Interconnector (UK) Limited



IUK Access Agreement Summary

Disclaimer

This IUK Access Agreement Summary ("IAAS") describes the transportation model and the related services offered by Interconnector (UK) Limited ("IUK") under the IUK Access Agreement ("IAA").

The IAAS is provided for the purpose of assisting potential Shippers in deciding whether or not they wish to partake in the services offered by IUK under the IAA. As such, the IAAS should not be construed as giving rise to any contractual relationship between IUK (or any of its affiliated entities) and any other party. This summary is only a description of the services offered by IUK under the IAA and any potential IAA Shipper should read both the IAA and IUK Access Code ("IAC") before signing up and not rely solely on the IAAS. IUK is not liable to any IAA Shipper who enters into the IAA and IAC without reading and understanding them.

The IAAS may be amended from time to time to reflect changing regulatory requirements and other modifications to the model and/or services on offer. IUK aims to ensure the IAAS is up to date and a comprehensive description of the services provided, but on occasion the IAAS may not reflect the most recent changes to the services provided under the IAA and IAC.

INTRODUCTION

The Interconnector

IUK owns and operates the Interconnector gas pipeline, linking the GB and Belgian markets and offering trading opportunities across the North West European market areas of NBP, ZTP and Zeebrugge Beach.

Since its inauguration in October 1998, the Interconnector has been a major catalyst in the creation of the spot gas market within Europe and a key factor in the liberalisation of energy markets.

Ours is the only facility to offer a fully flexible commercial and physical bi-directional service between GB and mainland Europe. As such, we provide important security of supply across the region.

Service Provision

IUK offers gas transportation services directly under two contracts: the Standard Transportation Agreement ("STA") and the IAA. Parties can be signatories to either or both of these contracts, allowing them access to capacity in the IUK transmission system.

The STA is a long-term contract under which all technical capacity is sold until 30 Sept 2018. A number of secondary market mechanisms are available to allow third parties to access this capacity.

The IAA is a dynamic contract that enables Shippers to buy both long-term and short-term capacity, dependent on availability. Capacity will be made available in Q1 2015, then in auctions held on the European joint booking platform PRISMA from 1 November 2015. From 1 October 2018, it is anticipated that all technical capacity will be available to buy under the IAA.¹ This document provides the reader with an overview of the services offered under the IAA.

Our Regulatory Obligations

IUK is certified as a Transmission System Operator ("TSO") by the National Regulatory Authorities ("NRAs") of GB and Belgium: Ofgem² and CREG.³ Together with our NRAs and connected transporters, National Grid Gas ("NGG") and Fluxys Belgium, we are helping to harmonise the European Energy Market through the implementation of the Third Energy Package and associated legislation.

In this document you will see references, in particular, to the Congestion Management Procedure ("CMP") guidelines⁴ and the Capacity Allocation Mechanism ("CAM") Network Code.⁵ These contain provisions designed to facilitate cross-border trade and increase market liquidity.

Specifically, CMP sets out rules to ensure that when Shippers are not using capacity it can be offered to other Shippers who may be able to use that capacity. In addition CAM contains rules to ensure efficient, transparent and non-discriminatory access to infrastructure networks such as our own. CAM details a number of standardised capacity products and the auction rules for TSOs to apply when allocating the capacity.

¹ Subject to, among other things, the availability of the facilities, contractual terms and conditions and the prevailing regulatory conditions.

² Office of Gas and Electricity Markets.

³ La Commission de Régulation de l'Electricité et du Gaz.

⁴<u>http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2012:231:0016:0020:en:PDF</u>

⁵<u>http://www.entsog.eu/public/uploads/files/publications/CAM%20Network%20Code/2013/EC_131014_CAM</u> %20NC_Regulation%20984-2013.pdf

THE IUK TRANSMISSION SYSTEM

Physical Operations

The IUK transmission system comprises:

- A compression/reception terminal at Bacton, GB, with a connection to the National Grid Gas transmission system
- A compression/reception terminal at Zeebrugge, Belgium, with a connection to the Fluxys Belgium transmission system
- A 235 kilometre pipeline between the two terminals, within the GB and Belgium sectors of the southern North Sea.

