process, CSL also conducted an industry workshop. As required by the Undertakings, CSL provided Ofgem with all the responses to its consultation. Following an assessment of the information provided Ofgem decided not to veto the proposed changes to the SSC.\textsuperscript{51} As previously stated, Ofgem views on the provisions of the Gas Directive are provisional, and may change depending on how these provisions are transposed into GB legislation.
decided to accept or reject a market participant’s proposed changes to the main commercial conditions. The SSO should also ensure that its criteria for accepting/rejecting changes to the final main commercial conditions do not unduly discriminate against particular users, particularly in favour of related undertakings.

5.13. Ofgem would generally expect that the level of consultation (ie the amount of information provided, the length of time for the consultation, and the process for engaging market participants such as workshops) undertaken by the SSO will be reflective of factors such as:

- the significance of the proposed changes. For example, Ofgem would expect that SSOs that are developing the main commercial conditions for a new service to conduct a comprehensive market consultation. Similarly, there are likely to be certain commercial conditions that have far greater implications for system users than others (eg changes in credit arrangements may require more consultation than proposed changes to changes in timing of nominations). Ofgem would expect the level of consultation to be more extensive when the proposed changes are likely to have a significant impact on system users.

- the SSO’s position in the market. For example, the impact on the market (and associated risks) of changes to the main commercial conditions of a market player with SMP are likely to be greater than for market players without SMP. Given the above, Ofgem would generally expect any market player with SMP to conduct a more extensive consultation process.

5.14. Ofgem’s preliminary view is that SSOs are best placed to determine the level of consultation that is most appropriate when developing their main commercial conditions. Similarly, Ofgem’s preliminary view is that it does not need to approve the consultation process or the final form of the main commercial conditions for the purposes of the Third Package.

**Question 1:** What level of consultation should SSOs undertake when developing main commercial conditions for the first time and when proposing amendments to the standard terms and conditions?

**Question 2:** Are there aspects of an SSO’s main commercial conditions where small changes are likely to have a significant impact on system users?

5.15. In order to demonstrate compliance with the requirements of the Third Package, Ofgem would expect that the SSO will be able to demonstrate that appropriate measures were taken to ensure that all customers that could contribute to market demand were consulted, and, that their views were given appropriate consideration in determining the main commercial conditions.
**Offering a mix of services**

5.16. Under article 15(2) of the Gas Regulation, SSOs are required to:

- provide both firm and interruptible third party access services; the price of interruptible capacity shall reflect the probability of interruption (Article 15(2)(a));
- offer storage facility users both long and short term services (Article 15(2)(b)); and
- offer storage facility users both bundled and unbundled services of storage space, injectability and deliverability (Article 15(2)(c)).

5.17. These provisions serve two important roles. First, they help address the risk of capacity hoarding by further underpinning the congestion management procedures required by Article 17(3) of the Gas Regulation (see chapter 4). Second, they should facilitate access by requiring SSOs to provide a mix of services.

5.18. Currently, facilities that are subject to the nTPA requirements in the GB market offer the majority of capacity as standard bundled units (SBUs) on a year ahead basis. SSOs can also sell the SBUs for longer durations. In addition, customers can purchase (both bundled and unbundled) interruptible services on a range of durations. Some capacity is also offered as firm, unbundled services.

5.19. The mix of services offered from the Rough and Hornsea facilities is largely the result of the extensive consultation process undertaken in 1998 in order to develop the SSC for these facilities (discussed above). At that time, it was considered that a defined SBU would provide the SSOs with a product that would meet the needs of the market and be straightforward to sell via an auction process. The ratio of deliverability, injectability and space for the SBU was broadly aligned with the technical (maximum) capacities of each facility. Ofgas also concluded that making the SBUs available on a mix of year ahead and five year contracts would provide market participants with sufficient certainty regarding their storage capacity while competition in the market developed (ie the five year product) and sufficient flexibility to adjust their portfolio on an ongoing basis (year ahead products).

5.20. Since that time, CSL has increased the number of services that it offers under the SSC. In addition, it has developed other services that are not subject
to the SSC as they utilise the ‘incremental capacity’ at Rough.\textsuperscript{52} As noted above, CSL was required to formally consult on the additional services made available via its SSC.

5.21. Ofgem has taken the view that there is value to the market in SSOs defining and offering some basic services (products) from their facilities (or portfolio of facilities). Such services are likely to be those that are demanded by a significant proportion of the SSO’s customers. In the case of the existing facilities in the GB market that are subject to the nTPA requirements, Ofgem considers that those firm products sold under the SSC would constitute ‘standard services’.

5.22. Ofgem recognises that the mix of services (including standard services) will vary across SSOs. Both the design of services (for example, ratios for bundled product) and the general mix of services offered will be influenced by a range of factors including the technical parameters of the facilities in the SSO’s portfolio and prevailing market conditions (for example, availability and types of services offered from other flexible sources of gas supply).

5.23. Given this, Ofgem has taken the preliminary view that SSOs would generally be expected to test market demand when determining the mix of services they provide, or when they are considering a significant change in the mix of services they offer.

**Determining the mix of services**

5.24. There are various methods by which SSOs could test demand to determine the mix of the services that they offer. For example, for a new storage facility or significant increases in the capacity of an existing storage facility, SSOs could consider:

- undertaking a formal consultation process to seek stakeholder views about demand for new or different products.

- offering the proposed services directly to the market under a transparent, objective and non-discriminatory allocation mechanism. In this case, SSOs could consider offering individual or multiple services to the market via an open allocation process to determine whether or not services are demanded by market participants.

\textsuperscript{52} Incremental capacity is defined in the Rough Undertakings as capacity created at Rough achieved through investment in storage operations by CSL which is incremental to the Minimum Rough Capacity, Additional Space and Further Additional Space.
5.25. We would generally expect market demand to be tested whenever an SSO is offering new or additional capacity or services, when SSOs are considering significant changes in the mix of services they intend to offer, or when there is a significant change in market conditions. However, when an SSO offers a tailored service for one customer, it must be able to demonstrate that other market participants have the ability to purchase the same services under the same terms and conditions.

5.26. Further, we would expect the testing of market demand to be more extensive when the SSO's actions are likely to significantly change the mix of services that are offered in the GB market.

**Question 3:** Should SSOs be expected to formally consult or test the market before changing existing services or offering any new services to the market? If no, please explain why.

**Contract length**

5.27. A number of market participants have sought Ofgem’s views regarding the appropriate mix of short and long term contracts that SSOs should offer.

5.28. Under Article 15(2)(b) SSOs are required to offer to storage facility users both long and short term services. Ofgem recognises that market participants require access to a mix of long and short term services. Short term contracts allow market participants to enter and adjust their portfolio of flexible gas supply, while long term contracts provide greater security and certainty. For SSOs, long term contracts can provide an important tool for underwriting investment, while short term services (ie one year or less) may provide SSOs with opportunities to realise the higher (but more volatile) returns from selling the capacity.

