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Facilitating the implementation of aspects of the Capacity Allocation Mechanisms Network Code in Great Britain

Consultation

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Overview:

This document sets out how certain aspects of European Regulation 984/2013 of 14 October 2013 establishing a Network Code on Capacity Allocation Mechanisms in Gas Transmission Systems ('CAM') could be facilitated within Great Britain.

The document sets out our minded to position on the modifications that the Authority proposes to make to the Gas Transporter Licence that National Grid Gas holds in respect of the NTS in order to facilitate the implementation of CAM. Following consultation and consideration of responses, the Authority's current intention is to make these licence modifications by the end of 2014, with the intention that the licence amendments would come into force by 1 November 2015. By making these proposed changes in this timeframe, the Authority considers that it will provide stakeholders with the necessary certainty to enable each participant to make the necessary changes to their own documentation in order to meet the 1 November 2015 deadline.

Context

One of the most important pieces of recent legislation on European gas and electricity markets is referred to as the Third Package. The Third Package of European energy reforms created a new legal framework to promote cross-border trade. Part of this, the Gas Regulation, sets out procedures for the establishment of a number of legally binding network codes. These network codes are designed to promote the creation of liquid markets, the efficient use of cross-border transmission capacity and the integration between Member States' gas markets.

In order for these network codes to be implemented in Great Britain ('GB') changes will be required to legislation, licences, GB network codes (including the Uniform Network Code), interconnection agreements, methodology statements and potentially other industry documentation.

The Network Code on Capacity Allocation Mechanisms in Gas Transmission Systems ('the CAM network code') came into force on 3 November 2013 and applies from 1 November 2015. Any changes necessary to ensure compliance of the GB legal and regulatory framework with the provisions of the CAM network code must be made by 1 November 2015.

Associated documents

EU Third Package Regulation (EC) No 715/2009 (July 2009): http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32009R0715

Capacity Allocation Mechanism Network Code (October 2013): http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32013R0984:EN:NOT

Ofgem open letter on implementation of CAM at the Bacton entry point (October 2013): https://www.ofgem.gov.uk/publications-and-updates/options-great-britain%E2%80%99s-implementation-european-union-network-code-capacity-allocation-mechanisms-gas-transmission-systems-regulation-9842013-bacton-entry-point-0

Contents

Executive Summary

The Third Package of European energy reforms created a new legal framework to promote cross-border trade, under this framework the Capacity Allocation Mechanisms Network Code ('CAM') was established, introducing (amongst other things) standardised products and auctions for entry and exit capacity.

In implementing CAM there are instances where the Authority and/or industry will have discretion in translating the requirements into domestic licences, codes and other industry agreements (such as interconnection agreements and methodology statements). This document follows our open letter of October 2013 which described some of the issues with implementing CAM in Great Britain ('GB') and sets out our minded to decision on the changes to National Grid Gas' Gas Transporter licence necessary to best facilitate the implementation of CAM.

Facilitating implementation of CAM on the NTS in GB

Our minded to decision is that CAM should be implemented within GB at Interconnection Points ('IPs') only. In GB there are currently two IPs; at Bacton and Moffat. We do not consider that the benefits of implementing CAM would be increased by implementing CAM at all entry and exit points.

Facilitating implementation of CAM at entry points to the NTS

Currently the Bacton Aggregated System Entry Point is the only IP where firm entry capacity onto the National Transmission System ('NTS') is made available so is the focus of this document. However, our approach would apply to any other IP where firm entry capacity into GB was to be made available.

Bacton is unique within GB in that gas enters from the UK Continental Shelf ('UKCS') as well as from the two interconnectors with mainland Europe. Once CAM has been implemented, entry capacity at Bacton will be sold under the current Uniform Network Code ('UNC') arrangements (via National Grid Gas's Gemini system) or by the rules described by CAM, depending on the route into GB. This raises a number of issues which we discuss in this document.

We consider that these issues are best managed by splitting the current Bacton entry point into two new entry points – Bacton UKCS and Bacton IP. Our minded to position is that the amount of capacity available at the Bacton IP entry point is set at the sum of the maximum technical capacities of the two interconnectors, with the remaining baseline capacity being made available at the Bacton UKCS entry point.

In order to confirm that such a split is appropriate, we are encouraging shippers who currently hold capacity at the existing Bacton entry point to provide information to us as to how they might assign their current holding between the two new entry points. Respondents should provide such information as a confidential annex to their main response to this consultation.

Facilitating implementation of CAM at exit points from the NTS

The existing exit capacity at Bacton is already defined separately between the various offtake points, and therefore there is no requirement to split these exit points further. As a result we are not proposing any licence changes in respect of exit capacity other than to amend an existing definition. However, we note that changes are required to other industry documentation in order to implement CAM at exit pints from the NTS.

Wider implementation of CAM

This document sets out our proposals on how the CAM network code could be implemented in respect of the NTS. The proposed changes to the GB arrangements set out in this document will create the framework that allows interested parties to implement aspects of CAM (eg, bundled capacity products and standard auctions). Based on the views set out in this document, we consider that interested stakeholders are in a position to propose modifications to their relevant contractual documentation to the Authority for approval as appropriate.

1. Introduction

Background

1.1. One of the most important pieces of recent EU legislation on European gas and electricity markets is referred to as the Third Package[1]. The Third Package of European energy reforms created a new legal framework to promote cross-border trade, in response to the European Commission's inquiry into competition in gas and electricity markets published in January 2007[2]. The inquiry found that there was insufficient integration between Member States' markets and highlighted a number of issues. These included the fact that insufficient or unavailable cross-border transmission capacity and different market designs were hampering integration.

1.2. In order to rectify this, a number of legally binding network codes are being established[3]. These network codes are designed to promote the creation of liquid markets, the efficient use of cross-border transmission capacity and the integration between Member States' gas markets.

1.3. The CAM Regulation, which established CAM, came into force on 3 November 2013 and applies from 1 November 2015. Any changes necessary to ensure compliance of the GB legal and regulatory framework with the requirements of the CAM network code which are not directly effective must therefore be made by 1 November 2015[4]. The aims of CAM are to:

- Facilitate equal and transparent access to transmission capacity;
- Achieve effective competition on the wholesale market;
- Facilitate a more transparent, efficient and non-discriminatory system of allocation of capacity; and
- Avoid foreclosure of the downstream supply markets.

Role of Ofgem in implementing the CAM network code

1.4. This document relates to implementation of aspects of CAM which may not be sufficiently clear, precise and unconditional such that some action is required to be taken by the Authority and/or industry to ensure domestic licences, codes and

[1] Details of the documents contained within the Third Package are set out in appendix 2.
[2] http://ec.europa.eu/competition/sectors/energy/inquiry/index.html
[3] Details of the establishment of these network codes are set out in appendix 2.
[4] By 'directly effective' we mean that the Authority has no discretion in how the change might be implemented. Ofgem's role in implementing European network codes is discussed in more detail in appendix 2.

industry agreements (such as interconnection agreements and methodology statements) reflect the requirements of EU legislation[5].

1.5. Section 4C of the Gas Act 1986 requires the Authority to carry out our functions in the manner that we consider is best calculated to implement, or to ensure compliance with, any binding decision of Agency for the Co-operation of Energy Regulators ('ACER') or the European Commission made under the Gas Directive, the Gas Regulation or the ACER Regulation in relation to gas. The CAM Regulation is a European Regulation that supplements the Gas Regulation and we are therefore required to ensure compliance with it.

1.6. In this document we are consulting on options for ensuring that the Gas Transporter Licence held by National Grid Gas ('NGG') in respect of the National Transmission System ('NTS') ('the NTS licence'), and other domestic regulatory arrangements are such that they can enable the requirements of CAM to be implemented. The Authority will propose licence modifications and make the requisite licence modifications following consultation where we consider it is the best means of facilitating the implementation of the CAM network code. We will also approve Uniform Network Code ('UNC') modifications proposed by industry where we consider that these better facilitate the relevant objectives of the UNC (one of which is to ensure compliance with the Regulation and any relevant legally binding decisions of the European Commission and/or ACER). We note that other amendments to industry documentation may also require approval by other NRAs or parties to bilateral agreements.

1.7. Where more than one implementation option will enable compliance with CAM we will consider how each option better achieves compliance and how it better furthers our principal objective and statutory duties under the Gas Act 1986 compared to the other options available.

Progress so far

1.8. On 31 October 2013 we published an open letter setting out our preferred approach for the implementation of the CAM network code at the Bacton entry point[6]. This letter covered two key policy areas; whether capacity should be bundled into two or three Transmission System Operator ('TSO') bundles, and whether the CAM network code should only be implemented at Interconnection Points ('IPs')[7] and the resultant effects of how capacity at Bacton should be sold. We set out our views

[5] For the avoidance of doubt, even if an element of a European network code is clear, precise and unconditional and hence no action is required from a narrow legal perspective, it may still be appropriate to modify existing industry codes and industry agreements, for example to ensure consistency.
[6] We hosted an industry workshop on 25 November 2013 to discuss the content of the letter.
[7] The term 'Interconnection Point' is defined in the CAM Regulation as physical or virtual point connecting adjacent entry-exit systems or connecting an entry-exit system with an interconnector, in so far as these points are subject to booking procedures by network users.

at that time that there was potential for a two or three TSO bundle, CAM should be implemented at IPs only and that we considered the Bacton entry point needed to be split into two Aggregated System Entry Points ('ASEPs') (one for flows from the UK Continental Shelf ('UKCS'), and another at the IP) to facilitate implementation of the CAM network code. We also noted that the current allocation of exit capacity on an enduring basis was not compliant with the CAM Regulation. Responses to the open letter generally supported our positions and are summarised at various points in this document[8].

1.9. Within the responses to the open letter we noted concerns from stakeholders about the perceived loss of flexibility that implementation of the CAM network code would bring. These concerns were based around the fact that the current arrangements allow a shipper in possession of Bacton entry capacity to choose where it brings gas into GB from. For example, shippers can flow gas into Bacton from the UKCS or via the two gas interconnectors – Interconnector UK ('IUK') and the Balgzand Bacton Interconnector ('BBL'). We hosted a workshop on 28 January 2014 that gave stakeholders the opportunity to explore what solutions might maintain some level of the flexibility they currently enjoy while ensuring compliance with the CAM network code. We discuss this issue in more detail later in this document.

1.10. The TSOs[9] in respect of the routes between mainland Europe and GB are developing a joint set of proposals for how they intend to implement the requirements of the CAM network code[10] (referred to as 'concept documents')[11]. These proposals will explain to the market and the relevant National Regulatory Authorities ('NRAs') at a high level how the CAM network code will be implemented across all TSOs on any specific route. The main focus will be on how the TSOs will offer bundled capacity products for auction and how other aspects of other network codes which are relevant for the functioning of bundled products are applied (for example how mechanisms set out in the Congestion Management Procedures Decision[12] will work once CAM has been implemented). Following an opinion on these documents from NRAs we expect the TSOs to individually modify their contractual documentation as required in order to implement the changes and to submit these documents to the Authority (and other NRAs) for approval where appropriate.

[8] The responses to our open letter are available on the Ofgem website: (https://www.ofgem.gov.uk/publications-and-updates/options-great-britain%E2%80%99s-implementation-european-union-network-code-capacity-allocation-mechanisms-gas-transmission-systems-regulation-9842013-bacton-entry-point-0)

[9] Fluxys, IUK and NGG in respect of the Belgium to GB route, Gasunie Transportation Services ('GTS'), BBL and NGG in respect of the Netherlands to GB route.

[10] We would expect a similar process to be followed by the TSOs in respect of the routes from GB to Ireland.

[11] Information relating to the GB-Belgium route concept document can be found at: http://www.interconnector.com/about-us/what-we-have-to-say/consultations/

[12] Commission Decision of 24 August 2012 on amending Annex I to Regulation (EC) No 715/2009 of the European Parliament and of the Council on conditions for access to the natural gas transmission networks

1.11. NGG has to date raised three Modification Proposals[13] to the UNC in respect of amendments required in order for the CAM network code to be implemented. The Authority approved UNC 461 on 28 March 2014. We expect Modification Proposals UNC 500 and UNC 501 to follow the modification process as set out in the UNC and to come to Authority for decision in due course.

Interactions with other work

1.12. The CAM Regulation establishing the CAM network code is one component of a range of legislation that stems from the Third Package. In implementing this legislation it is crucial that all stakeholders ensure that a coherent set of arrangements is put in place across all aspects of the gas market. As noted above, this requires TSOs to modify their contractual documentation and for NRAs to ensure that the documentation that they are responsible for is amended in an appropriate and timely manner.

1.13. From a GB perspective, it is important that the gas transmission access charges regime remains fit for purpose at domestic entry and exit points: that it protects the interests of existing and future consumers. We will assess the current charging arrangements and options for change against the following criteria: compliance with network codes (including the CAM network code and the Tariffs network code[14]); economic efficiency; impact on cross-border trade; developments in the transportation business; and security of supply. The Gas Transmission Charging Review ('GTCR') gives market participants the opportunity to consider the GB charging methodology in the context of the implementation of CAM. We want to avoid a situation whereby the charging arrangements are considered from a European perspective today and reopened from a national perspective later on. We will continue to consider the interactions between the implementation of CAM and the GTCR[15].