IUK carries out regular maintenance to ensure the continued safe and efficient operations of these facilities.⁶

Capacity

These facilities are used to transport gas between the GB and Belgian gas markets. They allow for volumes of up to 20 bcm/y from GB to Belgium and up to 25.5 bcm/y from Belgium to GB.⁷

The average Gross Calorific Value ("GCV") of the gas in the IUK transmission system over the previous five years is 11.5 kWh/Nm³. This means that we can transport an equivalent of up to 630 GWh/d of energy from GB to Belgium and or 803.4 GWh/d from Belgium to GB.

Additional Capacity

IUK has developed a number of mechanisms to make additional capacity available for the market over and above technical capacity, in response to the CMP guidelines.

This includes Oversubscription Capacity ("OS Capacity"). The OS mechanism is based on the idea that the right to use capacity can be 'oversold' (in comparison to the technical maximum capacity) with an expectation that not all buyers will exercise their right to use at the same time. IUK makes a decision each day about how much OS capacity it can make available for the following day.⁸

Capacity may also be voluntarily surrendered by Shippers, or withdrawn from Shippers due to Long Term Use It Or Lose It ("LT UIOLI") mechanisms. This capacity will be made available via IUK's regular capacity auctions.

⁶ Some maintenance can only be safely carried out when the system is not in use, and the IAA provides that IUK can cease operations to carry out this work for up to 15 days each Gas Year. IUK will consult the market and adjacent TSOs when selecting dates for this work, and Shippers will be provided with sufficient notice of any maintenance period.

⁷ This 'nameplate capacity' may vary with actual operational conditions.

⁸ Should difficulties arise in meeting the resulting aggregate net nomination, a mechanism is in place for capacity to be bought back by IUK in order to reduce the aggregate net nomination to within the system capability.

THE IAA SERVICE

Once a party is a signatory to the IAA, they are ready to purchase and use capacity in the IUK transmission system.

Transportation Model

IUK operates an Entry-Exit model. The IUK Bacton Terminal ("IBT") and IUK Zeebrugge Terminal ("IZT") are Entry and Exit Points, and Shippers can purchase corresponding Entry and Exit capacities.

Entry services enable gas to be delivered into the IUK transmission system at a specified Entry Point. Exit services enable gas to be withdrawn from the IUK transmission system at a specified Exit Point.

These capacities can be purchased independently so that a Shipper can transport gas through the pipeline between GB and mainland Europe by purchasing IBT Entry with IZT Exit or IZT Entry with IBT Exit.

Acquiring Capacity

IUK is offering capacity from 1 October 2018 onwards to the market in Q1 2015.

Auctions

IBT and IZT are Interconnection Points subject to the CAM Network Code. This means that we will offer the CAM Standard Capacity Products via the prescribed auction processes from 1 November 2015.

This capacity will be made available on the European capacity platform, PRISMA.⁹ Shippers will bid for capacity on the platform, which implements the auction algorithms defined in the CAM Network Code, namely, Ascending Clock and Uniform Price.

IUK may, at its discretion, also invite IAA Shippers to subscribe for capacity under an alternative process in addition to these auctions.

Bundling

Under CAM, adjacent TSOs will jointly offer bundled capacity where possible for firm products (underpinned by individual contracts within the relevant contractual framework of the respective TSOs, in IUK's case the IAA).¹⁰

At IBT, IUK capacity will be bundled with NGG capacity at their Bacton Interconnection Point ("IP"). At IZT, IUK capacity will be bundled with Fluxys Belgium capacity; Shippers can choose whether to buy a bundle to/from ZTP or Zeebrugge Beach.

Secondary Market Mechanisms

IUK supports various secondary market mechanisms under the IAA. Capacity can be advertised on our online Bulletin Board or using PRISMA Secondary.