5.29. Currently in the GB market the majority of capacity subject to the nTPA regime is sold on a year ahead basis. However, Ofgem understand that some capacity has been sold for durations of up to 10 years.

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53 In relation to a new storage facility, SSOs could also test market demand for different services as part of an open season process. SSOs may refer to ERGEG’s (non-binding) Guidelines for Good Practice on Open Season Procedures (GGPOS) for more information regarding open season procedures.

54 Approximately 80 per cent of capacity at Rough is sold on annual contracts, and approximately 60 per cent of capacity at Hornsea is sold on annual contracts.
5.30. It is Ofgem’s view that Article 15(2) of the Gas Regulation requires SSOs to offer some firm capacity on a short term basis via the primary allocation mechanism. Ofgem does not intend to specify a minimum threshold for the amount of capacity that must be offered on a short term basis. However, the more the SSO can demonstrate that the mix of contract durations it offers is linked to market demand the lower is the risk that they could be found in breach of the nTPA requirements.

5.31. For new facilities or significant expansions in capacity, SSOs may need to underpin the investment by selling capacity on long term contracts.

5.32. When SSOs are intending to use long term contracts to underpin new investments, Ofgem would generally expect that the SSOs consider ways to ensure that the mechanism for offering the capacity to the market is open, transparent and non discriminatory (refer to chapter 4). In addition, Ofgem would generally expect that the maximum length of contracts offered to underpin new investments is consistent with a reasonable payback period for the investment.

5.33. In cases where the decision of the SSO is likely to have a significant impact on the level of capacity that is available on a short term basis in the GB market, Ofgem would expect that the SSO conducts extensive market testing of demand before changing its product mix.

5.34. Ofgem has also taken the view that the higher the proportion of capacity that SSOs sell on long term contracts, the more important it will be for the SSO to be able to demonstrate that it is facilitating the secondary trading of capacity and that its congestion management procedures prevent capacity hoarding.

**Question 4:** Should SSOs be expected to offer a minimum threshold of capacity on a short term basis? How should SSOs determine the minimum proportion of capacity that should be sold on a short term basis?

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55 Under clause 2.2(a) of the Rough Undertakings, CSL will (and Centrica will ensure that CSL will) offer for sale at least 20 per cent of Minimum Rough Capacity on annual contracts.  
56 Ensuring that the arrangements are objective, transparent and non discriminatory is particularly important when the capacity is being sold to related undertakings on a long term basis.
Other service specification requirements

5.35. As noted above, the provisions of Article 15(2)(a) and 15(2)(c) of the Gas Regulation require SSOs to offer services on both a firm and interruptible basis; and offer bundled and unbundled services.

5.36. In relation to interruptible capacity, Ofgem has taken the preliminary view that, much like firm capacity, interruptible services should be available on a mix of durations and on both a bundled and unbundled basis. The mix of these services should also reflect demand for such services.

5.37. In relation to offering both bundled and unbundled services, Ofgem understands that bundled units provide customers with greater certainty about their ability to make use of the space that they purchase from the SSO, and can also benefit the SSO in ensuring that its maximum technical storage capacity is being offered to the market. In contrast, unbundled capacity may allow customers to tailor the capacity they purchase to meet their particular storage requirements. It may also provide SSOs with the ability to offer more storage services to the market.

5.38. Further, the ability to offer unbundled services should also facilitate secondary trading of capacity, as customers may be able to sell their unused injection rights, withdrawal rights or space to other parties.

5.39. Given the above, Ofgem’s preliminary view is that we would generally expect that SSOs offer some firm bundled capacity as part of their ‘standard services’. However, the amount of capacity that SSOs should offer as bundled and unbundled services should reflect demand for the services at the facility.

**Question 5:** Should SSOs be expected to offer bundled capacity as part of their ‘standard services’? Should SSOs be expected to also offer unbundled capacity as part of their ‘standard services’? Please explain your views.
6. Transactions with related undertakings

Chapter summary
This chapter considers the implication of the requirements of the Third Package for transactions between SSOs and their related undertakings. As part of this chapter we also set out the unbundling requirements of Article 15 of the Gas Directive and the confidentiality requirements of Article 16 of the Gas Directive.

Question 1: What factors should Ofgem take into consideration when assessing a market player’s flexible gas requirements and, in particular, need for storage services?

6.1. A fundamental requirement of the Third Package for SSOs is to ensure that they refrain from discriminating between system users or classes of system user, particularly in favour of related undertakings (Gas Directive, Article 13(1)(b)).

6.2. This requirement is supported by other provisions within both the Gas Directive and the Gas Regulation. As noted in previous chapters, Articles 15 and 17 of the Gas Regulation require that the contractual arrangements and allocation mechanisms are non-discriminatory. Further, Article 15 of the Gas Directive sets out the unbundling requirements for SSOs that operate facilities for which access is economically and/or technically necessary. In addition, Article 16 of the Gas Directive sets out requirements for the management of commercially sensitive information.

6.3. This chapter considers the implication of these provisions for transactions between SSOs and their related undertakings. First we ask for market participant views on the unbundling of SSOs from their related undertakings. The following section outlines Ofgem’s preliminary views on transactions between SSOs and their related undertakings, particularly in relation to any market player with SMP.

57 Ofgem is unable to provide guidance regarding how it will interpret the requirements of Article 15 and 16 of the Gas Directive until DECC clarifies how it intends to implement these provisions. However, as DECC has indicated that these provisions will apply to SSOs that operate facilities for which access is technically and/or economically necessary, Ofgem is seeking views about the provisions.
Unbundling requirements

6.4. Article 15 of the Gas Directive sets down provisions for unbundling of SSOs that operate storage facilities for which access is economically and/or technically necessary from the other part of a vertically integrated undertaking which have production or supply activities.

6.5. Article 15(2) of the Gas Directive sets down the minimum criteria for ensuring that SSOs are independent from their related undertakings. These include that:

- persons responsible for the management of the SSO shall not participate in company structures of the integrated natural gas undertaking responsible, directly or indirectly, for the day-to-day operation of the production and supply of natural gas (Article 15(2)(a));

- appropriate measures shall be taken to ensure that the professional interests of persons responsible for the management of the SSO are taken into account in a manner that ensures that they are capable of acting independently (Article 15(2)(b));

- the SSO shall have effective decision making rights, independent from the integrated natural gas undertaking, with respect to assets necessary to operate, maintain or develop the storage facilities. This shall not preclude the existence of appropriate coordination mechanisms to ensure that the economic and management supervision rights of the parent company in respect of return on assets regulated indirectly in accordance with Article 41(6) in a subsidiary are protected. In particular, this shall enable the parent company to approve the annual financial plan, or any equivalent instrument, of the storage system operator and to set global limits on the levels of indebtedness of its subsidiary. It shall not permit the parent company to give instructions regarding day-to-day operations, nor with respect to individual decisions concerning the construction or upgrading of storage facilities, that do not exceed the terms of the approved financial plan, or any equivalent instrument (Article 15(2)(c)); and

- the SSO shall establish a compliance programme, which sets out measures taken to ensure that discriminatory conduct is excluded, and ensure that observance of it is adequately monitored. The compliance programme shall set out the specific obligations of employees to meet those objectives. An annual report, setting out the measures taken, shall be submitted by the person or body responsible for monitoring the compliance programme to the regulatory authority and shall be published (Article 15(2)(d)).
6.6. The aim of these provisions is to ensure that SSOs are sufficiently independent from their related undertakings, so that their ability (and incentives) to discriminate in favour of their related undertakings is diminished.

