Interconnector (UK) Limited

IUK Access Code

Explanatory Note - Definitions

Capitalised words and expressions used in the IUK Access Agreement and the IUK Access Code will have the meanings set out or referred to in Appendix B (Definitions and Interpretation) of the IUK Access Agreement. For convenience, certain definitions are set out within the section of the IUK Access Code in which they are primarily used. The definition in Appendix B will comprise a cross-reference to the relevant section in the IUK Access Code. Thus a section in the IUK Access Code may contain some capitalised terms which are defined within the section (and referred to in Appendix B) and other capitalized terms which are defined in Appendix B.

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SECTION A
TRANSPORTATION SYSTEM GENERAL PRINCIPLES

1. Transportation

1.1. **IAA Shipper Nominations:** an IAA Shipper may:

(a) nominate Natural Gas for offtake from an Approved Transmission System at any Entry Point; and

(b) nominate Natural Gas for redelivery to an Approved Transmission System at any Exit Point.

Such nominations shall be made in accordance with this IUK Access Code.

1.2. **Natural Gas availability:** Interconnector shall:

(a) at each Entry Point, offtake Quantities of Natural Gas nominated for and made available at that Entry Point by the IAA Shipper; and

(b) make available to the Shipper at the Exit Point for which the IAA Shipper has an Exit Nomination Quantities of Natural Gas in accordance with that Exit Nomination.

Interconnector shall not be required in any hour physically to offtake or make available Quantities of Natural Gas equal to the IAA Shipper's Nominations for that hour where any Operating Arrangements apply. If Operating Arrangements apply, Interconnector shall act in accordance with paragraph 1.2 of Section D in managing the physical flow of Natural Gas at each Connection Point.

1.3. **Rate of Offtake by IAA Shipper:** The IAA Shipper shall offtake Natural Gas at each Exit Point at the same rate as such Natural Gas is made available to it by Interconnector at that Exit Point.

1.4. **Reduced Offtake Rate:** If the IAA Shipper offtakes Natural Gas at a rate less than the rate at which Natural Gas is made available by Interconnector at any Exit Point:

(a) Interconnector's obligation to offtake Natural Gas at the Entry Point(s) shall be suspended;

(b) such suspension shall apply simultaneously and in the same Quantities as such Natural Gas is not offtaken by the IAA Shipper at the Exit Point; and

(c) the IAA Shipper shall, if Interconnector so requests, reduce its rate of delivery of Natural Gas at the Entry Point (in order to restore the balance in the Transportation System).

The suspension of Interconnector's obligation to offtake Natural Gas made available by the IAA Shipper at the Entry Point shall end when the balance is restored by the IAA Shipper or (pursuant to paragraph 1.5) by Interconnector and the Transportation System has returned to normal operating conditions.

1.5. **Restoring Transportation System Balance**: If the IAA Shipper, having been requested by Interconnector in accordance with paragraph 1.4 to restore the balance in the Transportation System by reducing its rate of delivery of Natural Gas at the Entry Point, shall fail to do so immediately upon such request being made or within such period of time thereafter as Interconnector may specify or allow, Interconnector shall be entitled to restore the balance in the Transportation System and allocate a Balancing Charge to the Shipper in accordance with the procedures in Section E.

SECTION B
CAPACITY

1. Transportation System Capacity

1.1. **Acquiring and Holding Capacity:** IAA Shippers may apply for and hold capacity in the Transportation System at each Connection Point.

1.2. **Capacity Classes:** The classes of capacity which may be held by IAA Shippers are Entry Capacity and Exit Capacity.

1.3. **Capacity Definitions:** For the purposes of the IUK Access Code:

(a) **"Entry Capacity"** is capacity in the Transportation System available for use by an IAA Shipper in delivering gas to the Transportation System at the Bacton Entry Point or the Zeebrugge Entry Point;

(b) **"Exit Capacity"** is capacity in the Transportation System available for use by an IAA Shipper in offtaking gas from the Transportation System at the Zeebrugge Exit Point or the Bacton Exit Point.

2. Capacity Rights

2.1. **Capacity Held:** For the purposes of the IUK Access Code, an IAA Shipper's Capacity Rights in relation to a Connection Point is the Capacity which the IAA Shipper is registered (in accordance with this Section B) as holding at that Connection Point on a Gas Day.

2.2. **Registration:** IAA Shippers may apply for and be registered on ISIS or any successor system as holding (i) daily Entry Capacity and (ii) daily Exit Capacity, pursuant to a bid under paragraph 4.