Trade Notifications

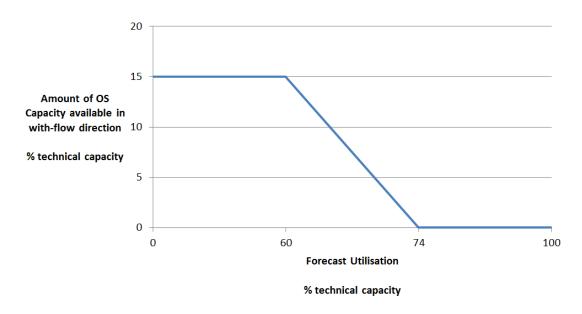
Shippers may also submit Trade Notifications to inform IUK of a transfer of gas in the IUK transmission system to another IAA Shipper.

⁹ See <u>https://www.prisma-capacity.eu/web/start/</u> for further information

¹⁰ Any unmatched capacity on either side will be offered as unbundled capacity. Any interruptible capacity will be offered unbundled.

Availability of OS Capacity

IUK determine and announce if, and how much, OS Capacity is to be made available on a day-ahead basis. The calculation is based on a statistical scenario model which includes risk profiling to minimise the need for Buy-back.¹¹ Current flow rates for today are to be used to forecast nominations for tomorrow.¹²



Buy-back

IUK will, when circumstances require, advertise its Buy-back requirements on the Bulletin Board: http://www.interconnector.com/operational-data/capacity-summary

If aggregate nominations exceed, or are predicted to exceed, the physical capability of the IUK transmission system, and OS Capacity has been sold, then a Buy-back process will be initiated. IUK will determine the quantity of capacity to be bought back to reduce the aggregate net nominations to within the physical capability of the IUK transmission system.

IUK will publish a notification on the Bulletin Board making Shippers aware that Buy-back is required and providing details of the quantity and direction of capacity sought. All Shippers will be invited to offer capacity, which will be bought by IUK through a pay-as-bid auction. IUK will accept offers of capacity in order of price, starting with the lowest offer until the required Buy-back volume is met.¹³

¹¹ At very high flows, the Interconnector operates at or very close to its design limits and consequently there is no further capacity available on a firm basis and limited, if any, capacity available on an interruptible basis without incurring undue safety and system integrity risks. Not making OS Capacity available in the prevailing flow direction when demand is forecast to exceed 75% reflects the fact that Shippers' nominations can change considerably within-day in response to events and/or pricing signals, and consequently ensures that the requirement to buy back will be not be excessive.

¹² The quantity of OS Capacity made available is at the discretion of IUK; whilst the quantity will be based upon today's flowrates, IUK may deem it prudent to reduce the quantity of OS Capacity made available tomorrow, given additional market information, in order to ensure safe and efficient operations.

¹³ IUK will set a maximum Buy-back price in advance of any Buy-back auction, based on a pre-agreed methodology. Shippers may offer to sell capacity to IUK for a price greater than this maximum Buy-back price, however IUK will be required to reject any such bids. If IUK receives insufficient bids at or below this maximum Buy-back price to fulfil the full Buy-back requirement, the remaining capacity will be bought back via the Forced Buy-back mechanism.

The process will be completed within 4 hours:

hh:mm	 IUK publish on Bulletin Board that Buy-back is required including quantity and entry/exit direction
hh:mm + up to 1hr	• Shippers can enter an offer to sell Firm Capacity back to IUK at a price set by the Shipper
hh:mm + exactly 1hr	 Buy-back capacity offer process closed IUK accepts the offers from the lowest priced offer until required Buy- back volume met
hh:mm + 2:00	All successful capacity offers for Buy-back accepted
hh:mm + 4:00	Capacity transferred

Forced Buy-back will be triggered if insufficient capacity can be bought back through the auction process or if the requirement to Buy-back occurs after 22:00 UK Time ("UKT"). Forced Buy-back will occur for capacity bought day-ahead and within-day to the extent needed to bring nominations within the physical capability of the system. After the day the normal allocation process will result in an under-allocation and Buy-back payments will be due from IUK to the relevant Shippers in proportion to that under-allocation.

USING YOUR CAPACITY

Nominations

Nominations specify the quantity of gas that the Shipper wishes to flow into or out of the IUK transmission system at each Entry or Exit point. Renominations can also be submitted should a Shipper's flow requirements change.

Shippers can nominate gas to flow in either direction at any time. IUK manages net flows to ensure individual nominations are met.