6.7. Ofgem understands that the SSOs that operate facilities that are subject to the TPA regime in the GB market are unbundled both legally and operationally.\(^{58}\) In the case of CSL, its unbundling (separation) requirements are set out in the Rough Undertakings.\(^{59}\)

6.8. DECC will implement the unbundling provisions set out in Article 15 of the Gas Directive. In its July 2010 consultation, DECC has stated that the unbundling requirements will only apply to SSOs that operate facilities for which access is deemed technically and/or economically necessary.\(^{60}\) DECC is currently considering responses to the consultation including whether these provisions should be implemented through legislation or included in a licence for SSOs.

**Confidentiality requirements**

6.9. Article 16 of the Gas Directive sets out the confidentiality requirements for all SSOs in relation to the management of commercially sensitive information.\(^{61}\) In particular, all SSOs must:

- ... preserve the confidentiality of commercially sensitive information obtained in the course of carrying out its activities, and shall prevent information about its own activities which may be commercially advantageous from being disclosed in a discriminatory manner. In particular, it shall not disclose any commercially sensitive information to the remaining parts of the undertaking, unless this is necessary for carrying out a business transaction (Article 16(1));

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\(^{58}\) In its consultation on the implementation of the Third Package, DECC notes that SSEHL believes that it meets the requirements for legal and operational unbundling specified in Article 15 of the Gas Directive.

\(^{59}\) The requirements for the legal, financial and physical separation of CSL from all other Centrica businesses is set out in Section 5 of the Rough Undertakings. Among other things, these provisions set out detailed requirements regarding the management and reporting arrangements for CSL, the types of services that can be shared within the group; and requires CSL to be located at a physically separate site from all other Centrica businesses.


\(^{61}\) This provision will apply to both SSOs with facilities for which access is technically and/or economically necessary and SSOs that operate facilities for which access is not economically and/or technically necessary.
... not, in the context of sales or purchases of natural gas by related undertakings, misuse commercially sensitive information obtained from third parties in the context of providing nTPA (Article 16(1)).

6.10. These provisions are intended to provide storage users with comfort that SSOs will not provide information to the market in a discriminatory manner. They are also intended to ensure that the SSO will not misuse any commercially sensitive information it receives from market participants.

6.11. Currently, storage facilities that are subject to TPA requirements in the GB market have confidentiality provisions as part of their standard services contracts. For CSL, the requirements regarding the use of commercially sensitive information are also set out in the Rough Undertakings.

6.12. DECC is responsible for implementing the provisions of Article 16 of the Gas Directive. As noted above, DECC is currently considering the consultation responses on how to implement these provisions in GB.

Transactions with related undertakings

6.13. SSOs often form part of vertically integrated undertakings. They often have related undertakings that are involved in the production of and/or the supply of natural gas. These related undertakings will generally want to purchase services from the SSO.

6.14. Currently, related undertakings of SSOs that are subject to the TPA regime in the GB market purchase storage services from the SSO either via the primary or secondary market. However, while CSL's related undertakings pay a market based price for the capacity at Rough, the Rough Undertakings limit the amount of capacity that the Centrica Group can hold at Rough (and obtain from the primary allocation process). In 2009/10, the Centrica Group was permitted to reserve 15 per cent of the 'Minimum Rough Capacity', a maximum of 1524GWh of 'additional space', and any 'incremental capacity'.

6.15. As noted above, the SSO of gas storage facilities that are subject to the nTPA regime must be unbundled from any related undertakings. Further, Article

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62 The Minimum Rough Capacity is 455 million SBUs of capacity. 'Additional Space' means that space into which gas can be injected over and above the Minimum Rough Capacity, which has been created as the result of the operation of Rough by its previous owners and which can be quantified before the beginning of the Storage Year. Incremental capacity means capacity created at Rough achieved through investment in storage operations by CSL which is incremental to the Minimum Rough Capacity, Additional Space and Further Additional Space.
13(b) of the Gas Directive requires that related undertakings should not be treated favourably compared to other potential system users, while Articles 15 and 17 of the Gas Regulation require that the SSO offer services on a non-discriminatory basis.

6.16. Ofgem has taken the view that these provisions prevent SSOs from being able to reserve capacity for their related undertakings, or provide the related undertakings with services on more favourable terms compared to those offered to non-related undertakings. In other words, related undertakings should purchase capacity from the SSO’s primary (and/or secondary) market.

6.17. In such cases where undertakings are purchasing capacity from a related SSO, the related undertakings should be able to demonstrate that the amount that they offer to pay for capacity is fair and justifiable on a commercial valuation of the storage services.

6.18. However, Ofgem recognises that there is a risk that any market player with SMP could potentially purchase capacity from related undertakings with a view to either withholding the capacity to increase wholesale gas prices (and the value of storage services) or to partially foreclose the market (ie increase the costs for its competitors in related markets). For example, a market player with SMP might attempt to distort market based outcomes by:

- the related undertakings of the SSO purchasing capacity on the primary market then selling it on a discriminatory basis to other parties via the secondary market; or
- the related undertakings purchasing capacity in order to create scarcity and increase the value of storage services (and of wholesale gas).

6.19. Based on the above concerns, Ofgem has taken the view that it is especially important for any market player with SMP to be able to justify that the amount of storage capacity that is retained by the group (purchased by the SSO’s related undertakings) is consistent with the market player’s requirements for flexible gas. The following section outlines Ofgem’s preliminary views on the factors that we may consider when assessing a market player’s requirements for its own storage services.

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63 These risks are more acute when the market player is significantly long on gas (ie its total sources of supply exceed its demand for gas).
Capacity purchased by related undertakings in the primary market

6.20. Ofgem has taken the view that a market player with SMP is more likely to have an incentive to influence the prices of storage services (and wholesale gas prices) when it has more gas than it needs to meet its supply requirements (ie it is long on gas). Given this, we have proposed that market players should be able to demonstrate that they require the amount of storage capacity that is retained within the undertaking.

6.21. There are various approaches that market players could adopt to determining the amount of storage capacity (and other sources of supply) that they require. Such decisions are likely to be influenced by a range of factors including: the market player’s attitude towards risk (and willingness to be exposed to the NBP for purchasing flexible gas); the contractual arrangements that the market player has for other sources of gas supply; and the position of the related undertakings in the related markets (eg a related undertaking’s share of domestic customers in the retail market).