Purpose of this document

1.14. This document sets out our minded to view on how the CAM network code could be implemented on the NTS in GB. The proposed changes to the GB arrangements set out in this document will create the framework that allows stakeholders to implement the remaining aspects of CAM (eg, bundled capacity products and standard auctions). Based on the views set out in this document, we consider that interested stakeholders are in a position to propose modifications to

[13] UNC 461: Changing the UNC Gas Day to Align with the Gas Day in EU Network Codes, UNC 500:EU Capacity Regulations – Capacity Allocation Mechanisms with Congestion Management Procedures and UNC 501:Treatment of Existing Entry Capacity Rights at the Bacton ASEP to comply with EU Capacity Regulations.
[14] At the time of publication, the Tariffs network code is at the Framework Guideline stage and expected to be implemented by late 2017.
[15] Up-to-date information is available on our GTCR website: https://www.ofgem.gov.uk/gas/transmission-networks/gas-transmission-charging-review .

their relevant contractual documentation to the Authority for approval in accordance with the content of this document.

1.15. This document therefore sets out our proposals for modifications to NGG's NTS licence that we consider are required in order to facilitate the implementation of components of CAM in GB[16]. In particular these relate to the creation of a separate category of entry point at IPs and the associated allocation of baseline capacity to those entry points. The remainder of this document is set out as follows:

- Chapter 2 Facilitation of the implementation of CAM on the NTS in GB;
- Chapter 3 Facilitation of the implementation of CAM at entry points to the NTS;
- Chapter 4 Facilitation of the implementation of CAM at exit points from the NTS;
- Chapter 5 Next steps, including details of our proposed licence changes.

1.16. Section 5A of the Utilities Act 2000 requires that before implementing an important proposal we are required to either carry out and publish an assessment of the likely impact of implementing the proposal or publish a statement setting out our reasons for thinking that it is unnecessary for us to carry out such an assessment. We consider that it is not necessary to carry out an impact assessment in respect of the issues set out in this consultation document for the following reason:

- Where the proposals do involve the exercise of discretion by the Authority as they provide options for implementation, we do not consider that the variation in the effect of the implementation of the options meets the technical definition of being an important proposal in accordance with Section 5A of the Utilities Act 2000.

1.17. We invite comments on what is set out in this document. Responses should be sent to David McCrone (**david.mccrone@ofgem.gov.uk**) by **8 August 2014**.

[16] Licence modifications that are required to implement changes to the Gas Day will be the subject of a separate consultation process. As implementation progresses, we recognise that it may become apparent that other licence changes may be required.

2. Facilitating implementation of CAM on the National Transmission System in Great Britain

Chapter Summary

This chapter sets out the requirements of the CAM network code and the proposed changes to the rules relating to capacity allocation on the NTS which we consider to be required in order to facilitate the implementation of CAM in GB. It highlights the current capacity allocation methodology in GB and why we consider that it is appropriate to retain this methodology for entry and exit points that are not required to comply with CAM.

Question box

Question 1: Do you agree with our proposal to only implement the CAM network code in respect of the allocation of entry and exit capacity on the NTS at IPs?

The CAM network code

2.1. The CAM network code seeks to facilitate access to cross-border capacity for shippers by introducing the following:

- Bundled capacity products that will merge exit and entry capacity products at both sides of every IP (which are underpinned by individual contracts each side of the IP, eg, the UNC in the case of NGG in GB), thereby requiring shippers to buy fewer products in order to flow gas from one market to another.
- The ability for a shipper to make a single nomination (a declaration of how much gas a shipper intends to flow against the capacity it holds) against an associated bundled capacity quantity.
- The sale of capacity via pan-European web based booking platforms.
- The offering for sale of capacity via an auction procedure for yearly, quarterly, monthly, daily and within-day standard capacity products[17].
- The coordination of maintenance of pipelines or parts of transmission networks by TSOs and communication procedures by TSOs.

2.2. The CAM network code applies to all firm and interruptible capacity offered at IPs (including additional capacity, ie, capacity in excess of the technical capacity[18]).

[17] The only exception to this is within-day interruptible capacity which will be allocated by an over-nomination procedure where TSOs decide that this will be offered.

The capacity made available at IPs shall be the maximum technical capacity, taking into account system integrity, safety and efficient network operation, and should not be to the detriment of other points on the system[19]. The CAM network code does not apply to exit points to end consumers and to distribution networks, entry points from liquefied natural gas ('LNG') terminals and production facilities, as well as entry-exit points to or from storage facilities[20].

Potential benefits of implementing the CAM network code

2.3. We consider that implementation of the CAM network code will make a positive difference to energy consumers by furthering the Third Package objectives of: promoting a competitive, secure and environmentally sustainable internal market; eliminating restrictions on trade in natural gas between Member States through a more efficient use of cross-border capacity; transparent and non-discriminatory access for all network users; and effective competition on, and flexible use of, gas transmissions systems. Enabling gas to flow according to market-driven price signals is a key enabler of these objectives.

2.4. Currently if a shipper wishes to flow gas from the Netherlands to GB it must buy three capacity products: exit capacity from the Dutch GTS network, capacity on the BBL interconnector and entry capacity at the Bacton NTS entry point. Similarly a shipper flowing gas between Belgium and GB must buy three products: Fluxys entry or exit capacity, IUK capacity and entry or exit capacity at Bacton.

2.5. This arrangement creates a number of issues. A shipper may be able to buy one or two capacity products but may be unable to get the third necessary to flow gas. This leaves the shipper with potentially stranded capacity that it is unable to use and this arrangement is an inefficient use of transmission capacity. If a shipper is able to purchase all the necessary capacity products to flow gas, it is required to make three separate nominations to the relevant TSO. Multiple nominations, and the varying allocation mechanisms themselves, increase the complexity and transaction costs faced by market participants when seeking to book capacity.

[18] Capacity in excess of the technical capacity is defined as additional capacity in 2.2.2.1 of Annex I of the Gas Regulation on Congestion Management Procedures (the CMP Guidelines) in the link http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2012:231:0016:0020:EN:PDF. The CAM network code may also apply to entry points from and exit points to third countries, subject to the decision of the relevant NRA. Ofgem's view is that there are currently no such entry or exit points in GB where CAM would be applied.

[19] In this document we consider the options against the CAM objective of ensuring the maximum technical capacity is made available at IPs. However, we recognise that it is necessary to ensure that this is not to the detriment of other points on the system.

[20] The scope of the CAM Regulation is set out in Article 2 of the CAM Regulation.

2.6. We consider that the implementation of the requirements of the CAM network code will ensure a more efficient allocation of transmission capacity at IPs between European transmission networks and that it will facilitate cross-border trade and contribute to the Third Package's objective of the creation of a competitive European internal gas market. Establishing a harmonised auction process offers a fair and transparent way of ensuring third party access to transmission networks.

2.7. As well as benefiting GB consumers, we consider that our proposals for facilitating the implementation of the CAM network code will meet the needs of market participants. Standardised capacity products and a single transmission capacity allocation mechanism are intended to facilitate market access for shippers via a more efficient allocation and use of network capacity. We also consider that consistency and simplicity in selling capacity across interconnectors will benefit market participants by lowering transaction costs.

The current arrangements for capacity allocation on the NTS

NTS entry capacity

2.8. Entry capacity booked at an ASEP provides shippers with the right to bring gas onto the NTS at that ASEP up to the level of capacity they have booked.

2.9. Entry capacity can be either a firm (financially firm) or interruptible (rights may be curtailed) product. Firm entry capacity is made available in quarterly, monthly, daily or within day strips via a suite of long and short term auctions. Interruptible entry capacity is made available on a daily basis via auctions. Shippers can obtain entry capacity by making bids on NGG's Gemini system and bids are allocated or rejected in accordance with the rules set out in the UNC.

2.10. NGG is obligated by its NTS licence to provide a minimum volume of firm entry capacity at each ASEP. It may also choose to release further firm entry capacity over and above the obligated level. The volume of firm entry capacity made available at each ASEP (taking into account capacity sold at previous auctions) is made up as follows:

- Baseline NTS entry capacity (obligated) as set out in NGG's NTS licence;
- Incremental NTS entry capacity (obligated) is firm capacity made available over and above baseline, in response to market demand and backed by shipper commitment (but ultimately becomes baseline); and
- Incremental NTS entry capacity (non-obligated) is additional firm NTS entry capacity at an ASEP, over and above obligated levels released at NGG's discretion.

2.11. If a shipper flows more gas than it holds entry capacity for on any given gas day, then it will incur an overrun charge[21]. The overrun charge is the shipper's financial incentive to buy all the NTS transmission capacity that it needs.

2.12. There may be scenarios where NGG is able to accept less gas at an ASEP than the sum of the transmission capacity entitlements held by shippers. If shippers choose to flow above NGG's capability it may lead to a transportation constraint. Transportation constraints can arise as a result of a number of factors such as maintenance or adverse supply/demand scenarios. In this scenario NGG has a range of commercial tools available to it to alleviate any constraints. These include scaling back interruptible entry capacity and buyback of firm entry capacity.

NTS exit capacity

2.13. NTS exit capacity provides shippers with a right to offtake gas from the NTS. As with entry capacity, NGG is obligated to provide a baseline amount of firm exit capacity as well as incremental capacity in response to market demand. It may also provide a non-obligated volume at its discretion. Shippers obtain exit capacity by making applications or bids on the Gemini system through a number of application windows and auctions. Exit capacity sold in a long term application window is an enduring product. As with entry capacity, if a shipper's flow exceeds its booked exit capacity entitlement for any given gas day, it will incur overrun charges calculated in accordance with Section B of the UNC.

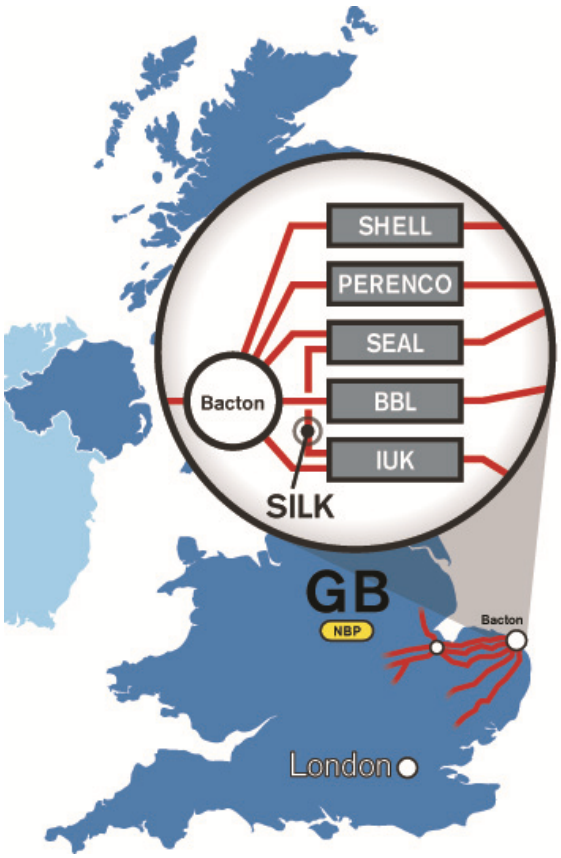
2.14. NGG can also scale back off peak NTS exit capacity when and where there is a constraint. This can range between a zero and 100% scaling back of available exit capacity. NGG can also request shippers to reduce demand for a set period of time by requesting offers for offtake flow reduction at NTS exit points in the areas impacted by the forecast constraint.

Current GB interconnection

2.15. The GB gas market is physically connected to the continent via the two gas interconnectors that connect to the NTS at Bacton: IUK (GB – Belgium) and BBL (GB – Netherlands). The point where an interconnector 'meets' the NTS is referred to as an IP. An IP is a point that is subject to booking procedures and connects adjacent entry-exit systems or connects an entry-exit system with an interconnector. Gas also flows into the NTS at Bacton from the UKCS. Gas can also flow from UKCS directly onto IUK without entering the NTS via the SILK pipeline. Figure 1 illustrates the configuration at the Bacton entry and exit point.

[21] The applicable overrun charge is based on the price paid for capacity and cost of buy-backs at that ASEP times a multiplier as set out within UNC TPD B2.12.

Figure 1: Diagram of entry and exit to the NTS at Bacton[22,23]



2.16. The GB gas market is also connected to the Republic of Ireland ('RoI') and Northern Ireland ('NI') via the IP at Moffat in south-west Scotland. Interconnector 1 ('IC1') and Interconnector 2 ('IC2') transport gas from Brighouse Bay to Loughshinny and Gormanstown in the RoI. From Moffat, gas is transported to NI first via the Moffat to Twynholm pipeline before joining the Scotland to NI pipeline ('SNIP') at Twynholm. This is illustrated in Figure 2 below.

2.17. As well as being an exit point from the NTS to NI and RoI, Moffat is also defined within the NGG NTS licence as a system entry point with a zero baseline in respect of the NTS. This allows for a commercial interruptible reverse flow from the island of Ireland onto the NTS.

[22] At present, gas can enter the NTS at Bacton via any of the System Entry Points identified. However, physical exit flows are only possible onto IUK with commercial interruptible exit service being offered onto BBL.
[23] Gas flows have not been seen at the Tullow sub terminal since 2 August 2011.

Figure 2: Diagram of entry and exit to the NTS at Moffat[24]

Interconnector capacity

2.18. Capacity on the two interconnectors with mainland Europe has mostly been sold under long term contracts. These will expire in 2018 for IUK and in 2016 and 2022 for BBL. Not all capacity on BBL has been sold under long term contracts. In addition, capacity should be made available through the Congestion Management Procedures ('CMP'). A Transportation Agreement between Premier Transmission Limited ('PTL') and BGE (UK) sets out the amount of capacity for Northern Ireland shippers in the pipeline and how those shippers can nominate gas to PTL in order to flow from Moffat to NI.