A nomination takes the form of a standardised electronic message entered on the IUK Shipper's Information System ("ISIS"). The message relates to a particular Gas Day (which begins at 06:00 CET and terminates at 06:00 CET the following day) and to a specific point, and provides for each hour of the relevant Gas Day the quantities of gas, expressed in kWh, that the Shipper wishes to deliver or offtake under its subscribed services at the relevant point.

The nomination process comprises the following steps:

- A Shipper sends nominations to IUK;
- Nominations are then processed by IUK and matched with nominations in the adjacent system;
- IUK calculates the confirmed quantities to be delivered/offtaken to/from the IUK transmission system;
- IUK sends a confirmation message in order to communicate to the Shipper the results of the process.

Shippers may revise their nominations on a day-ahead or intraday basis by sending renominations, with a lead time of at least 2 whole hours.

Single Sided Nominations

Where a Shipper has capacity on both sides of an IP, either IBT or IZT, they will be able to submit a single nomination to cover their gas flows on both sides of the relevant IP. At IBT, the nomination must be submitted to NGG; at IZT it can be submitted to either IUK or Fluxys Belgium. The TSOs will cooperate to process this nomination and provide a confirmed nomination quantity to the Shipper.

Balancing the System

To ensure the reliable and efficient operation of the Interconnector system, the total quantities of gas entering the system must, on a hourly basis, be in balance with the total quantities of gas leaving the system. IAA Shippers are responsible for ensuring that their nominations are balanced across the system every hour of the day.

Allocation and Operational Balancing Agreement

Gas is allocated at each Entry and Exit Point on an hourly basis. This data is provided to the relevant Shipper in kWh.

We work closely with our neighbouring transporters to allow us to meet nominations exactly and provide additional flexibility to ensure operations are run in the most efficient manner without impacting Shipper confirmed nomination quantities.

IUK and Fluxys Belgium make use of an Operational Balancing Agreement ("OBA") at IZT, and IUK and NGG are actively working to agree an OBA at IBT. An OBA ensures that allocations on each side of an IP are deemed to equal nominations ("allocate as nominate"), except under exceptional circumstances.

Gas Quality and Operating Conditions

IUK Shippers must supply gas within specified quality and operational requirements and IUK is entitled to refuse to accept any gas not meeting these requirements. These are outlined in full in the IAA.

Surrender

In accordance with CMP, Shippers are able to voluntarily surrender capacity to IUK for a specified period of time, not less than one day. IUK will then endeavour to sell this capacity via its regular capacity auctions.

Any revenue IUK receives from the reallocation of such surrendered capacity will be returned to the disposing Shipper.

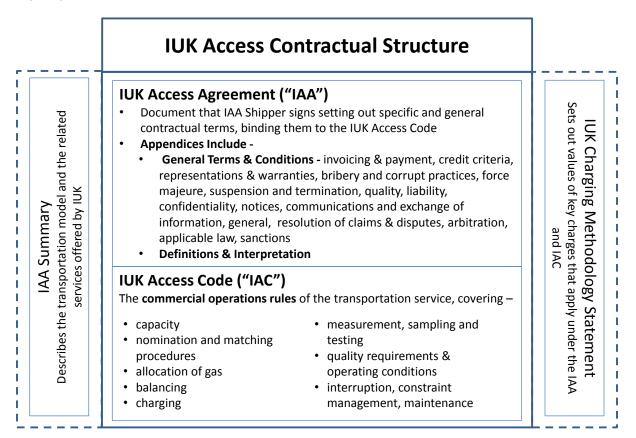
Long Term Use It Or Lose It

Also in accordance with CMP, IUK undertakes to review long-term capacity utilisation if other parties are unable to obtain capacity in the IUK transmission system after taking reasonable steps to acquire it, with a view to determining if systematically underutilised capacity exists according to the definitions of CMP. Utilisation will include a Shipper's nominations, plus any capacity they advertise for sale on the secondary market or successfully sell to another party.

IUK's NRAs may ultimately instruct IUK to withdraw capacity from a Shipper if they consider the Shipper to be systematically underutilising capacity. This capacity would then be made available to other parties. Any revenue received from the sale of this capacity would be returned to the Shipper from whom the capacity had been withdrawn, up to a limit of their relevant payment obligations for such capacity.