6.22. Ofgem also appreciates that the market players may face other obligations (eg requirements of the Uniform Network Code on a gas supplier to be able to meet demand), and may adjust the amount of storage capacity they hold depending on attitudes towards the risks posed by fluctuating weather (demand conditions).

6.23. However, in determining an upper bound for its demand, a market player should not use risk mitigation strategies as a basis for excessively inflating its flexible gas requirements and therefore its need for storage services.

6.24. Having established a level of demand for flexible gas supplies, a market player should consider what amount of storage capacity it requires in order to meet its demand requirements. When making this assessment, the market player should consider its other sources of gas supply and whether the storage capacity purchased will result in it having aggregated sources of supply that significantly exceed its demand requirements.

6.25. Ultimately, the risk to the market arises when a market player with SMP is not using the storage capacity it holds. Given this, consideration will need to be given as to whether the related undertakings are using the capacity in a manner that is consistent with how the capacity would be used if the storage capacity was not owned by a related undertaking. For example, Ofgem may consider the following questions:

- are the related undertakings using the capacity in a manner that is consistent with the prevailing market signals (ie injecting and withdrawing capacity)?
- are the related undertakings selling significant amounts of storage capacity on the secondary market (on a short term basis) during periods of high demand?
- are changes in the amount of capacity the related undertakings obtain consistent with the drivers of their demand and changes in other sources of supply?

- are the related undertakings’ purchasing strategies for the storage services consistent with their broader purchasing strategy for storage (ie are they bidding for and obtaining storage at other facilities)?

6.26. Ofgem notes that under the Rough Undertakings, Centrica has been limited to acquiring between 15 and 20 per cent of capacity at Rough via the primary market. We are unaware that this level of retention for the use by a related undertaking has created concern in the market.

6.27. Ofgem does not propose that there should be an upper limit on the amount of capacity that market players can hold at their own storage facilities as long as the amount of capacity held can be justified (as discussed above). However, market players should note that the potential risk of noncompliance with the Third Package may increase as the amount of storage capacity retained by the market player rises, particularly in cases when that market player has SMP.

**Question 1**: What factors should Ofgem take into consideration when assessing a market player’s flexible gas requirements and, in particular, need for storage services?
Chapter Summary

Article 19 of the Gas Regulation outlines transparency requirements for SSOs. In particular, SSOs must make information on contracted and available storage capacity publicly available. This chapter provides Ofgem's preliminary views on how this information is expected to be made available.

**Question 1:** Do SSOs provide sufficient information on the services they offer and the terms and conditions of access? Is any further information required? Are there any improvements that could be made to how information is provided by SSOs?

**Question 2:** Do SSOs provide sufficient information on the maximum capacity and the level of utilisation? What further information is required? Are the current timeframes for providing this information appropriate?

**Question 3:** Should SSOs publish the information required under section 19(4) on their websites or should NGG undertake this role for all SSOs?

7.1. Transparency obligations on SSOs play an important role in the development of an efficient and effective energy market. Equitable and timely access to operational and market information can help facilitate more informed decision making by market participants. Improved transparency can reduce barriers to gas market entry and therefore can help the development of competitive markets.

7.2. Article 19 of the Gas Regulation places a number of transparency obligations on SSOs. While most rules in the Gas Regulation apply only to facilities providing TPA, Article 19(4) of the Gas Regulation places obligations on all storage facilities, regardless of whether TPA is in place. Ofgem understands that whilst some of these transparency requirements imposed on SSOs are new, SSOs already provide much of the required information.

7.3. This chapter provides Ofgem's preliminary views on transparency and information sharing provisions. In the following section, we consider the requirement on SSOs to provide information on the services they offer. We then discuss the requirement on SSOs to provide information on contracted and available capacity. Following this, transparency requirements imposed on all SSOs, rather than just those that are subject to nTPA arrangements, are outlined.

**Publishing information on access**

7.4. Article 19(1) requires SSOs to make public detailed information regarding the services they offer and the relevant conditions applied, together with the technical information necessary for storage facility users to gain effective access to storage facilities.
7.5. To meet the requirements of this provision, SSOs are expected to provide the following information:

- **Services that are available**: the types of services that are available and their respective features are expected to be published.

- **Technical specifications of these services**: for each of these services key technical specifications of the products are expected to be provided to allow comparison of products. For example, SSOs are expected to publish deliverability, space and injectability of offered products.

- **Conditions applied to the services**: the terms and conditions attached to storage should be published. For example, SSOs are expected to provide information on storage usage terms and applicable injection periods.

- **Processes for negotiating access to these services**: the steps required to become a storage customer are expected to be published.

7.6. This information should be published on the relevant SSO’s website and provided directly to customers upon request.

7.7. Ofgem considers that SSOs which are currently subject to TPA requirements in the GB market appear to already provide much of this information required by Article 19. Both CSL and SSEHL provide information on the types of storage products on their websites and the technical specifications of these services. They both also provide the SSC, which provides information on storage terms and conditions, on their websites. The processes for granting access also appear to be outlined on respective SSOs’ websites.

7.8. As indicated above, Article 19(1) requires the information provided by SSOs to be sufficiently detailed to enable storage facility users to gain effective access. Ofgem seeks views on whether all the information on the SSOs’ services that storage facility users require is currently provided. For example, Ofgem notes that CSL currently publishes indicative prices on a rolling basis and overall weighted average prices at the end of each storage year. Ofgem seeks views on whether such pricing information is required and sufficient for effective access.

**Question 1**: Do SSOs provide sufficient information on the services they offer and the terms and conditions of access? Is any further information required? Are there any improvements that could be made to how information is provided by SSOs?

**Publishing information on capacity allocation**

7.9. Article 19(2) of the Gas Regulation requires SSOs to make public information on contracted and available storage capacity on a numerical basis on a regular and rolling basis and in a user friendly standardised manner.
7.10. Ofgem considers that there is already experience in the GB market of SSOs providing information on contracted and available capacity. CSL, for example, provides information on gross nominations and a statement on sold and unsold capacity. Ofgem seeks views on whether the level of information provided by SSOs is sufficiently detailed to meet the requirements of the Gas Regulation.

7.11. Another issue concerns the requirement that information be provided on “a regular and rolling basis.” Ofgem believes that the requirement for information to be provided on “a regular and rolling basis” would suggest that the daily updating of information is appropriate. This would also appear consistent with publication of information requirements elsewhere in Article 19.  

7.12. There may be, however, other areas where information on capacity allocation should be provided on a different basis. For example, UIOLI information may need to be provided on a closer to real time basis. Ofgem seeks views on what timeframes are appropriate for the provision of different types of information.

**Question 2:** Do SSOs provide sufficient information on the maximum capacity and the level of utilisation? What further information is required? Are the current timeframes for providing this information appropriate?