Comparison of capacity allocation requirements under CAM with existing GB allocation

2.19. Tables 1 and 2 set out the existing GB arrangements for selling entry and exit capacity as well as the requirements set out in the CAM network code.

[24] At present, gas can only physically exit the NTS at Moffat. Commercial interruptible entry services are also offered at Moffat.

Table 1: Timing of Gemini and CAM network code entry capacity auctions[25]

Auction	Gemini	CAM
Annual	• No UNC equivalent	• Held annually • Single year product up to Y+15 • Pre defined price steps (minimum reserve price at First Step)
Quarterly	• Held annually • Capacity available in quarterly strips (Oct Y+2 to Sep Y+16) • Pre defined price steps • (minimum reserve price at First Step)	• Held annually • Capacity available in quarterly strips for next year • Pre defined price steps (minimum reserve price at First Step)
Annual Monthly	• Held annually • Monthly strips (18 months: current year, Apr to Sept plus Y+1) • Minimum reserve price (pay as bid)	• No CAM equivalent
Rolling Monthly	• Held monthly • One monthly strip • Minimum reserve price (pay as bid)	• Held monthly • One monthly strip • Pre defined price steps • (minimum reserve price at First Step)
Day Ahead (Rolling Day Ahead) Firm + Interruptible	• Held daily • One daily strip • Minimum reserve price, pay as bid	• Held daily • One daily strip • Minimum reserve price (uniform price)
Within Day	• Held at various times within day • Capacity sold for the gas day • effective from time is next hr bar+1 from time of allocation • Zero reserve price (pay as bid)	• Held hourly within day • Capacity sold for the gas day • effective from time is next hr bar+3 from time of allocation • Minimum reserve price (uniform price)

[25] As the CAM auctions will be set out in the UNC we have used Gemini in this document to refer to the existing UNC allocation procedures.

Table 2: Timing of Gemini and CAM network code exit capacity allocation

Auction/Application	Gemini	CAM
Enduring Annual Exit (Flat) Capacity Increase (Application)	• Held annually • Enduring product • Used to increase capacity from in Y+4 to Y+6 • Price set in year before use	• No CAM equivalent
Enduring Annual Exit (Flat) Capacity Decrease (Application)	• Held annually • Enduring product • Used to decrease capacity holdings from Y+1	• No CAM equivalent
Annual NTS (Flat) Exit Capacity (Application)	• Held annually • Capacity from Y+1 to Y+3 • Price set in year before use	• Held annually • Single year product up to Y+15 • Pre defined price steps • (minimum reserve price at First Step)
Quarterly	• No UNC equivalent	• Held annually • Capacity available in quarterly strips for next year • Pre defined price steps • (minimum reserve price at First Step)
Rolling monthly	• No UNC equivalent	• Held monthly • One monthly strip • Pre defined price steps • (minimum reserve price at First Step)
Day Ahead Firm + Interruptible[26]	• Held daily • One daily strip • Minimum reserve price (pay as bid)	• Held daily • One daily strip • Minimum reserve price (uniform price)
Within Day	• Held at various times within day • Capacity sold for the gas day • effective from time is next hr bar+1 from time of allocation • Minimum reserve price (pay as bid)	• Held hourly within day • Capacity sold for the gas day • effective from time is next hr bar+3 from time of allocation • Minimum reserve price (uniform price)

[26] Off-peak product under the current UNC rules is offered with a zero reserve price

Future allocation of capacity on the NTS in GB

2.20. Article 2.1 of the CAM Regulation states:

"This Regulation shall apply to interconnection points..... This Regulation shall not apply to exit points to end consumers and distribution networks, entry points from 'liquefied natural gas' (LNG) terminal and production facilities, and entry-exit points to or from storage facilities."

2.21. This means that the CAM Regulation requirements are only required to be applied in respect of entry and exit capacity allocation to the NTS at the IP at Bacton (in respect of the interconnectors only) and at the IP at Moffat. It follows however that this means once CAM is implemented at these IPs there will be different capacity allocation mechanisms at IPs compared to all other entry and exit points in GB. This could lead to benefits to the interconnectors versus, for example, flows from the UKCS or vice versa[27]. We therefore need to consider the pros and cons of wider implementation of the CAM network code in GB.

2.22. In our open letter we set out three options for implementing the requirements of the CAM network code within GB. These can be summarised as follows:

- Implementation of the CAM network code at all GB entry and exit points;
- Implementation of CAM at the full Bacton ASEP[28] (ie, including flows from UKCS) and at the Moffat entry and exit point[29]; or
- Implementation at IPs only.

Implementation of the CAM network code at all GB entry and exit points

2.23. The first proposed option would see the CAM network code requirements implemented in respect of all entry and exit points within GB, which goes beyond the requirements of CAM. The benefit of such an approach would be that all entry and exit capacity in GB is sold under the same mechanism. All other things being equal this removes any potential possibility for discrimination between entry or exit points.

[27] Depending on the final decision there may be different auctions (and therefore different capacity products) at different entry points. This may make it more attractive to flow gas via a particular route.

[28] As exit capacity at Bacton is already split between the various exit points (e.g. IUK or LDZ) we have not considered the option of implementing CAM at all Bacton exit points, whilst not implementing at other non IP exit points.

[29] The pipeline from Moffat that connects to SNIP, IC1 and IC2 is owned and operated by BGE (UK) and is subject to the terms of the Transportation Agreement ('TA') between PTL and BGE (UK). It is therefore considered appropriate to implement the CAM network code across all NTS exit capacity (and the virtual entry capacity) at Moffat which is used solely by shippers in respect of flows to the RoI and NI.

2.24. In our open letter we noted that implementing the requirements of the CAM network code in respect of all GB entry points would be disproportionate and extremely challenging to deliver by 1 November 2015.

2.25. The aim of the CAM network code however is to achieve effective competition in the wholesale market. We set out the potential benefits this would bring earlier in this chapter. Implementing the CAM network code requirements in respect of all entry (including those for LNG and storage) and exit points would require significantly more processes to be changed with little or no discernible benefit at those points which are not IPs in achieving effective competition in the EU wholesale market. In particular, the benefits of implementing the CAM network code in respect of cross-border harmonisations and the facilitation of cross-border flows are not relevant in respect of non-IP entry and exit points. Any benefits that there might be in bundling the allocation of, for example, entry capacity at an LNG terminal together with the allocation of the capacity at an LNG terminal are not clear. To enable such bundling of capacity to occur would require a complete change to the way in which capacity is allocated at LNG terminals. We therefore do not consider that this is an appropriate way in which to implement CAM.

Implementation of the requirements of the CAM network code at the full Bacton ASEP and Moffat only

2.26. A variation on the first proposed option would be to implement the requirements of the CAM network code in respect of the full Bacton ASEP. This would see entry capacity for gas entering from UKCS at Bacton sold in compliance with the requirements of the CAM network code. Gas entering from UKCS at all other GB entry points would continue to be sold under the current UNC arrangements.

2.27. One advantage of this proposal would be that it might be possible to retain the Bacton ASEP as one aggregate capacity right. Shippers who hold existing Bacton entry capacity would not be required to assign their existing holding into rights relating to any new ASEPs which may or may not be created. However, this approach would mean that gas brought into GB from UKCS is sold via two different mechanisms depending on what entry point is used (ie, Bacton versus all other entry points). This option also goes beyond the requirements of CAM.

2.28. It is worth noting that while Tables 1 and 2 show similar allocation processes under the existing UNC arrangements and under the requirements of CAM there are some differences. They are also both subject to a minimum reserve price which could be calculated in different ways. Article 26 of the CAM Regulation states that:

"The tariff as calculated using the methodology set and/or approved by the national regulatory authority, or the tariff set and/or approved by the national regulatory authority, shall be used as the reserve price in all auctions"

"The appropriate tariff arrangements for the implementation of this Regulation shall be set out on a Union and/or national level in due time."

2.29. The Tariffs Network Code is still in development and is expected to reach comitology in early 2015. In parallel, we are also reviewing GB gas transmission charging arrangements. Both workstreams may result in changes to the calculation of reserve prices. There is therefore no guarantee that reserve prices in the Gemini and CAM auctions will be the same or how different prices could be managed if one ASEP was retained.

2.30. The differences between the Gemini and CAM network code auctions could lead to a scenario where it is more favourable to bring gas from UKCS into GB at Bacton than other entry points which are not subject to CAM or vice versa. The point where UKCS gas enters GB from a particular field is fixed. This could potentially discriminate between shippers and producers as they would be unable to change the entry point at which they bring gas into GB. In our open letter we set out that we considered that it was not appropriate to make a special case for UKCS gas arriving at the Bacton ASEP. We therefore do not consider that this is an appropriate way in which to implement the CAM network code.

Implementation at IPs only

2.31. The third option is that the CAM network code requirements are implemented in respect of IPs only. In the case of the Bacton entry point this would mean that the CAM network code is implemented only in respect of gas flowing to and from the BBL and IUK pipelines. Entry capacity for gas flowing into Bacton from UKCS and exit capacity for gas flowing to the LDZ and other non IP exit points at Bacton would continue to be sold under the existing UNC arrangements. In respect of Moffat all entry and exit capacity would be allocated under CAM.

2.32. This option ensures compliance with the requirements of CAM, which only applies to IPs. That is, implementation of the requirements of the CAM network code is in respect of IPs only. Furthermore, this option fulfils the Authority's principal objective by not discriminating between flows from UKCS depending upon their entry point into GB (which otherwise may impact security of supply and the interests of existing and future consumers).

2.33. A potential disadvantage with this option is that there will be two different auction mechanisms used to sell entry capacity at a single ASEP[30]. This could have consequences for NGG and shippers which must be considered further. However we consider that there are ways of mitigating these and discuss these in the next chapter.

Responses to our open letter

2.34. The majority of respondents agreed with the view expressed in our open letter. One respondent explicitly supported the minimal implementation of European

[30] We note that exit capacity at Bacton will also be sold under two different mechanisms.

network codes. Another respondent noted that while consistency across GB was desirable it was not critical to the successful implementation of CAM.

Our proposal

2.35. **We propose that the requirements of the CAM network code should be implemented within GB at IPs only.** That is only entry and exit capacity at Bacton and Moffat in respect of flows through the interconnectors will be sold in compliance with the requirements of the CAM network code. This proposal ensures compliance with the requirements of the CAM Regulation, which only applies to IPs, and maintains the view set out in our open letter.

2.36. Should this option be implemented, this will mean that entry capacity for gas from UKCS entering Bacton will be sold under the prevailing UNC rules, while gas entering from BBL or IUK will be sold pursuant to the requirements of the CAM network code, which will also be contained within the UNC. We set out how this can be addressed in the next chapter.

3. Facilitating implementation of CAM at entry points to the NTS

Chapter Summary

This chapter sets out the changes that will be required to facilitate the implementation of the requirements of the CAM network code in respect of entry points to the NTS. This chapter focuses on the changes that would be necessary to the licence of NGG in respect of the Bacton ASEP if the CAM network code is only implemented in respect of IPs.

Question box

Question 2: Do you agree with our proposal to split the Bacton ASEP into a UKCS ASEP and IP ASEP?

Question 3: Do you agree with our proposal to create one single IP ASEP, with the baseline capacity set at the sum of the maximum technical capacity for the IUK and BBL interconnectors?

Question 4: If you are a holder of entry capacity at Bacton after November 2015, please provide details of entry capacity holdings after this date. Please also provide details of how you would choose to assign these capacity rights following any split of the Bacton ASEP (ie, into a UKCS ASEP and IP ASEP)?

Entry points onto the NTS at IPs

3.1. Currently the Bacton ASEP is the only IP where firm entry capacity onto the NTS is made available (a virtual entry point exists at Moffat allowing for interruptible reverse flow into GB). This chapter therefore focuses on the facilitation of implementation of the CAM network code at the Bacton ASEP. However, it should be noted that the views expressed in this chapter would be equally applicable to any entry capacity made available at any future IP.

Facilitating the implementation of CAM at the Bacton ASEP

3.2. As outlined in the previous chapter, gas enters GB at Bacton from more than one source. The Bacton entry point is unique in GB in that gas from two interconnectors and three UKCS sub-terminals all enters the NTS there. When gas enters the NTS via the Bacton ASEP, NGG currently makes no physical differentiation between the supply streams.

3.3. NGG also makes no distinction when allocating entry capacity in respect of gas flows from UKCS or mainland Europe. Shippers book entry capacity under the rules

set out in the UNC and are free to choose their route into GB on the day. The baseline entry capacity at Bacton is currently set out in NGG's NTS licence as 1783.4 GWh/day. Figures for historical flows do not indicate that there is any contractual congestion at Bacton[31].

Proposal to split the Bacton ASEP

3.4. As set out in Chapter 2, we propose that the CAM network code is implemented in respect of IPs only. In the case of Bacton this approach means that entry capacity will be sold through two different mechanisms.

3.5. We set out in our open letter that selling entry capacity at one ASEP under two different mechanisms may have unintended consequences. For instance, sale of capacity by one mechanism without knowing the results from the other mechanism may result in an oversell. Alternatively, holding the auctions at different times may favour participation in one auction over the other. In our open letter, we considered that there are four ways in which any conflict can be managed:

- NGG resolves;
- Capacity reduction;
- Competing auctions; and
- Split capacity.

NGG resolves

3.6. In this option NGG would offer all entry capacity that is available at the Bacton ASEP on both Gemini and PRISMA[32]. If more capacity is sold than is available across the two platforms (and is expected to be utilised) then NGG would use the options available to it to resolve any unavailability of capacity that may arise, for example by buying back capacity.