THE CONTRACT

In order to subscribe to the services outlined above, a party must first sign the IAA and adhere to the capacity utilisation rules contained therein, illustrated below:



The IAA is concluded for an indefinite period, with termination rights defined; the service confirmation will be set out on ISIS.

Changes

IUK will regularly review the access rules set out in the IAA to ensure they meet the needs of customers and comply with legislative changes. Changes will only be made following completion of the required public consultation process and approvals from the National Regulatory Authorities.¹⁴

¹⁴ Approval by 70% of STA Shippers is also required for capacity for use before 1 October 2018.

COSTS AND INVOICING

Cost of Transporting Gas

IUK publishes a Charging Methodology Statement, which outlines and explains the various costs associated with using the IUK transmission system, including:

- Initial Registration Fee;
- Monthly Administration Fee;
- Reserve Prices for all auctions;
- 'Large Price Steps' and 'Small Price Steps' applicable to Ascending Clock auctions;
- Maximum Buy-back Price;
- Forced Buy-back Price;
- Maximum Buy-back Deficit;
- Net OS Revenue Share to be distributed to Shippers for a Gas Year;
- Electricity Unit Cost.

Invoicing Process

Shippers will be invoiced and must pay the initial registration fee before they will be granted ISIS access and be able to participate in the capacity auction processes.

Thereafter, Shippers will be invoiced on a monthly basis in arrears for the following:

- 1. Monthly Administration Fee;
- 2. Entry Capacity Charges;
- 3. Exit Capacity Charges;
- 4. Balancing Charges associated with any negative imbalances, in exceptional circumstances;
- 5. Fuel Gas Charges;
- 6. Electricity Charges; less
- 7. Re-allocated Capacity Payments (through the successful sale of surrendered capacity);
- 8. Buy-back Payments;
- 9. Balancing Charges associated with any positive imbalances;
- 10. Any reduction in the Capacity Charges due to Lost Capacity.

Revenue

Shippers will also receive a share of the revenue from the sale of OS Capacity in proportion to their use of the transportation facilities throughout the relevant Gas Year.

Fuel and Shrinkage Costs

When capacity is nominated against, fuel gas and/or electricity is required. When gas is physically entering the system at IBT, fuel gas is used principally by the gas turbines that power the compressors located at IBT. When gas is physically entering the system at IZT, electricity is used by the electric motors that power the compressors located at IZT. A small amount of fuel gas is also consumed in heating gas exiting the IUK transmission system.

Until 1 October 2018, IAA Shippers will be invoiced for the fuel gas and electricity consumed in meeting their flow requirements. IUK will calculate how much fuel gas is used by each IAA Shipper at the end of each day and invoice on a monthly basis. IUK will set an estimated unit charge for electricity each year and invoice monthly, and an annual reconciliation will take place when the actual cost is known.

After this date, Shippers will continue to be invoiced for electricity, but will be charged a fixed percentage of their flow requirement rather than an amount calculated from the exact quantity of electricity consumed, and no reconciliation will take place. Shippers will also then be asked to provide their fuel gas physically, and this will also equate to a fixed percentage of their flow requirement.

Through the course of operations IUK may detect system shrinkage. Shippers will be allocated shrinkage in proportion to their allocations, using a fixed shrinkage factor notified in advance by IUK.

DATA TRANSPARENCY

IUK operates in a transparent manner. We publish the following information on our website and, where appropriate, the European Transparency Platform:

- Available capacity and quantity to be offered in each of the upcoming auctions, according to the timeline outlined in CAM;
- Buy-back notifications, as necessary;
- The number and volume of unsuccessful, valid requests for Firm Capacity with a duration of one month or longer, on a bi-annual basis;
- The total capacity made available through each of the CMP mechanisms, on a rolling monthly basis.

How to Contact Us

The service provisions contained within the IAA have been developed in co-ordination with our stakeholders and are designed to meet a real market need.

As a valued stakeholder, we are keen to help you understand these provisions and hear your views on the continued development of our service.

If you would like to contact us about any aspect of the service, please do not hesitate to call us, on +44 (0)20 7092 6500, or email <u>iukinfo@interconnector.com</u>.