### Publishing information on capacity allocation - all facilities

7.13. Article 19(4) requires all SSOs, including those exempt from TPA requirements, to make public the amount of gas in each storage facility, as well as inflows and outflows, and the available storage capacities.

7.14. Article 19(4) also requires all SSO to communicate this information to the transmission system operator (TSO), who shall make it public on an aggregated level per system or subsystem defined by the relevant points. The information shall be updated at least daily.

7.15. All SSOs are required to report the following information:

- the amount of gas in its storage facility;
- the inflows to its storage facility;
- the outflows from its storage facility; and

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64 In particular, the requirements of Article 19(4) which are discussed later in this Chapter.
the available storage capacity for its facility. Available capacity means the part of technical capacity that has not been allocated to a storage user through a storage contract and is available in the system.

7.16. Each SSO is required to provide this information to the TSO daily.

7.17. Ofgem understands that SSOs in the GB market already provide much of this information to National Grid Gas (NGG), who publishes it in an aggregated form.

7.18. However, Article 19(4) also requires each SSO to separately provide this information. Ofgem considers that there are two ways in which the requirements of Article 19(4) could be met. First, each SSO could provide the information required under Article 19(4) on their respective websites. Alternatively, Ofgem believes that NGG could publish this information on behalf of SSOs. Essentially this could work as an extension of the Gas Storage Monitor information currently published by NGG. Ofgem considers that there may potentially be more transparency where NGG reports this information on behalf of all SSOs. It may enable a potential user to more easily access storage capacity information.

7.19. In cases where SSOs operate multiple facilities jointly in order to maximise total capacity, the SSO can request that the TSO make its information available to the market in an aggregated form.

**Question 3:** Should SSOs publish the information required under section 19(4) on their websites or should NGG perform this role for all SSOs?
8. Conclusions and next steps

8.1. In this document, we have set out our preliminary views for guidance on nTPA arrangements for gas storage facilities in the GB market.

8.2. The objective of our guidance is to provide market participants with greater clarity around the operation of the nTPA regime. This potentially has wide ranging benefits. For potential investors, clarity around the regulatory framework should reduce uncertainty which otherwise might deter investment or increase the cost of capital. For gas storage customers, by supporting more transparent and non discriminatory access arrangements, guidance can promote more efficient use of existing and planned storage facilities. For end consumers, benefits may accrue from increased security of supply and increased competition as gas storage capacity is brought to the market.

8.3. In developing this guidance, we have also taken the view that the nTPA regulatory regime provides SSOs with significant scope to develop the access arrangements that will apply to their facilities. Given this, our guidance is intended to assist SSOs in developing access arrangements that are likely to comply with the relevant legislation. In developing the guidance, we are mindful of the benefits of providing greater certainty to the market without unduly limiting the ability of SSOs to deliver the services demanded by the market.

8.4. Taking these factors into account, we have also taken the view that any market player who has the ability and incentive to affect the wholesale price of gas for a sustained period of time, ie it has SMP, could face a greater risk of being found non compliant with the nTPA regime. On this basis, Ofgem has provided its views on some good practice safeguards that any market player with SMP could adopt when designing their access arrangements in order to reduce the risk of non compliance.

8.5. In chapter 3, we set out our preliminary views on how SMP can be assessed. We consider that pivotality analysis is an important analytical tool for assessing SMP and have proposed that any market player that is pivotal for ten per cent or more of the volume of gas demand for a sustained period of time would generally be deemed as having SMP. However, we have also taken the view that market players that do not meet this threshold could still be in a position to profitably increase the price of gas and have therefore proposed other factors that could be considered to determine if a market player has SMP.

8.6. In chapter 4, we set out our preliminary views regarding the measures that SSOs should consider in relation to both determining the maximum capacity that must be offered to the market and the mechanisms for allocating the available capacity. In this chapter we have proposed that SSOs should be able to define the maximum technical capacity for their storage facilities, and that this would represent the minimum amount of capacity that we would expect an SSO to make available to the market (this can be done across a group of facilities
subject to nTPA requirements if the SSO operates more than one facility subject to such requirements).

8.7. In relation to offering the capacity to the market, the arrangements for allocating capacity must be objective, transparent and non discriminatory. Ofgem’s preliminary view is that using auctions to allocate capacity (particularly for standard services) will generally lower the potential risk of an SSO being found non compliant with the Gas Regulation. However, SSOs may consider alternative allocation mechanisms that deliver similar degrees of objectivity, transparency and non discrimination. Some factors that may influence the SSO’s approach to allocating capacity include whether it has SMP; whether there is a scarcity of supply for the services being offered; and whether the service is new or innovative.

8.8. Further, we noted that we would generally expect SSOs to set a reserve price for their services. Ofgem would expect that SSOs that do not have SMP will be able to demonstrate that the reserve prices they set are not being used to withhold capacity from the market or discriminate against some customers. For any market player with SMP, Ofgem has taken the preliminary view that given the additional risks associated with demonstrating compliance, that we would generally expect such market players to use auctions to allocate standard services. Ofgem would also expect that the SSO sets the reserve price for the auction(s) based on the relevant marginal cost reference.

8.9. We also provided our preliminary views on the measures SSO could adopt to prevent capacity hoarding and to facilitate secondary trading. We noted that UIOLI arrangements are currently used at storage facilities subject to TPA requirements. We expressed the view that the arrangements used at these facilities appear to be generally consistent with the requirements of the Third Package. In relation to secondary trading, we noted our expectation that storage facility users should be able to resell their capacity for different durations, and that storage facility users may also be able to use the SSO’s primary allocation mechanism to resell their capacity to third parties and receive all the proceeds from the sale of their capacity.

8.10. In chapter 5, we provided our preliminary views regarding measures that SSOs could adopt to reduce the risk that their main commercial conditions and the mix of services offered do not comply with the requirements of the Third Package. Ofgem’s preliminary view is that we would expect SSOs to conduct open and transparent processes for consulting the market when developing (or amending) main commercial conditions and when determining the appropriate mix of services they provide. We proposed that SSOs should be responsible for determining the appropriate level of consultation/market testing, and that we would expect more extensive consultation/testing processes to be adopted if the market player has SMP; and/or when the significance of the issue is greater. Examples of when more extensive processes may be needed include:

- when developing a new contract for services;
• when a significant amount of new capacity is being offered; or
• when changing the mix of services offered to address changes in supply and demand conditions.

8.11. In relation to the mix of services, SSOs are required to offer long term and short term services, firm and interruptible services, and bundled and unbundled services. In chapter 5, we also noted that long term contracts could be used to underpin new investments in gas storage facilities. In such circumstances, Ofgem would generally expect that the SSOs must be able to demonstrate that the mechanism for offering the capacity to the market is objective, transparent and non-discriminatory. We also expressed the view that the higher the proportion of capacity that SSOs sell on long term contracts, the more important it will be for the SSO to be able to demonstrate that it is facilitating the secondary trading of capacity and that its congestion management procedures prevent capacity hoarding.