3.7. Shippers would bid for capacity as they required and the onus would be on NGG to monitor what was available in the relevant auctions and what had been booked. The risk with this approach is that one auction takes place whilst no regard is made of capacity being sold in the other. This means that more capacity could be sold than is available. While this would facilitate the implementation of CAM it would appear to be against its stated aim of efficient allocation of transmission capacity. Furthermore, false or inaccurate price signals may adversely affect accurate price discovery and liquidity at trading hubs. This would not be in the interests of consumers.

[31] Information in respect of historical flows is set out in appendix 4.
[32] PRISMA offers shippers a platform to book primary and secondary capacities in accordance with the CAM network code. NGG has signed up to use PRISMA in respect of capacity to be allocated via CAM.

3.8. Further, if the total baseline is made available in both auctions, it may signal that there is an artificially high level of capacity available. This could cause problems if future signals from market participants for incremental capacity are not received as a result. Such consequences may have impacts on security of supply and therefore the interests of existing and future consumers.

3.9. We note that there is currently more than sufficient available entry capacity at the Bacton ASEP to meet demand[33]. Given there is plenty of entry capacity available, the risks of an oversell or suppressing the signal for incremental capacity would appear to be low. However there is no guarantee that this will continue indefinitely. As such this option could place an additional, and potentially unnecessary, level of risk on NGG.

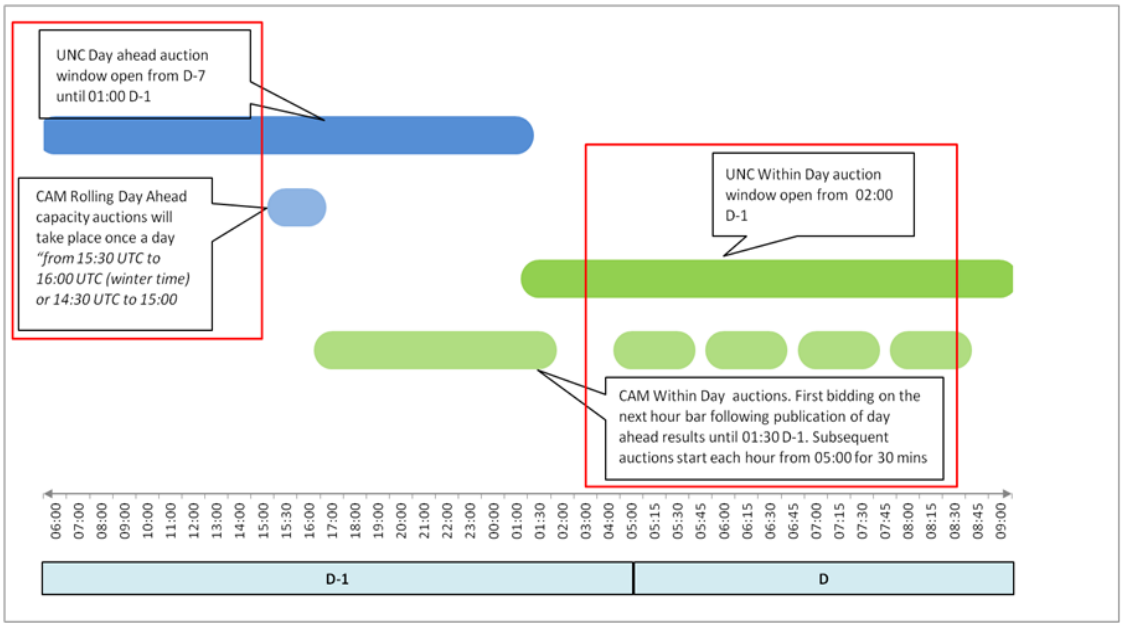
Capacity reduction and competing auctions

3.10. Our open letter also considered using capacity reduction or competing auctions. In the capacity reduction auction, all available capacity is made available in one of the types of auction. This auction is allowed to complete and the remaining unsold capacity is then made available in the other type of auction. Any capacity that is still available is sold through consecutive auctions alternating between the two types until all has been sold or there is no further demand. Competing auctions are held at the same time and capacity goes to where it is valued most across the two auctions.

3.11. The success of both of these options is dependent on when the auctions are held. Figure 3 summarises the timing of the day ahead and within day auctions as currently set out in the UNC and in the CAM network code.

[33] Source: National Grid Quarterly System Entry Capacity auction allocation results for 1 October 2013 to 30 September 2028 (http://www2.nationalgrid.com/uk/industry-information/gas-transmission-system-operations/capacity/entry-capacity-auction/)

Figure 3: Gemini and CAM network code day ahead and within day entry capacity auction timings



3.12. Our open letter suggested that these timings did not allow for capacity reduction or competing auctions to work effectively. NGG would be unable to determine the capacity available for auction in the CAM day ahead auction (as the equivalent Gemini auction is ongoing at the same time) therefore ruling out capacity reduction. Furthermore the intermittent nature of the CAM within day auctions means that shippers participating in the Gemini auctions will be able to buy capacity when there is no CAM auction taking place. This may provide a competitive advantage to those shippers participating in the Gemini auction.

3.13. The issues with capacity reduction and competing auctions described above can arguably be resolved. In order to do so however the timings set out in the CAM network code and in respect of the Gemini auctions would need to be aligned. The CAM network code auction timings are set out in the CAM Regulation and as such take precedence over GB industry codes. Equally we do not consider it is practical or appropriate to change the Gemini timings to align with CAM at this time in respect of UKCS capacity. This would require changes to the arrangements at all GB entry points, or at least making a special case for the Bacton ASEP. A further complication would be the requirement to develop some form of communication between auction platforms. This adds unnecessary complexity which we do not consider to be necessary or appropriate at this time.

Split capacity

3.14. We set out in our open letter that we considered the most appropriate solution to facilitate CAM implementation is for baseline entry capacity at the Bacton ASEP to be split.

3.15. This option would see the creation of at least two new ASEPs; one for gas entering GB from UKCS ('the UKCS ASEP') and at least one for gas entering from IUK and BBL ('the IP ASEP(s)'). This implementation option would facilitate the implementation of the CAM network code requirements at IPs, such as making maximum capacity available at IPs and holding the requisite auctions.

3.16. Splitting entry capacity would allow for separately defined volumes to be made available under the Gemini and CAM auctions. This would provide the advantage that the CAM and Gemini auctions could be held independently of each other. The volume available at one ASEP would also be unaffected by the outcome of an auction at the other. This avoids the issues described above.

3.17. Further advantages of this option are that this would not require changes to the Gemini or CAM auctions and would avoid the possibility of sales of capacity significantly above the baseline. This would also avoid the situation where signals from market participants for incremental capacity are not received. We also consider that splitting the Bacton ASEP could enable a more straightforward implementation of future network codes at Bacton when the scope of network code requirements is limited to the IP component. While an option being straightforward is not a reason to proceed in itself, this in addition to being compliant with CAM provides a further advantage.

3.18. We note one disadvantage of splitting the Bacton ASEP is that there is a need to define how any split will be made. There is also a consequence for long term existing bookings (bought when Bacton was a single ASEP) that needs to be examined further.

Responses to our open letter

3.19. The majority of responses to our open letter agreed that it would be impractical to seek to change the timings of Gemini auctions in respect of entry points which are not IPs and to which the CAM network code does not apply within the CAM implementation timescales. One respondent felt that changes could be implemented to allow capacity reduction to work until at least 2018. We note that capacity is sold 15 years in advance in both CAM and Gemini auctions. We consider that our proposal provides an enduring solution and avoids the need for unnecessary changes to the UNC which may need to be revisited at a later date.

3.20. The majority of respondents also supported the proposal to split baseline entry capacity at the Bacton ASEP. Some provided qualified support as they noted the current arrangements offered flexibility over which route into GB they could choose to use their entry capacity for. They considered that implementation of the CAM network code requirements reduced the flexibility available to them. Other respondents also raised concerns over the treatment of existing historical bookings.

3.21. Two respondents were against a split of the Bacton ASEP. One noted that the current arrangements allowed shippers to arbitrage between UKCS and interconnectors on a day ahead and within day basis. They felt that this should be

maintained. They also said that is was not appropriate until a mechanism for booking unmatched capacities was specified. The other respondent preferred to find a virtual model that was CAM compliant.

Our proposal

3.22. We agree that the treatment of existing historical bookings must be resolved as part of any split of the Bacton ASEP. We also consider that flexibility should be maintained where this would be compliant with the requirements of the CAM network code and where it is practical and appropriate to do so. These issues are discussed further later on in this document.

3.23. **We propose that the Bacton ASEP will be split as we proposed in our open letter** This is a consequence of the proposal of implementing the requirements of the CAM network code at IPs only and that there will be two different auction mechanisms employed at the same ASEP rather than anything within the CAM network code itself (for instance, the bundling of capacity products). The split will see the creation of at least two new ASEPs for gas entering GB from UKCS and via the IUK and BBL interconnectors with mainland Europe. This option would facilitate achievement of compliance with the CAM network code requirements such as the requirement to make the maximum technical capacity available and to implement auctions and capacity bundling at IPs.

One versus two Interconnector ASEPs

3.24. In our open letter we said that should we decide to split the Bacton ASEP any split of the existing Bacton ASEP would be into a UKCS ASEP and an IP ASEP (accounting for gas flowing from BBL and IUK). However Article 3 of the CAM Regulation defines an IP as *"...a physical or virtual point connecting adjacent entry-exit systems or connecting an entry-exit system with an interconnector, in so far as these points are subject to booking procedures".* We consider that this definition allows for individual IPs, and therefore individual ASEPs, in respect of the two interconnectors.

3.25. We considered that both options would work in theory and would facilitate achievement of compliance with the requirements of CAM. In fact, if the maximum technical capacity of the interconnectors is provided then we saw no difference in the available capacity under either option and both would be compliant with CAM.

3.26. However, in the event of two IP ASEPs there could be a scenario where flowing gas via one interconnector was more desirable than flowing gas via the other. If capacity at the preferred ASEP was sold out but there was still spare capacity on the other, NGG might be forced to take action such as buying back capacity unnecessarily. It would not be efficient or economic for it to do so. This may also provide unnecessary signals for incremental capacity as discussed above. Furthermore, any costs incurred may ultimately be passed back to consumers. If there is only one IP ASEP, NGG can view the capacity available to both

interconnectors in aggregate. This would maintain some of the flexibility currently available to NGG and shippers.

Responses to our open letter

3.27. All but one of the responses to our open letter either supported a single IP approach or were indifferent. Shippers in favour of a single IP agreed that this might offer more flexibility and was therefore preferable. There was general agreement with our proposed split as long as it did not introduce any artificial scarcity and or congestion.

Our proposal

3.28. As we set out above both options would work and be compliant with the requirements of CAM to make the maximum technical capacity at interconnectors available. However we consider that two interconnector ASEPs may introduce inefficiencies that would not be consistent with our principal objective and statutory duties or with the overall aims of CAM. The interests of consumers include their interests in the fulfilment by the Authority of the objectives set out in Article 40 of the Gas Directive. These objectives include eliminating restrictions on trade in natural gas between Member States, including developing appropriate cross-border transmission capacities to meet demand and enhancing the integration of national markets which may facilitate natural gas flow across the Community. **As such, we propose that there should be one IP ASEP in respect of flows onto the NTS from both IUK and BBL.**

Setting UKCS and IP ASEP baseline capacities

3.29. In our open letter we considered that there are four options for determining the baseline capacities at the new UKCS and IP ASEPs but only some of which would comply with the requirement of CAM to make the maximum technical capacity available. Appendix 4 describes these in more detail as well providing information on historical entry flows into the existing Bacton ASEP. The four options are summarised in Table 3.

Table 3: Options for setting UKCS and IP ASEP baseline entry capacities

Option	Pros	Cons
Splitting based on technical capacities of the two interconnectors	• Meets historical flows on BBL and IUK (reverse flow – import mode to UK) observed since January 2010 • Meets future booked capacity on IUK and BBL	• May be insufficient if UKCS production were to increase
Split based on predicted UKCS and or interconnector flows	• Meets historical flows on BBL and IUK (reverse flow) observed since January 2010 • Meets future booked capacity on IUK and BBL • Highest capacity assigned to UKCS production of the four options	• Requires a change to existing aggregate licence baseline • May not result in maximum technical capacity being provided at IP and therefore not CAM compliant
Split based on predicted UKCS and or interconnector flows as a percentage of existing baseline capacity	• Meets historical flows on BBL and IUK (reverse flow) observed since January 2010	• Does not meet the maximum technical capacity of the interconnectors and therefore not CAM compliant • Would not meet NGG's forecast for flows in 2015/16
Split based on existing holdings	• Allows for a more 'user led' process	• Past flows do not necessarily reflect future requirements • May not result in maximum technical capacity being provided at IPs and therefore not CAM compliant

3.30. Our open letter stated our preferred option that the capacity at the IP ASEP should be the sum of the maximum technical capacities of the two interconnectors, with the remainder of the current Bacton ASEP baseline capacity assigned to the new UKCS ASEP. This would result in the following baseline capacities[34]:

- IP ASEP – 1301.6 GWh/day
- UKCS ASEP – 481.8 GWh/day

[34] This figure was based on the maximum technical capacities published by the interconnectors at the time. These were 494 GWh/d and 807.6 GWh/d for BBL and IUK respectively.

Responses to our open letter

3.31. The majority of responses to our open letter considered that giving the IP ASEP the sum of the maximum technical capacity of the two interconnectors was the most practical solution.

3.32. Some respondents were concerned that it may lead to artificial scarcity or congestion. We do not consider that this is likely to be the case and this view is supported by historical flow data.