8.12. In chapter 6, we outlined the unbundling and confidentiality requirements specified in Articles 15 and 16 of the Gas Directive respectively\(^65\) and the requirement that all market participants (including an SSO’s related undertakings) must purchase capacity via the SSO’s primary allocation mechanism.

8.13. In relation to transactions between related undertakings, we noted that there is a greater risk that any market player with SMP could use transactions with related undertakings to withhold capacity from the market or to discriminate against competitors of the market player in related markets. Given these concerns, we proposed that any market player with SMP should be able to justify that the amount of storage capacity that is retained by the group (ie purchased by the SSO’s related undertakings) is consistent with the market player’s requirements for flexible gas supplies, taking its other sources of flexibility into consideration. Further, we would expect that the related undertakings use the capacity in the same way as if the undertakings were not related to the SSO; and that any excess capacity is returned to the market on a non-discriminatory basis.

8.14. In Chapter 7 we provided our preliminary views about the provision of information to the market. We outlined the information, particularly on contracted and available storage capacity, that SSOs must make available. We noted that while some of these transparency requirements imposed on SSOs are new, SSOs already appear to provide much of the required information.

\(^65\) We noted that DECC is currently considering responses to its consultation regarding how to implement these provisions of the Gas Directive.
Next steps

8.15. Ofgem is seeking stakeholder views on its proposed approach to TPA guidance. To this end, we have posed a number of specific questions to industry stakeholders. This provides some direction of the matters that Ofgem is seeking to clarify. However, respondents may wish to provide views on other matters they consider relevant to the provisions of the Third Package in relation gas storage facilities.

8.16. The consultation period will run for six weeks. During this period we will meet with industry stakeholders to discuss the views set out in this document.

8.17. Ofgem will then develop and publish guidance based on consideration of views arising from this consultation.
## Appendices

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Appendix 1 – Consultation Response and Questions

1.1. Ofgem would like to hear the views of interested parties in relation to any of the issues set out in this document.

1.2. We would especially welcome responses to the specific questions which we have set out at the beginning of each chapter heading and which are replicated below.

1.3. Responses should be received by 15 December 2010 and should be sent to:

Ian Marlee  
Partner, GB Markets  
Ofgem  
9 Millbank, London, SW1P 3GE  
GB.markets@ofgem.gov.uk

1.4. Unless marked confidential, all responses will be published by placing them in Ofgem’s library and on its website www.ofgem.gov.uk. Respondents may request that their response is kept confidential. Ofgem shall respect this request, subject to any obligations to disclose information, for example, under the Freedom of Information Act 2000 or the Environmental Information Regulations 2004.

1.5. Respondents who wish to have their responses remain confidential should clearly mark the document/s to that effect and include the reasons for confidentiality. It would be helpful if responses could be submitted both electronically and in writing. Respondents are asked to put any confidential material in the appendices to their responses.

1.6. Next steps: Having considered the responses to this consultation, Ofgem intends to publish its guidance on nTPA arrangements for gas storage facilities in the GB market. Any questions on this document should, in the first instance, be directed to:

Antony Miller  
GB Markets  
Ofgem  
9 Millbank, London, SW1P 3GE  
Antony.miller@ofgem.gov.uk
CHAPTER: Three

Question 1: Should pivotal gas volume be used when assessing SMP? If no, please explain why.

Question 2: Is the proposed figure of ten per cent of pivotal gas volume an appropriate threshold for defining SMP? If no, what is an appropriate threshold?

Question 3: Is it appropriate to also consider market outcomes to assess whether a market player may have SMP at lower levels of pivotality?

Question 4: Are there any additional factors that should be used when considering if a market participant has SMP?

CHAPTER: Four

Question 1: What factors should be taken into consideration when defining the maximum capacity of a group of facilities?

Question 2: What concerns, if any, do market participants have with Ofgem’s preliminary views on capacity allocation? What concerns, if any, do storage users have with the use of allocation mechanisms other than auctions to allocate capacity, particularly standard services?

Question 3: Does the use of auctions provide market participants with sufficient safeguards that any market player with SMP will provide standard services to the market on a non-discriminatory basis? What other measures/safeguards in relation to how any market player with SMP allocates capacity could be considered?

Question 4: Do market participants consider that the prevailing anti hoarding arrangements currently in place at GB storage facilities that are subject to the TPA regime are appropriate and compatible with the requirements of the Gas Regulation? If no, please explain why.

Question 5: Do market participants consider that the mix of interruptible and firm storage services is appropriate and compatible with the requirements of the Gas Regulation? If no, please explain why.

Question 6: Do market participants consider that the existing arrangements for the secondary trading of storage capacity are appropriate and compatible with the requirements of the Gas Regulation? If no, please explain why.

CHAPTER: Five

Question 1: What levels of consultation should SSOs undertake when developing main commercial conditions for the first time and when proposing amendments to the standard terms and conditions?
**Question 2:** Are there aspects of an SSO’s main commercial conditions where small changes are likely to have a significant impact on system users?

**Question 3:** Should SSOs be expected to formally consult or test the market before changing existing services or offering any new services to the market? If no, please explain why.

**Question 4:** Should SSOs be expected to offer a minimum threshold of capacity on a short term basis? How should SSOs determine the minimum proportion of capacity that should be sold on a short term basis?

**Question 5:** Should SSOs be expected to offer bundled capacity as part of their ‘standard services’? Should SSOs be expected to also offer unbundled capacity as part of their ‘standard services’? Please explain your views.

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**CHAPTER: Six**

**Question 1:** What factors should Ofgem take into consideration when assessing a market player’s flexible gas requirements and, in particular, need for storage services?

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**CHAPTER: Seven**

**Question 1:** Do SSOs provide sufficient information on the services they offer and the terms and conditions of access? Is any further information required? Are there any improvements that could be made to how information is provided by SSOs?

**Question 2:** Do SSOs provide sufficient information on the maximum capacity and the level of utilisation? What further information is required? Are the current timeframes for providing this information appropriate?

**Question 3:** Should SSOs publish the information required under section 19(4) on their websites or should NGG undertake this role for all SSOs?
Appendix 2 – Framework for assessing pivotality

1.1. There are various ways in which market players could assess their pivotality. This appendix outlines Ofgem’s preliminary views on factors that SSOs should take into consideration when developing a model to assess pivotality.

1.2. First, a model of pivotality needs to take into consideration a range of timeframes. This is important because the substitutability of different sources of gas supply vary over different timeframes. Given this, one approach for assessing pivotality could be to analyse pivotality for each day, week, month, quarter and season. When conducting such analysis, each period should be considered independently from the next. For example, in the daily analysis, the model should assess whether a market player’s supplies are necessary to meet demand on that day, without considering previous or subsequent days. A similar analysis could then be conducted for the following day. Similarly, the seasonal model should assess whether a market player’s supplies are necessary to meet demand over a winter season. The analysis can then be repeated for the summer season.