Our proposal

3.33. **We propose that the current Bacton ASEP is split so that the maximum technical capacity of the two interconnectors is available to users at the Bacton IP ASEP.** This would achieve compliance with Article 6 of the CAM Regulation to make the maximum technical capacity available. It also furthers the interests of consumers by promoting competition and eliminating restrictions on trade in natural gas between Member States through making the maximum capacity at interconnectors available.

3.34. Since publishing our open letter we note that the maximum technical capacity for IUK reverse flow (ie, imports into GB) as published by IUK has changed. We understand this to be the result of a change in Gross Calorific Value used in its calculation. This has meant a slight amendment to our proposed split. Taking this into account we propose that the split would be as follows[35]:

- IP ASEP – 1297.8 GWh/day
- UKCS ASEP – 485.6 GWh/day

3.35. We do not think there is a need to recalculate the total amount of capacity available at Bacton (either at the existing single ASEP or under our proposed split). There has been no user signal to do this so would be inefficient to do so.

3.36. Under our proposed approach, shippers will need to assign existing booked capacity rights to one, or spread across both, of the new ASEPs. The current Bacton ASEP will no longer exist so we do not consider that it is appropriate to allow capacity to be held against it. The process for assigning existing capacity rights is discussed further later in this chapter and we also note that NGG has raised UNC modification 501 to this effect.

[35] These figures are based on the current Bacton baseline capacity as set out in NGG's NTS licence (1783.4 GWh/d), maximum firm technical capacity for IUK reverse flow (803.4 GWh/d) and BBL firm forward flow maximum technical capacity (494.4 GWh/d) taking account of system integrity and efficient network operation. Figures for IUK and BBL are published on the respective interconnector's website and correct as of 28 May 2014.

Fungibility

3.37. In our open letter we stated that we did not consider capacity should be fungible between the two new Bacton ASEPs. That is, capacity sold at one ASEP should not be freely usable at the other. This would be the case for capacity booked after 1 November 2015 as well existing bookings (once shippers had assigned rights relating to existing holdings to a particular ASEP).

3.38. There are CAM network code compliance reasons for this, we consider that our proposal ensures compliance with the CAM network code. CAM requires TSOs to notify network users about the amount of technical capacity to be offered for each upcoming auction. This requires the TSO to know how much has been previously sold. If sold capacity is freely fungible between the two ASEPs it is not possible to ascertain how much capacity is available for future auctions. Furthermore, it is possible that the final Tariffs network code will set out tariff structures at IPs that are different from those at domestic points. This means, once implemented, there may be a difference in UKCS ASEP and IP ASEP capacity products, adding weight to the argument that they should not be used interchangeably.

3.39. However, if a shipper held unbundled entry capacity at the IP ASEP it would be free to choose to combine this with unbundled IUK or BBL capacity (if available) as it wishes on a given day.

Responses to our open letter

3.40. The majority of responses to our open letter agreed with our view which considered that it was difficult, if not impossible, to maintain fungibility under CAM. However this was at the expense of flexibility, which we recognise.

3.41. Those in favour of retaining fungibility commented that the physical volume of gas being delivered to Bacton was not changing so this was unnecessary, and that while compliant, undermines the spirit and aim of European network codes to promote cross-border trading.

Our proposal

3.42. We agree that the physical volume entering the Bacton ASEP is not changing as a result of the implementation of the CAM network code in GB. However as stated above, the capacity products being sold at each of the Bacton ASEPs may be different. It does not seem appropriate that a shipper could buy capacity under one set of terms and conditions and use that capacity in the same way as shippers who have bought a similar product under another set of terms and conditions. For example, if the price for one product was fixed, with the other at a floating price. There is also the problem of NGG understanding how much capacity is available as described above.

3.43. We consider that capacity not being fungible is compliant with the CAM network code requirements. The CAM network code is aimed at ensuring the efficient allocation of capacity at IPs between European transmission networks. It should also facilitate cross-border trade and contribute to the Third Package's objective (which we as the NRA for GB are required to take all reasonable measures to achieve) of a more competitive European gas market. **We therefore continue to consider that entry capacity should not be fungible between the two Bacton ASEPs.**

Treatment of sold entry capacity

3.44. As we have set out previously shippers currently book entry capacity at the Bacton ASEP under the rules set out in the UNC and are free to choose their route into GB on the day. Implementation of the CAM network code will introduce bundled capacity products and we also consider that it requires the Bacton ASEP to be split. There are bookings for entry capacity at the existing Bacton ASEP for dates after the CAM network code is to be implemented. These have been booked with an understanding that Bacton is one ASEP and a shipper is not limited to a prescribed route. Responses to our open letter expressed concerns about the impact of this on existing capacity holdings and the flexibility shippers may have in the future. Furthermore we recognise that existing sold capacity might be complicated by already completed future secondary trades.

3.45. We also note that the existing Bacton ASEP is not contractually constrained at present. We have worked with stakeholders to explore ways in which flexibility might be maintained and continue to do so. This is discussed later in this chapter.

3.46. The actual assignment of future capacity rights will be facilitated by a modification to the UNC[36]. To ensure that a modification can be implemented and the assignment of the existing rights process under it to be completed in time for 1 November 2015, we intend to make a final decision on the new baseline capacities by early 2015. We will continue to work with stakeholders on this but this consultation represents one of the last formal opportunities for stakeholders to make representations on our proposed split.

3.47. We would encourage shippers who currently hold capacity at the existing Bacton ASEP to express their views on the proposed Bacton ASEP split so that we can take their views into account and so that they are able to contribute to the final decision of any future split. We recognise that a decision on how a shipper might assign capacity between the new ASEPs is dependent on a number of factors, some of which are still in development. However we are asking at this time for details of a shipper's existing entry capacity holding at Bacton and an indication of how it may choose to split this under our proposals as this will help inform our final decision. For instance, if all respondents indicate a desire for UKCS ASEP capacity only, our proposals that are set out in this document may not be appropriate. As this

[36] NGG has raised UNC Modification Proposal 501.

information is commercially sensitive stakeholders should provide this information as an annex to their response and clearly mark it as confidential.

Existing contracts

3.48. The CAM network code applies to existing contracts. Article 20 of the CAM Regulation sets out what the obligations are in respect of existing contracts. In summary, this is that parties to existing contracts should aim to reach agreement on the bundling of the capacity via contractual arrangements in compliance with the requirement for capacity to be bundled across interconnection points.

3.49. In responses to our open letter and industry working groups, shippers have expressed a desire for the opportunity to terminate existing contracts as a result of the changes being implemented as a result of CAM. This is because shippers consider that the product that they had purchased will no longer be available to them as a result of these changes, ie, previously they had bought capacity at the Bacton ASEP, whereas in the future they will only hold capacity at either the IP ASEP or the UKCS ASEP. We consider that CAM applies to existing contracts and parties should take their own legal advice on contractual issues. All parties to the main contract between NGG and shippers (the UNC) are free to raise modifications to the UNC arrangements, including in respect of capacity already purchased. The Authority considers any UNC modification proposal that comes to it for decision against the relevant objectives of the UNC[37] and its wider statutory duties.

Flexible use of entry capacity

3.50. As discussed above a lack of fungibility between any new UKCS ASEP and any new IP ASEP may reduce the level of flexibility that shippers currently have. For instance, if a shipper had entry capacity at an IP ASEP bundled with BBL, but wished to flow via IUK on a given day the shipper would be required to purchase Bacton entry capacity for a second time bundled with capacity on IUK[38].

3.51. In our open letter we indicated that there were a number of options available to NGG that might facilitate flexible use of entry capacity. These included the use of entry capacity transfer and trade in order to ease congestion, or substitution of unsold entry capacity between different NTS entry points in the longer term.

3.52. On 14 January 2014 we hosted a workshop exploring ways of maintaining flexibility for shippers as part of implementing the CAM network code at the Bacton ASEP. Shippers, through responses to the open letter as well as comments on the

[37] Including relevant objective (g) Compliance with the Regulation and any relevant legally binding decisions of the European Commission and/or the Agency for the Co-operation of Energy Regulators.
[38] It should be noted that in order to have this choice the shipper will need to purchase capacity on both IUK and BBL, as is currently the case.

day, set out five objectives which they considered to be important for implementing the CAM network code (subject to being compliant with the CAM network code). These objectives were:

- capacity should be fungible (as far as practically possible within the bounds of being CAM compliant);
- avoid unnecessary artificial constraints;
- honour existing contracts (subject to changes necessary to be CAM network code compliant);
- be free to allocate capacity as shippers wish; and
- implementation is at minimal cost.

3.53. The lead option that emerged from responses to the open letter and the workshop was an amendment to the existing overrun regime. We discuss this proposal in more detail in appendix 5. This proposal would compare the total capacity holdings at the two Bacton ASEPs with the volume of flows through the two ASEPs prior to any overrun charges being faced. We would note that such a proposal does not alter the type of entry capacity product that has been procured and therefore do not consider that the capacity has become fungible.

3.54. Our view remains that this option has potential merit and would continue to encourage industry to consider how this could be developed[39].

Summary

3.55. We have set out in this chapter how we propose to facilitate the implementation of the CAM network code at entry points onto the NTS within GB. In doing so we have addressed a number of issues that are specific to the Bacton entry point. In summary our minded to position is that:

- The existing Bacton ASEP is split into two new ASEPs (UKCS and IP);
- The baseline capacity for the IP ASEP is set at the sum of the maximum technical capacity of the two interconnectors (1297.8 GWh/day); and
- The baseline capacity for the UKCS ASEP is set at 485.6 GWh/day.

3.56. The relevant TSOs are consulting separately on those areas of the CAM network code where there is common interest. We consider that our proposed changes to the NTS regulatory regime as set out in this document will help facilitate the implementation of bundled capacity products and standard capacity auctions.

3.57. In chapter 5 we set out further information regarding the processes necessary to implement our proposals including detail of the modifications to NGG's NTS licence.

[39] We would remind industry that the timeframe for implementation of such an option is tight.

4. Facilitating implementation of CAM at exit points from the NTS

Chapter Summary

This chapter sets out some of the changes that will be required to facilitate the implementation of CAM at exit points from the NTS. We would note that, unlike with entry capacity, there are no changes that are necessary to NGG's NTS licence to facilitate implementation, however, we note the potential need for a minor definitional change in NGG's NTS licence.

Question box

Question 5: Do you agree that no change is required to the existing licence obligations relating to NTS exit capacity in order to facilitate the implementation of the CAM network code?

Question 6: Do you agree that there is a need to amend the definition of Off-peak Exit Capacity in NGG's NTS licence?

Exit points from the NTS at Interconnection Points

4.1. Unlike entry capacity, NGG's gas transporter licence already splits Bacton into six individual exit points from the NTS: Bacton (in respect of the GDN), Bacton (Great Yarmouth), Bacton (Baird), Deborah Storage (Bacton), Bacton (IUK) and Bacton (BBL). The CAM network code applies to the Bacton (IUK) and Bacton (BBL) exit points only. Exit capacity from the NTS is also made available at the Moffat IP where the CAM network code will also apply.

4.2. This chapter focuses on proposals for facilitating the implementation of the CAM network code at the existing IPs where exit capacity is made available. However, it should be noted that the proposals in this chapter should they be implemented would be equally applicable to any future exit capacity made available at an IP.

Treatment of exit capacity

4.3. We do not consider that there is any need to split the Bacton exit point(s) further in order to facilitate the implementation of the requirements of the CAM network code in GB. This is because there are already distinct exit points for BBL

(0 GWh/day) and IUK (623.58 GWh/day)[40]. Similarly at Moffat (433.4 GWh/day) the exit point set out in NGG's NTS licence relates specifically to the interconnector[41].

Enduring exit capacity

4.4. In our open letter we noted that exit capacity currently sold in the long term UNC application window can be sold as an enduring product. That is, there is no predetermined end date for the capacity holding. Article 9 of the CAM network code sets out the capacity products that will be available at IPs. This does not include an enduring product as is currently offered. We therefore considered that a change is necessary to end date existing enduring exit capacity holdings at IPs.

Responses to our open letter

4.5. Responses to our open letter were mixed with a number of respondents unable or unwilling to make a representation at the time. Those who did express a view suggested that a UNC modification might be used to end existing contracts, possibly in line with the expiry of long term contracts on IUK in 2018. Two respondents noted that shippers should be free to relinquish exit capacity contracts as a result of CAM implementation. We have set out our view on the treatment of existing contracts in chapter 3.

Our proposal

4.6. Our current view remains that exit capacity that has been sold as an enduring product will need to be end dated and note that this will need to be implemented via a modification to the UNC. We welcome NGG having raised a modification[42] to this effect and would encourage all interested parties to participate in the development of this modification.

[40] We note that this means, given our proposal set out in the previous chapter for a single IP ASEP at Bacton, there will be different treatment for exit capacity in respect of the interconnectors at Bacton. However, given that the baseline exit capacity for BBL is currently 0 GWh/day we do not consider that there is any benefit in amending the licence to combine the two exit points at this stage.
[41] We have stated the licence baseline exit capacities as set out in Special Condition 5G Part G Table 8 of NGG's NTS licence at the date of publication of this document. We note that NGG's NTS licence requires additional Legacy TO Exit Capacity to be offered for sale as Non-incremental Obligated Exit Capacity from dates in the future. We are not proposing any change to this.
[42] NGG's proposals in respect of end dating enduring exit capacity are included within Modification Proposal UNC 500.

Exit off peak capacity

4.7. Off Peak capacity is made available to the market at offtake points where it can be demonstrated that firm capacity is not being utilised. The volume of Off Peak capacity available at an offtake consists of three parts: Use It Or Lose It, Unutilised MNEPOR[43] and discretionary. If flows exceed the capability of the network, then NGG may curtail Off Peak capacity rights, without any compensation for the Users affected.

4.8. Under the NTS licence, Off-peak Exit Capacity is defined in relation to the term set out in the UNC. Under Modification Proposal UNC 500, it is proposed that for Interconnection Points this term is amended to "interruptible Capacity" to reflect CAM terminology. We therefore consider the definition in the NTS licence will need to be amended to incorporate this term.

[43] Maximum NTS Exit Point Offtake Rate

5. Next steps

Chapter Summary

This chapter sets our proposed approach for facilitating the implementation of the CAM network code through proposed changes to NGG's NTS licence. It concludes by setting out our next steps following responses to this consultation.

Question box

Question 7: Do you agree with the proposed changes to NGG's NTS licence that we have set out in appendix 3?

Question 8: Do you consider that some form of transitional arrangement is required? If so, do you consider that our proposals, as set out in this document, meet these requirements?

Question 9: Are there any other changes to NGG's NTS licence (or any other licence) that you consider are required to facilitate the implementation of CAM?

Proposed implementation

Proposed Licence changes

5.1. As set out in chapter 3, we consider that a modification of NGG's NTS licence is required to facilitate the implementation of CAM in GB. If our proposal to split the Bacton ASEP into two ASEPs is implemented, the baseline capacity for the Bacton entry point, which is set out in NGG's NTS licence, will need to be split into two separate entry points such that capacity at the IP can be sold pursuant to the requirement of the CAM network code.

5.2. The exit baseline capacities are also set out in NGG's gas transporter licence. Our current view is that no changes are required to the exit baseline capacities.

5.3. Furthermore we consider that the entry and exit points at IPs need to be distinguishable from other entry and exit points. This is so that they can be cross-referenced from the UNC generically as to what capacity is to be allocated under the CAM network code or the existing UNC allocation mechanisms. This is already possible for exit points where the licence specifies a type of offtake[44]. We propose

[44] In appendix 3, we have included a subset of Table 8 of NGG NTS licence Special Condition 5G to illustrate this.

amending NGG's NTS licence to list the "type of entry" for a relevant entry point, such that a similar cross reference can be made[45].

5.4. We have set out our proposed draft licence condition changes which would implement the options we have proposed in appendix 3 of this document. Should other implementation options be identified as a result of this consultation, we will propose new or amended draft licence conditions to reflect those options.

5.5. In order to provide stakeholders with certainty and to facilitate the development of the associated UNC modifications, our current intention, subject to the outcome of this consultation and the required statutory consultation, is to make the modifications to NGG's NTS licence at the end of this year, or early 2015 with the date from which the changes will take effect being 1 November 2015, i.e. the date of implementation of the CAM network code.

5.6. However, we recognise that there may be a need for some form of transitional requirement if our changes are made. For example, shippers will need to be able to acquire capacity at the new ASEPs in respect of gas flows on or after 1 November 2015 before this date (eg, in the monthly or day ahead auctions). There may also be a need for some processes to refer to the old pre 1 November 2015 ASEP (eg, in respect of reconciliation).

5.7. We propose to manage this transitional period by having two tables within the licence – one for entry points effective prior to 1 November 2015 (or such other date as the Authority may direct), and another with entry points effective from 1 November 2015 (or such other date as the Authority may direct). The processes set out within the UNC which require reference to the entry points described in NGG's NTS licence can then refer to these tables. This will provide confidence on which entry points are effective for a given process on the particular day to which one refers.

5.8. We consider that this approach manages the implementation of our changes with the least disruption and ensures that the processes set out in the UNC such as capacity auctions can proceed. We would welcome views on our approach.

UNC modifications

5.9. In this document we have identified areas where changes to the UNC are required to facilitate implementation of CAM in respect of arrangements on the NTS or where it may be prudent to do so. Two of these changes are:

- assignment of existing entry capacity rights to the new Bacton ASEPs; and

[45] A consequence of this is that the definition of Interconnection Point within the UNC may need to be amended to align with the licence.

- end dating existing exit capacity holdings at IPs

5.10. Industry parties may also wish to raise modification(s) in respect of maintaining flexibility, and/or in respect of contractual arrangements as discussed in chapter 3 of this document.

5.11. As set out above, NGG has raised three modifications (one of which, UNC 461, has already been approved) that it considers are required as a result of CAM implementation. We will consider any proposed modifications in respect of the UNC against the UNC relevant objectives and as required by our principal objective and our wider statutory duties.

Impact of the CAM network code on NGG methodology statements

5.12. NGG is required by its NTS licence to produce a number of methodology statements. These methodologies cover the release, trade and transfer, and substitution of capacity. There are also further documents required to be produced by NGG's NTS licence such as (but not limited to) system management principles, determination of NTS technical capacity and procurement guidelines.

5.13. Our proposed approach to implementing the CAM network code is likely to have impacts on each of these statements. We invite NGG to work with industry to review and update these accordingly.

Changes to other industry documentation

5.14. As set out previously, the TSOs are working together to develop CAM compliant solutions in respect of capacity allocation on each route from GB to Ireland and to mainland Europe. As part of this work, we expect each TSO to bring forward changes to their relevant documentation as required and to submit such proposed changes to the Authority (and other NRAs as appropriate) for approval as required.

Next steps

5.15. We welcome stakeholders' views on the proposed approach to the implementation of the aspects of the CAM network code set out in this document and the specific questions asked. Responses should be sent to Ofgem no later than **8 August 2014**. Details of how to respond can be found in appendix 1.

5.16. Subject to the responses we receive, and any revisions to the draft licence conditions which may be required as a result, we will undertake a statutory consultation in respect of any proposed licence amendments. Dependent on the outcome of that consultation, we would expect to make our final decision and make licence modifications in winter 2014/15 with any licence changes in respect of the CAM network code becoming effective in order to meet the implementation deadline.

Appendices

Index

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. 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.

1.2. Responses should be received by **8 August 2014** and should be sent to:

David McCrone
Wholesale Markets Policy – EU Gas
Ofgem
3rd Floor
107 West Regent Street
Glasgow
G2 2BA
Tel: 0141 341 3993
david.mccrone@ofgem.gov.uk

1.3. 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 under the Environmental Information Regulations 2004.

1.4. 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. We note that this will be particularly relevant in respect of capacity holdings at the Bacton ASEP.

1.5. Any questions on this document should, in the first instance, be directed to:

David McCrone
Wholesale Markets Policy – EU Gas
Ofgem
3rd Floor
107 West Regent Street
Glasgow
G2 2BA
Tel: 0141 341 3993
david.mccrone@ofgem.gov.uk

CHAPTER: Two

Question 1: Do you agree with our proposal to only implement the CAM network code in respect of the allocation of entry and exit capacity on the NTS at IPs?

CHAPTER: Three

Question 2: Do you agree with our proposal to split the Bacton ASEP into a UKCS ASEP and IP ASEP?

Question 3: Do you agree with our proposal to create one single IP ASEP, with the baseline capacity set at the sum of the maximum technical capacity for the IUK and BBL interconnectors?

Question 4: If you are a holder of entry capacity at Bacton after November 2015, please provide details of entry capacity holdings after this date. Please also provide details of how you would choose to assign these capacity rights following any split of the Bacton ASEP (ie, into a UKCS ASEP and IP ASEP)?

CHAPTER: Four

Question 5: Do you agree that no change is required to the existing licence obligations relating to NTS exit capacity in order to facilitate the implementation of the CAM network code?

Question 6: Do you agree that there is a need to amend the definition of Off-peak Exit Capacity in NGG's NTS licence?

CHAPTER: Five

Question 7: Do you agree with the proposed changes to NGG's NTS licence that we have set out in appendix 3?

Question 8: Do you consider that some form of transitional arrangement is required? If so, do you consider that our proposals, as set out in this document, meet these requirements?

Question 9: Are there any other changes to NGG's NTS licence (or any other licence) that you consider are required to facilitate the implementation of CAM?

Appendix 2 – Legal Overview

In this appendix, we set out the relevant legislative and regulatory background to the issues discussed in this document.

The Third Package

The term 'Third Package' refers to a package of EU legislation on European electricity and gas markets. This consists of the following pieces of legislation:

- Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC;
- Regulation (EC) No 714/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the network for cross-border exchanges in electricity and repealing Regulation (EC) No 1228/2003;
- Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC ('Gas Directive');
- Regulation (EC) No 715/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the natural gas transmission networks and repealing Regulation (EC) No 1775/2005 ('Gas Regulation'); and
- Regulation (EC) No 713/2009 of the European Parliament and of the Council of 13 July 2009 establishing an Agency for the Cooperation of Energy Regulators.

Regulation 984/2013 ('the CAM Regulation') of 14 October 2013 established a Network Code ('the CAM network code') on Capacity Allocation Mechanisms in Gas Transmission Systems and supplementing Regulation (EC) No 715/2009 of the European Parliament and of the Council supplements the Gas Regulation and forms an integral part of it.

Ofgem's role in implementing European Network Codes

Ofgem has a role in implementing the European Network Codes. The Gas Act 1986 requires us to carry out our functions in the manner that we consider is best calculated to implement, or to ensure compliance with, any binding decision of ACER or the Commission made under the Third Package in relation to gas. The CAM Regulation is a European Regulation that is a binding decision of the Commission and it therefore falls within this obligation.

The Authority will propose licence modifications and will make the requisite licence modifications following consultation where we consider it is the best means of implementing the requirements of the CAM network code. We will also approve UNC and other industry document amendments proposed by industry where we consider that these facilitate compliance with CAM.

Where more than one implementation option achieves compliance with CAM we will exercise our powers in a manner that is consistent with our principal objective (and any other relevant aspects of domestic law).

Appendix 3 – Draft licence conditions

In this appendix, we set out our current views on the modifications to the Gas Transporter licence which NGG holds in respect of the NTS ('NGG's NTS licence') that would be required based on the minded to position set out in this document.

The definition of "Off-peak Exit Capacity" in Special Condition 1A (Definitions) will also need to be amended to include the "interruptible" product which CAM introduces.

Under Special Condition 5F (Determination of Incremental Obligated Entry Capacity volumes and the appropriate revenue drivers to apply), Table 3 will need to be amended, such that it includes the correct references to the two new Bacton ASEPs.

The two new Bacton ASEPs will also need to be included within Table 6, where the reference to the current Bacton ASEP will need to be deleted. As set out in Chapter 5, we also propose that a new column "Type of Entry" is included in Table 6. This will enable the sections of the UNC that will relate to ASEPs at Interconnection Points to be linked back to the relevant ASEPs. As we discussed in the document we need to consider transitional arrangements such that shippers would be able to acquire capacity at the new ASEP entry points for 1 November 2015 and beyond, prior to 1 November 2015. There may also be processes that need to take place at the old ASEP after 1 November 2015. We are proposing to do this by having two tables – 6A and 6B. This will make it clear which table (and therefore ASEPs) apply in respect of gas flows on a particular day.

For completeness, we have included part of Table 8 of Special Condition 5G (Determination of Incremental Obligated Exit Capacity volumes and the appropriate revenue drivers to apply). We are not proposing that this table needs amending, as it already includes a column "Type of Offtake" that will enable the UNC sections to be linked to the relevant types of offtake that are set out in the licence. We set it out here for comparative purposes.

Special Condition 1A: Definitions

Off-peak Exit Capacity	shall have the meaning given to the term Off-peak Daily NTS Exit (Flat) Capacity in the Network Code or at an NTS Exit Point of type Interconnector, the term Interruptible NTS Interconnector Capacity in the Network Code.

Special Condition 5F: Determination of Incremental Obligated Entry Capacity volumes and the appropriate revenue drivers to apply

Table 3: Totex allowances for NTS Entry Points (in part)

	EnFIRzi$_t$	Z=			
		1	2	3	4
		£m per GWh/d capacity release - marginal cost (2009/10 prices)			
	Capacity Range	**0-25GWh/d**	**25-100GWh/d**	**100-500GWh/d**	**>500GWh/d**
Entry Point	~~Bacton~~				
	Bacton (UKCS)				
	Bacton (IP)				

5F.29 Licence Baseline Entry Capacity is set out in Table 6. For Gas Days prior to 1 November 2015 (or such other date as the Authority may direct in writing), Table 6A shall apply. For Gas Days from 1 November 2015 (or such other date as the Authority may direct in writing), Table 6B shall apply.