1.3. Second, Ofgem is of the view that any assessment of pivotality should take account of differing degrees of substitutability of supply sources at different time scales by assigning different “capacity coefficients” for each source at each time scale. For example, given the stocks of gas held in store at LNG import facilities, LNG may be able to provide flow at rates closer to their technical capacities over short timeframes (daily or weekly) however, as LNG can flow to a number of markets, the level of supplies over the winter period is likely to be less than the total physical capacity.

1.4. Ofgem has taken the view that information provided by NGG (in its Ten Year Statement and Winter Outlook) can be used to determine the maximum technical capacity of different sources of supply (both storage and non storage sources) and to estimate reasonable “capacity coefficients” that can be used to adjust the maximum daily capacity for the time scales being considered.

1.5. In relation to the capacity coefficients, the data underlying NGG’s Ten Year Statements provides estimates of peak daily winter flows for the various sources of supply.

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66 We have taken the view that a conservative approach to determining the physical capacity is appropriate. Therefore, it would be appropriate to only include sources of supply that NGG reports as being under construction. However, market players could also consider including any of their own projects which have a high probability of being constructed even if they are not included in NGG’s Ten Year Statement.

67 A capacity coefficient of 90 per cent would mean that flows would be expected to be 90 percent of the physical capacity for the period that the coefficient applies to.
supply. NGG’s Winter Outlook Reports can then be used as a basis for estimating likely flow rates over the winter period. For interim periods (for example a week, month, quarter) market players may need to apply some judgement as to what a reasonable flight path for the capacity coefficients should be.

1.6. Third, market players should make some reasonable assessment of gas demand over a relevant timeframe. Ofgem’s preliminary view is that a reasonable starting point is to use the growth rates given in NGG’s Ten Year Statement and apply these to actual demand data. These projections can then be used to produce forecasts for the appropriate timeframe. Ofgem notes that these NGG figures are subject to extensive industry consultation and are available to all market participants.

1.7. When assessing pivotality, market players should also consider different scenarios. For example, market players could consider their level of pivotality using NGG’s high and low estimates of demand growth; demand levels in an extreme winter (eg 1-in-20); a major supply side outages; and using different capacity coefficients for the more variable sources of supply. Ofgem accepts that numerous scenarios are conceivable. However, such analysis is particularly important for any market player that is on the SMP threshold to gain a better understanding of what changes in market conditions could result in them exceeding the SMP threshold.

68 While the Winter Outlook Reports are only for the coming year, the information provided in these reports could be used to provide reasonable estimates of the likely level of utilisation in future years.

69 For example, the assessment could take data from the most recent gas year then use NGG’s growth rates for demand (both aggregate and peak).
Appendix 3 – The Authority’s Powers and Duties

1.1. Ofgem is the Office of Gas and Electricity Markets which supports the Gas and Electricity Markets Authority (“the Authority”), the regulator of the gas and electricity industries in Great Britain. This appendix summarises the primary powers and duties of the Authority. It is not comprehensive and is not a substitute to reference to the relevant legal instruments (including, but not limited to, those referred to below).

1.2. The Authority’s powers and duties are largely provided for in statute (such as the Gas Act 1986, the Electricity Act 1989, the Utilities Act 2000, the Competition Act 1998, the Enterprise Act 2002 and the Energy Acts of 2004, 2008 and 2010) as well as arising from directly effective European Community legislation.

1.3. References to the Gas Act and the Electricity Act in this appendix are to Part 1 of those Acts. Duties and functions relating to gas are set out in the Gas Act and those relating to electricity are set out in the Electricity Act. This appendix must be read accordingly.

1.4. The Authority’s principal objective is to protect the interests of existing and future consumers in relation to gas conveyed through pipes and electricity conveyed by distribution or transmission systems. The interests of such consumers are their interests taken as a whole, including their interests in the reduction of greenhouse gases and in the security of the supply of gas and electricity to them.

1.5. The Authority is generally required to carry out its functions in the manner it considers is best calculated to further the principal objective, wherever appropriate by promoting effective competition between persons engaged in, or commercial activities connected with,

- the shipping, transportation or supply of gas conveyed through pipes;
- the generation, transmission, distribution or supply of electricity;
- the provision or use of electricity interconnectors.

1.6. Before deciding to carry out its functions in a particular manner with a view to promoting competition, the Authority will have to consider the extent to which the interests of consumers would be protected by that manner of carrying out those functions and whether there is any other manner (whether or not it would promote competition) in which the Authority could carry out those functions which would better protect those interests.

70 Entitled “Gas Supply” and “Electricity Supply” respectively.
71 However, in exercising a function under the Electricity Act the Authority may have regard to the interests of consumers in relation to gas conveyed through pipes and vice versa in the case of it exercising a function under the Gas Act.
1.7. In performing these duties, the Authority must have regard to:

- the need to secure that, so far as it is economical to meet them, all reasonable demands in Great Britain for gas conveyed through pipes are met;
- the need to secure that all reasonable demands for electricity are met;
- the need to secure that licence holders are able to finance the activities which are the subject of obligations on them; and
- the need to contribute to the achievement of sustainable development.

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

Subject to the above, the Authority is required to carry out the functions referred to in the manner which it considers is best calculated to:

- promote efficiency and economy on the part of those licensed under the relevant Act and the efficient use of gas conveyed through pipes and electricity conveyed by distribution systems or transmission systems;
- protect the public from dangers arising from the conveyance of gas through pipes or the use of gas conveyed through pipes and from the generation, transmission, distribution or supply of electricity; and
- secure a diverse and viable long term energy supply,

and shall, in carrying out those functions, have regard to the effect on the environment.

1.8. In carrying out these functions the Authority must also have regard to:

- the principles under which regulatory activities should be transparent, accountable, proportionate, consistent and targeted only at cases in which action is needed and any other principles that appear to it to represent the best regulatory practice; and
- certain statutory guidance on social and environmental matters issued by the Secretary of State.

1.9. The Authority may, in carrying out a function under the Gas Act and the Electricity Act, have regard to any interests of consumers in relation to communications services and electronic communications apparatus or to water or sewerage services (within the meaning of the Water Industry Act 1991), which are affected by the carrying out of that function.

72 Under the Gas Act and the Utilities Act, in the case of Gas Act functions, or the Electricity Act, the Utilities Act and certain parts of the Energy Acts in the case of Electricity Act functions.

73 The Authority may have regard to other descriptions of consumers.

74 Or persons authorised by exemptions to carry on any activity.
1.10. The Authority has powers under the Competition Act to investigate suspected anti-competitive activity and take action for breaches of the prohibitions in the legislation in respect of the gas and electricity sectors in Great Britain and is a designated National Competition Authority under the EC Modernisation Regulation\textsuperscript{75} and therefore part of the European Competition Network. The Authority also has concurrent powers with the Office of Fair Trading in respect of market investigation references to the Competition Commission.