Table 6A: Licence Baseline Entry Capacity

NTS Entry Point	**Baseline capacity (in GWh/d)**
Bacton	1,783.4
Barrow	309.1
Easington	1,062.0
St. Fergus	1,670.7
Teesside	476.0
Theddlethorpe	610.7
Glenmavis	99.0
Partington	215.0
Avonmouth	179.3
Isle of Grain	218.0
Dynevor Arms	49.0
Hornsea	175.0
Hatfield Moor (storage)	25.0
Hatfield Moor (onshore)	0.3
Cheshire	285.9
Hole House Farm	131.6
Wytch Farm	3.3
Burton Point	73.5
Milford Haven	0
Barton Stacey	172.6
Garton	420
Burton Agnes (Caythorpe)	0
Winkfield	0
Blyborough (Welton)	0
Tatsfield	0
Albury	0
Palmers Wood	0
Fleetwood	0
Portland	0
Canonbie	0
Moffat	0

Table 6B: Licence Baseline Entry Capacity

NTS Entry Point	Type of Entry	Baseline capacity (in GWh/d)
Bacton (UKCS)	BEACH TERMINAL	485.6
Bacton (IP)	INTERCONNECTOR	1297.8
Barrow	BEACH TERMINAL	309.1
Easington	BEACH TERMINAL	1,062.0
St. Fergus	BEACH TERMINAL	1,670.7
Teesside	BEACH TERMINAL	476.0
Theddlethorpe	BEACH TERMINAL	610.7
Glenmavis	STORAGE SITE	99.0
Partington	STORAGE SITE	215.0
Avonmouth	STORAGE SITE	179.3
Isle of Grain	LNG IMPORTATION TERMINAL	218.0
Dynevor Arms	STORAGE SITE	49.0
Hornsea	STORAGE SITE	175.0
Hatfield Moor (storage)	STORAGE SITE	25.0
Hatfield Moor (onshore)	ONSHORE FIELD	0.3
Cheshire	STORAGE SITE	285.9
Hole House Farm	STORAGE SITE	131.6
Wytch Farm	ONSHORE FIELD	3.3
Burton Point	ONSHORE FIELD	73.5
Milford Haven	LNG IMPORTATION TERMINAL	0
Barton Stacey	STORAGE SITE	172.6
Garton	STORAGE SITE	420
Burton Agnes (Caythorpe)	STORAGE SITE	0
Winkfield	STORAGE SITE	0
Blyborough (Welton)	STORAGE SITE	0
Tatsfield	STORAGE SITE	0
Albury	STORAGE SITE	0
Palmers Wood	STORAGE SITE	0
Fleetwood	STORAGE SITE	0
Portland	STORAGE SITE	0
Canonbie	STORAGE SITE	0
Moffat	INTERCONNECTOR	0

Special Condition 5G. Determination of Incremental Obligated Exit Capacity volumes and the appropriate revenue drivers to apply

Table 8: Licence Baseline Exit Capacity (in part)

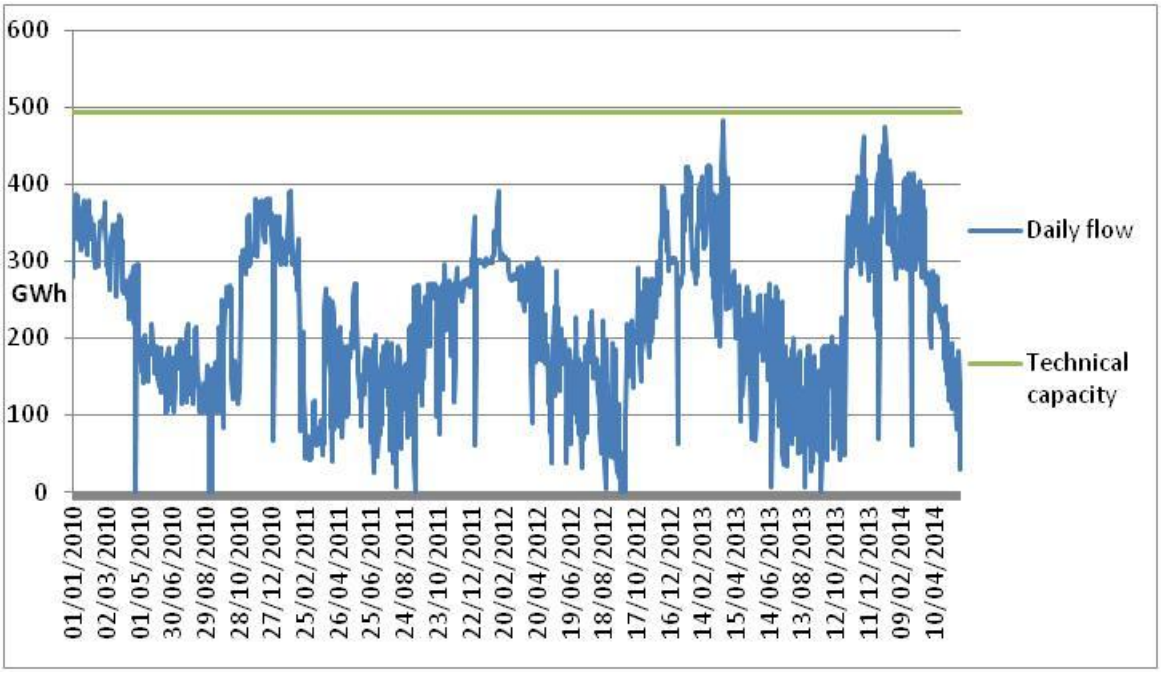
Offtake Point	**Type of Offtake**	**Enduring flat baseline (GWh/d)**
Bacton	GDN (EA)	3.66
Bacton (Great Yarmouth)	DC	20.04
Moffat (Irish Interconnector)	INTERCONNECTOR	433.4
Bacton (Baird)	STORAGE SITE	0
Deborah Storage (Bacton)	STORAGE SITE	0
Bacton (IUK)	INTERCONNECTOR	623.58
Bacton (BBL)	INTERCONNECTOR	0

Appendix 4 – Historical entry flows at Bacton

The technical capacity on BBL is specified as 494 GWh/d[46]. The majority of capacity on BBL has been booked under long term contracts which expire in 2016 and 2022.

The chart below shows the physical flows on BBL from January 2010 until May 2014. Physical flow did not exceed the maximum technical capacity at any point over the time studied.

Figure 4: BBL flows into Bacton ASEP between January 2010 and May 2014



(Source: BBL, http://www.bblcompany.com/flow-information/historicflow)

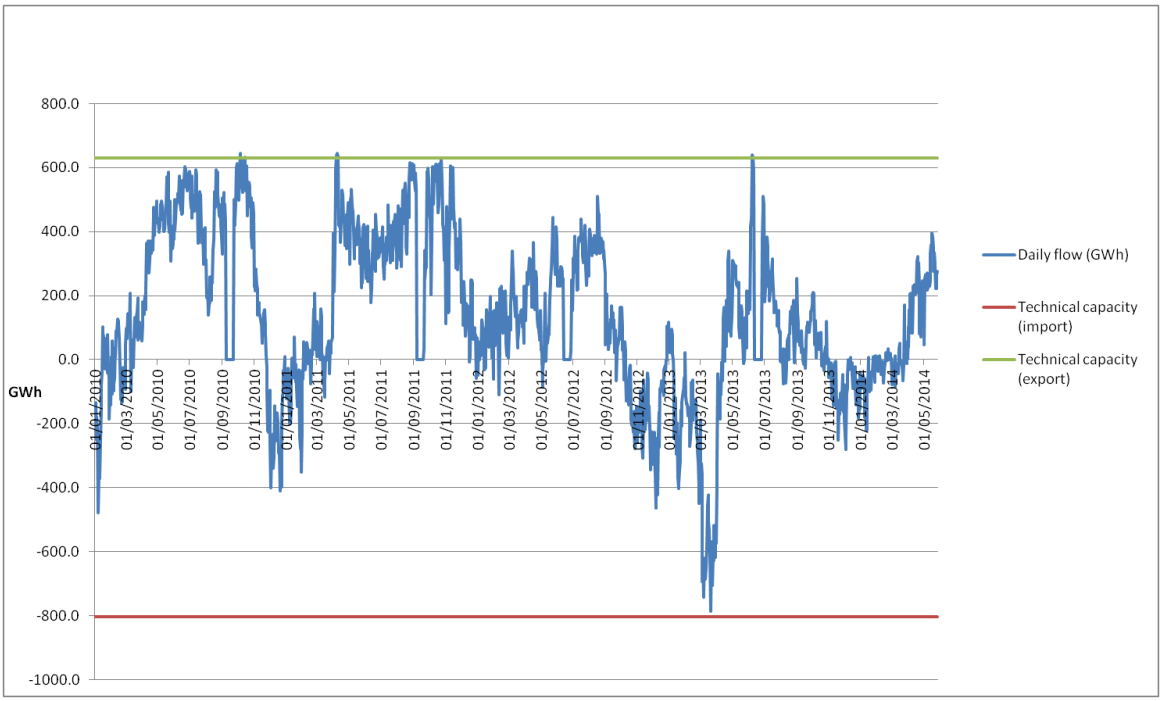
The technical capacity of IUK from Zeebrugge to Bacton is specified as 803.4 GWh/d[47]. Capacity on IUK is sold out until October 2018 on long term contracts. All the technical capacity becomes available from 1 October 2018[48].

[46] http://www.bblcompany.com/operations/available-transmission-capacity

[47] Figures published on IUK's website as of 28 May 2014. IUK also flows in the forward direction from Bacton to Zeebrugge. This requires exit capacity at Bacton rather than entry and so is not considered any further in this note.

The chart below shows the **net** physical flows on IUK between January 2010 and May 2014. The highest recorded daily reverse flow (import mode to UK) was 787 GWh/d (equivalent to 25.5 bcm/y) on 21 March 2013[49]. Therefore, flows from IUK into GB did not however exceed the technical capacity over this period.

Figure 5: IUK net flows between January 2010 and May 2014

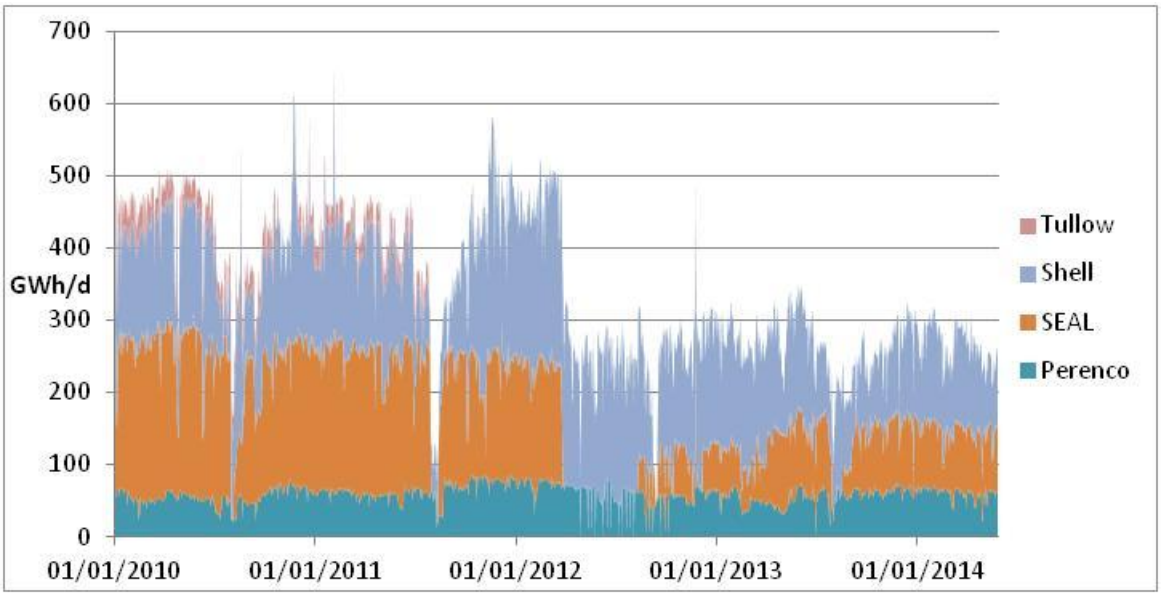


(Source: *http://www.interconnector.com/operational-data/historical-data/data-downloads/*).

As we highlighted earlier, gas also flows into Bacton from UKCS as well as from IUK and BBL. The charts below show the system entry point flow data for Bacton entry points receiving gas from UKCS between January 2010 and May 2014.

[48] http://www.interconnector.com/access-services/the-service/technical-capacity/
[49] http://www.interconnector.com/operational-data/historical-data/record-flows/

Figure 6: System entry flow data for Bacton from UKCS sources



(Source: NGG, *http://marketinformation.natgrid.co.uk/gas/DataItemExplorer.aspx)*

The above chart from NGG shows the system flow data at the Bacton ASEP from UKCS sources only. It shows that gas flows from UKCS into Bacton dropped significantly in March 2012 largely due to the drop in gas entering from SEAL. While gas flow has resumed along this route, the total gas flows from UKCS sources has exceeded 350 GWh on only one day since 2012.

Option 1: Splitting based on technical capacities of the two interconnectors

This option would define a split based on the sum of the maximum technical capacities of BBL and IUK (reverse flow). The balance would be assigned to entry capacity from UKCS. Based on the existing aggregate Bacton baseline set out in the NGG NTS licence this would be as follows:

- Bacton IP ASEP 1297.8 GWh/d
- Bacton UKCS ASEP 485.6 GWh/d

This would meet the historical flows on BBL and IUK (reverse flow) that have been observed since January 2010. The split also meets the future long term capacity that is booked on each route. If flows from UKCS were to increase significantly from those seen since January 2010 there may be insufficient entry capacity at the UKCS ASEP.

Option 2: Split based on predicted flows

NGG's Ten Year Statement Gone Green Scenario on long term gas demand and supply forecasts sets out a maximum forecast flow for 2015/16 for BBL, IUK and

UKCS[50]. Beyond 2015/16 UKCS production is expected to decline so this represents the maximum forecast flow over the period. The split is as follows:

- Bacton IP ASEP 1302 GWh/d
- Bacton UKCS ASEP 540 GWh/d

This would meet the historical flows on BBL and IUK (to GB) that have been observed since January 2010. The split also meets the long term contracts on each interconnector. It also provides an increased amount of entry capacity for domestic production compared to the first option.

This exceeds the current licence baseline at Bacton. There would therefore need to be a further amendment to NGG's NTS licence in order to amend the baseline. NGG has indicated that there has been no user signal to increase baseline capacity. We cannot assume this would automatically happen as could result in the reduction of baselines at other entry points in GB.