\textsuperscript{75} Council Regulation (EC) 1/2003.
Appendix 4 – Glossary

A

Anti hoarding arrangements
Transparent mechanism(s) that allow unused capacity to be made available to the market so as to maximise the use of a facility.

B

Balgzand Bacton Line (BBL)
The Balgzand Bacton Line (BBL) is an interconnector that flows gas from Balgzand in the Netherlands to Bacton in the UK.

Baseload
Part of the gas supply that is flowing on most days, and prone to only small variations.

C

Competitive constraints
Competitive constraints are factors that prevent a firm from profitably sustaining prices above competitive levels. Where there are no effective competitive constraints, market power can arise.

Cycling (storage)
Cycling is successive injection and withdrawal of gas within a season at a storage facility. Cycling usually refers to multiple successive refill and withdrawal cycles within the winter, as opposed to a unique summer refill followed by winter withdrawal.

D

Deliverability
Deliverability refers to storage exit capacity, ie from the storage facility to the transmission system.

Demand side response (DSR)
DSR is achieved when electricity and gas users reduce a proportion of their demand in response to a high price or some other event such as an overload.

DECC
Department of Energy and Climate Change.

Flexible beach

That proportion of UKCS production that offers more flexible supply.

Gas storage facility

See 'storage facility'.

Gas Directive


Gas Regulation


Herfindahl-Hirschman Index (HHI)

HHIs are a measure of market concentration. They assess the size of a firm in relation to the size of an industry.

Hornsea

A medium range storage facility located in East Yorkshire.

Injectability

Injectability refers to storage entry capacity, ie from the transmission system to the storage facility.

Interconnector

An interconnector is a pipeline linking two consumption markets, as opposed to pipelines linking a gas field and a consumption market.

Interconnector UK (IUK)
Commercial name of the interconnector linking Belgium and Great Britain

**L**

Liquefied Natural Gas (LNG)

The fluid state of natural gas, it can be obtained industrially by cooling down natural gas. Used essentially in dedicated tanker ships to transport gas overseas in a much reduced volume.

**LNG importation terminal**

LNG importation terminals are the terminals where LNG vessels can be offloaded.

**Long Range Storage (LRS)**

LRS facilities tend to be able to deliver gas at full capacity for more than 70 days.

**Langeled**

Underwater pipeline bringing gas from Norway to the UK (Easington).

**M**

Market player

For the purposes of this document a "market player" is a storage system operator (SSO) and any related undertakings.

**Medium Range Storage (MRS)**

MRS facilities tend to be able to deliver gas at full capacity for between 5 and 70 days. Such facilities are more prone to cycling.

**Minor facilities exemption**

Exemptions granted on the basis that Article 19 of the Second Gas Directive does not apply as TPA is not economically and/or technically necessary for providing efficient access to the system for the supply of customers.

**N**

**National Balancing Point (NBP)**

The NBP is the virtual unified trading point of the GB gas transmission network.

**National Grid Gas (NGG)**
National Grid owns and operates the National Transmission System throughout Great Britain and owns and operates a significant Gas Distribution network throughout part of England.

**Natural gas undertaking**

‘Natural gas undertaking’ means a natural or legal person carrying out at least one of the following functions: production, transmission, distribution, supply, purchase or storage of natural gas, including LNG, which is responsible for the commercial, technical and/or maintenance tasks related to those functions, but shall not include final customers (Article 2(1), Gas Directive).

**Negotiated Third Party Access (nTPA)**

Negotiated Third Party Access (nTPA) refers to arranging supply contracts on the basis of voluntary commercial agreements negotiated in good faith.

**Regulated Third Party Access (rTPA)**

Regulated Third Party Access (rTPA) refers to a system of access based on published tariffs and/or other terms and obligations, as determined by the relevant regulatory authority.

**Related undertaking**

A related undertaking for the purposes of the Third Package and this guidance means an undertaking where the same person or same persons are entitled, directly or indirectly, to exercise control, and where the undertaking or group of undertakings perform at least one of the functions of transmission, distribution, LNG or storage and at least one of the functions of production or supply.

**Rough**

A long range offshore gas storage facility, located off the east coast of England, close to Hull.

**Rough Undertakings**

Refers to the 'undertakings given by Centrica PLC and Centrica Storage Limited to the Secretary of State for Trade and Industry pursuant to section 88 of the Fair Trading Act 1973'.

**SSEHL**

SSE Hornsea Limited

**Secondary capacity allocation**
Involves mechanism(s) by which unused capacity is offered to shippers on the secondary market.

**Short Range Storage (SRS)**

SRS facilities tend to be able to deliver gas at full capacity for up to five days. They are normally LNG facilities that are able to flow gas at very short notice, but take a very long time to refill.

**Significant market power (SMP)**

Refers to the ability of a market player to affect the wholesale price of gas in a way that is profitable for the market player for a sustained period of time.

**Storage facility**

‘Storage facility’ means a facility used for the stocking of natural gas and owned and/or operated by a natural gas undertaking, including the part of LNG facilities used for storage but excluding the portion used for production operations, and excluding facilities reserved exclusively for transmission system operators in carrying out their functions (Article 2(9), Gas Directive).

**Storage System operator (SSO)**

‘Storage system operator’ means a natural or legal person who carries out the function of storage and is responsible for operating a storage facility (Article 2(10), Gas Directive).

**Supply**

‘Supply’ means the sale, including resale, of natural gas, including LNG, to customers (Article 2(7), Gas Directive).

**Supply Undertaking**

‘Supply undertaking’ means any natural or legal person who carries out the function of supply (Article 2(8), Gas Directive).

**T**

**Ten Year Statement (TYS)**

The TYS is published in line with Special Condition C2 of National Grid’s Gas Transporters’ Licence and Section O of the Uniform Network Code. It is published annually and provides a ten year forecast of transportation system usage and likely system developments.

**Third Package**

**Third Party Access (TPA)**

TPA means access by third parties to transmission and distribution networks, and gas and LNG storage facilities. The requirements of TPA are met either through a negotiated (nTPA) or regulated TPA (rTPA) regime.

**United Kingdom Continental Shelf (UKCS)**

The UK Continental Shelf is the region of waters surrounding the United Kingdom, in which the UK claims the rights to minerals.

**Use it or lose it (UIOLI) arrangements**

Arrangements that ensure there are incentives to "use capacity" at a facility or otherwise "lose capacity" at a facility whereby any unused capacity is made available to the market.
Appendix 5 – Feedback Questionnaire

1.1. Ofgem considers that consultation is at the heart of good policy development. We are keen to consider any comments or complaints about the manner in which this consultation has been conducted. In any case we would be keen to get your answers to the following questions:

1. Do you have any comments about the overall process, which was adopted for this consultation?
2. Do you have any comments about the overall tone and content of the report?
3. Was the report easy to read and understand, could it have been better written?
4. To what extent did the report’s conclusions provide a balanced view?
5. To what extent did the report make reasoned recommendations for improvement?
6. Please add any further comments?

1.2. Please send your comments to:

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