Option 2a: Split based on predicted flows as a percentage of existing baseline capacity

A variation of the above approach takes NGG's Ten Year Statement's Gone Green Scenario and pro rates it against the existing baseline set out in the NGG NTS licence. The split is as follows:

- Bacton IP ASEP 1266.2 GWh/d
- Bacton UKCS ASEP 517.2 GWh/d

This would not require a change in aggregate to the baseline set out in the NGG NTS licence but would not meet NGG's forecast for flows in 2015/16. The split also does not achieve the aggregate maximum technical capacity of BBL and IUK. It would be sufficient however to meet the flows observed on BBL and IUK since January 2010.

Option 3: Split based on existing holdings

A final option would be to split the Bacton ASEP into a UKCS ASEP and an IP ASEP based on existing capacity holdings. This could be purely user led or based on historical allocations. A user led approach has the benefit of allowing wider input into the process. Using only existing capacity holdings has the disadvantage that past flows do not necessarily reflect future requirements.

[50] http://www.nationalgrid.com/NR/rdonlyres/E60C7955-5495-4A8A-8E80-8BB4002F602F/58097/GasTenYearStatement2013.pdf

A further disadvantage is that this could result in a scenario where all shippers indicate a desire for the capacity to be allocated to the new UKCS ASEP only (or vice versa). Complying with these wishes could result in a split that goes against Article 6 of the CAM network code that the maximum technical capacity shall be made available to network users at interconnection points.

Appendix 5 – Maintaining flexibility at the Bacton ASEP

On 14 January 2014 Ofgem hosted a workshop exploring ways of maintaining flexibility for shippers as part of implementing the CAM network code at Bacton. Shippers, through responses to the open letter as well as comments on the day, set out their five objectives for implementing the CAM network code (subject to achieving compliance with the CAM network code):

- That capacity should be fungible (as far as practically possible within the bounds of being CAM compliant);
- To avoid unnecessary artificial constraints;
- To honour existing contracts (subject to changes necessary to be CAM compliant[51]);
- To be free to allocate capacity as shippers wish; and
- Implementation is at minimal cost.

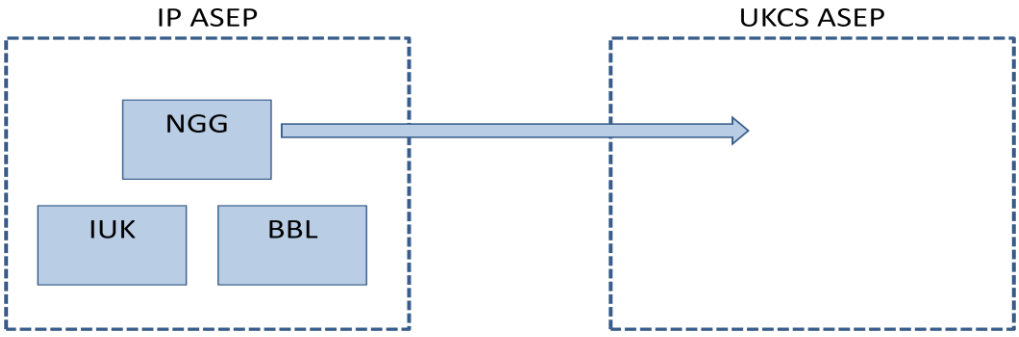
The lead option that emerged from responses to the open letter and the workshop was an amendment to the existing overrun regime. Under the existing regime, if a shipper flows more gas than it holds entry capacity for on any given gas day, then it will incur an overrun charge. The overrun charge is the shipper's financial incentive to buy all the capacity that it needs. Under the CAM network code, shippers would need to buy multiple volumes of capacity to flow into GB on more than one route. We recognise that this would incur additional cost.

Under this option, a shipper would be able to flow into GB up to the aggregate level of entry capacity held by that user at Bacton across both ASEPs, without incurring any overrun charges. The potential outcomes of the proposals in various scenarios are described below.

In scenario 1 below, a shipper has unbundled IUK and/or BBL capacity as well as entry capacity on a new IP ASEP but nothing on any new UKCS ASEP. Allowing the shipper to flow into the UKCS ASEP up to the capacity held on the IP ASEP (less any flows through IUK and or BBL) offers flexibility. A variation is also true where the shipper holds capacity at the UKCS ASEP, none on the IP ASEP, but wishes to flow via IUK or BBL (and would therefore require IUK or BBL capacity).

[51] The CAM Regulation applies to existing contracts. Article 20 of the Regulation provides that "*network users who are parties to existing transport contracts at the time of the entry into force of this Regulation ..., should aim to reach an agreement on the bundling of the capacity..., in compliance with the provisions set out in Article 19 of this Regulation*."

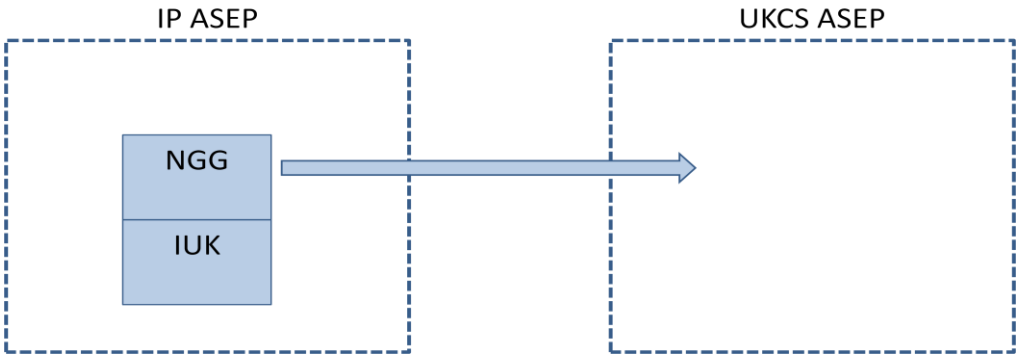
Figure 7: Overrun scenario 1



In scenario 2, the shipper holds bundled capacity at any new IP ASEP but not at any new UKCS ASEP. The shipper can flow from UKCS up to the aggregate held at Bacton (less any flows to the IP ASEP).

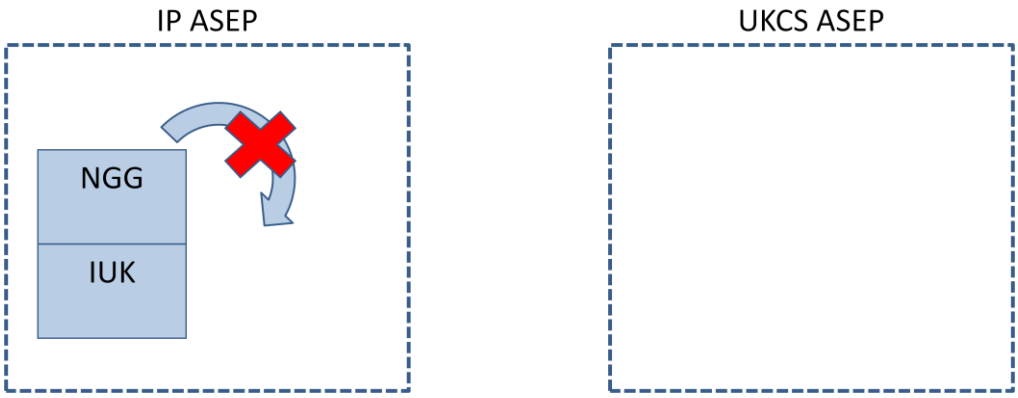
We do not consider that this constitutes breaking the bundle nor that capacity is being used fungibly. The bundled capacity product remains intact with all the liabilities and obligations remaining as if it were assigned to the shipper at the original ASEP. This could also provide flexibility within the IP ASEP if a shipper held unbundled capacity on one interconnector and bundled capacity on the other.

Figure 8: Overrun scenario 2



In scenario 3 below, the shipper has IUK-NGG bundled capacity but wishes to flow via BBL (ie, the other route into the IP ASEP). We do not consider that the overrun proposal would work here as the shipper does not hold the capacity on BBL necessary to flow. Interconnector representatives at our workshop in 14 January 2014 confirmed there was no concept of an overrun on their system. In this scenario the shipper must buy a BBL-NGG bundle or unbundled BBL capacity and follow scenario 2.

Figure 9: Overrun scenario 3



Appendix 6 - Glossary

For the purposes of this consultation the following definitions apply.

A

Agency for the Cooperation of Energy Regulators (ACER)

ACER plays a role in the development of EU-wide network codes and market rules. Its purpose is to assist the NRAs in exercising, at Community level, the regulatory tasks performed by Member States and, where necessary, to coordinate their action. ACER was created under the Third Package[52].

Aggregate System Entry Point (ASEP)

An entry point comprising one or more system entry point where gas can flow on to the NTS.

Authority (The)

The Gas and Electricity Markets Authority (GEMA). Ofgem is the Office of Gas and Electricity Markets. GEMA is the governing body of Ofgem and consists of non-executive and executive members and a non-executive chair. The names Ofgem, GEMA and the Authority are used interchangeably in this document.

C

Congestion Management Procedures (CMP) Guidelines

Established under the Third Package[53], the CMP Guidelines aim to maximise the efficiency of cross-border gas transmission networks by making capacity that is booked but underused (so-called contractual congestion) available to the market.

E

Entry point (System Entry Point)

A point (on the NTS) where gas can flow on to the system.

Entry-exit system

A system for third party access to gas transmission networks. In an entry-exit system network users book capacity at entry points and exit points independently.

[52] ACER was established under.
[53] Commission Decision 2012/490/EU on amending Annex I to Regulation (EC) No 715/2009 of the European Parliament and of the Council on conditions for access to the natural gas transmission networks.

Gas can be injected at the entry points and made available for off take at exit points on a fully independent basis. The gas does not follow a predefined contractual path. The entry-exit system has a virtual trading point where gas can change ownership within the system.

Exit point

A point (on the NTS) where gas can flow out of the system.

F

Fungibility

The ability of a good or asset to be interchanged with another individual good/asset of the same type.

G

Gemini

National Grid's electronic platform for conducting capacity auctions.

I

Interconnector (Gas)

A transmission line which crosses or spans a border between Member States for the sole purpose of connecting the national transmission systems of those Member States.

Interconnection Point

A physical or virtual point connecting adjacent entry-exit systems or connecting an entry-exit system with an interconnector, in so far as these points are subject to booking procedures by network users

L

Licensee (Gas)

The Gas Act requires parties carrying on certain activities to hold a licence from the Authority. The types of licensee relevant to this consultation are categorised as transporter, shipper, supplier and interconnector.

Licence condition

All parties licensed by the Authority to partake in gas industry activities are required to comply with certain licence conditions. The licence conditions are separated into standard licence conditions which apply to all licensees of one type (eg, transporters) and special licence conditions or standard special licence conditions which apply only to a specific party (eg, National Grid Gas).

Liquefied Natural Gas (LNG)

Natural gas (predominantly methane, CH_4) that has been converted temporarily to liquid form for ease of storage or transport.

N

National Grid Gas (NGG)

NGG holds the Gas Transportation licence for the gas National Transmission System (NTS). NGG is also the Gas Transportation licence holder for the North West, West Midlands, East England and London Gas Distribution Networks.

National Regulatory Authority (NRA)

GEMA was designated as the NRA in terms of the Third Package and as such is responsible for regulating Great Britain's energy market[54]. NRAs are required to have regulatory independence and act independently of any market interests. They must not seek or take direct instructions from any organisation, whether a government or other public or private entity, when carrying out their regulatory tasks.

National Transmission System (NTS)

National Grid Gas' high pressure gas transmission system. It consists of more than 6,400 km of pipe carrying gas at pressures of up to 85 bar (85 times normal atmospheric pressure).

P

PRISMA

PRISMA is the joint capacity booking platform of major European Transmission System Operators (TSOs). PRISMA was launched in April 2013 and is able to handle harmonised capacity products, offer auction mechanisms and serve the different TSO backend systems in accordance with the CAM Network Code. Gas traders can also use PRISMA to trade capacity on the secondary market.

S

Shippers

The holder of a licence under Section 7A of the Gas Act 1986. Gas shippers buy gas from producers and sell the gas onto suppliers.

[54] Note that there is a separate NRA for Northern Ireland: Northern Ireland Authority for Utility Regulation (UREGNI). In certain circumstances however (e.g. in the Board of Regulators at ACER), Ofgem is responsible for representing the UK in its entirety.

T

The Third Package

A suite of European Legislation comprised of three EU Regulations and two EU Directives[55]. It is a key step in implementation of a harmonised internal European energy market. It recognises the need for better co-ordination between European network operators and continuing co-ordination between regulators at that level.

Transmission System Operator (TSO)

A natural or legal person who carries out the function of transmission and is responsible for operating, ensuring the maintenance of, and, if necessary, developing the transmission system in a given area and, where applicable, its interconnections with other systems, and for ensuring the long-term ability of the system to meet reasonable demands for the transport of gas.

Transporter (Gas)

The holder of a licence in accordance with the provisions of the Section 7 of the Gas Act 1986.

U

Uniform Network Code (UNC)

Sets out inter alia the terms of transportation arrangements established by the licensee and other relevant gas transporters, to the extent that such terms are common, or are not in conflict, between relevant gas transporters in Great Britain..

[55] Electricity Directive (Directive 2009/72/EC), Gas Directive (Directive 2009/73/EC), ACER (Regulation 713/2009), Electricity Regulation (714/2009), Gas Regulation (Regulation 715/2009).

Appendix 7 - 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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