3. Available Daily Capacity – Day-Ahead

3.1. **Availability:** By 14.30 hours (UKT) / 15.30 hours (CET) on each Gas Day D-1, Interconnector will publish the quantity of Entry Capacity and Exit Capacity available at each Connection Point for Gas Day D, being Capacity made available through oversubscription, voluntary surrender of already contracted capacity, or through the application of a long-term use-it-or-lose-it ("LTUIOLI") mechanism.

3.2. **Publication:** Such capacity will be published on the Bulletin Board on ISIS and on Interconnector's website and will specify :

(a) Quantity of Entry Capacity, if any, available at Bacton Entry Point;

(b) Quantity of Exit Capacity, if any, available at Zeebrugge Exit Point;

(c) Quantity of Entry Capacity, if any, available at Zeebrugge Entry Point;

(d) Quantity of Exit Capacity, if any, available at Bacton Exit Point; and

(e) Reserve Prices for such capacities.

4. Daily Capacity Auction

4.1. **Application:** IAA Shippers may bid on ISIS for (i) daily Entry Capacity at the Bacton Entry Point and/or the Zeebrugge Entry Point for a Gas Day; and (ii) daily Exit Capacity at the Zeebrugge Exit Point and/or the Bacton Exit Point in accordance with this paragraph 4.

4.2. **Information Required:** A bid for daily Capacity on ISIS shall specify:

(a) the Entry Point;

(b) the quantity of Entry Capacity applied for;

(c) the minimum quantity of Entry Capacity which the IAA Shipper is willing to be allocated for the purposes of paragraph 5.1(d);

(d) the amount, (in p/kWh/h/day, which shall not be less than the Reserve Price) that the IAA Shipper is willing to pay for the specified quantity of Entry Capacity;

(e) the Exit Point;

(f) the quantity of Exit Capacity applied for;

(g) the minimum quantity of Exit Capacity which the IAA Shipper is willing to be allocated for the purposes of paragraph 5.1(d);

(h) the amount, (in p/kWh/h/day which shall not be less than the Reserve Price) which the IAA Shipper is willing to pay for the Exit Capacity applied for;

(i) such other information as Interconnector may stipulate from time to time;

and the "**Total Bid Price**" shall be the sum of the bid prices in (d) and (h).

4.3. **Submission:** A bid for daily Capacity:

(a) may be submitted at any time from 14.30 hours (UKT) / 15.30 hours (CET) on Gas Day D-1 until 16.00 hours (UKT) / 17.00 hours (CET) on Gas Day D-1 ("**Bid Deadline**"); and

(b) may be withdrawn at any time before the Bid Deadline.

4.4. **Withdrawal:** An IAA Shipper may not withdraw a bid for daily Capacity after the Bid Deadline.

4.5. **Non-compliant Bids:**

4.5.1 Interconnector shall reject a bid for daily Capacity if:

(a) any requirement of paragraph 4.2 is not complied with; or

(b) the bid was submitted after the Bid Deadline.

4.5.2 Interconnector may reject a bid for daily Capacity if the total liability (including the bid) of the IAA Shipper to pay fees and charges would exceed that IAA Shipper's Credit Criteria.

5. Daily Capacity Allocation

5.1. **Procedure:** After the Bid Deadline expires, Interconnector will allocate (i) Entry Capacity for each Entry Point; and (ii) Exit Capacity for each Exit Point, as follows :

(a) all bids for daily Capacity submitted in respect of the Gas Day D will be ranked in order of bid price (the highest price ranking first);

(b) Capacity will be allocated to capacity offers in descending order, allocating Entry Capacity and Exit Capacity to the daily capacity offer with the highest price first;

(c) where the quantity of Entry Capacity and Exit Capacity applied for under a bid exceeds the amount of the relevant Capacity remaining unallocated after allocation to higher priced bids, the IAA Shipper will be allocated a quantity equal to the remaining unallocated quantity, unless paragraphs (d) or (e) apply;

(d) where each of two or more bids ("**equal priced bids**") specifies the same bid price, and the quantity of relevant Capacity remaining applied for in aggregate under such bids exceeds the remaining unallocated quantity, the remaining unallocated quantity will be allocated pro rata to the quantities applied for in each such bid, unless paragraph (e) applies;

(e) where the quantity to be allocated in respect of a bid pursuant to paragraph (c) or (d) is less than the minimum quantity specified in the capacity bid, the bid will be disregarded (and of no effect), and a revised allocation will be made between remaining equal price bid(s) under paragraph (d).

5.2. **Acceptance and Registration:** Interconnector will:

(a) accept bids in respect of which Entry Capacity and Exit Capacity are allocated in accordance with paragraph 5.1; and

(b) notify each IAA Shipper whose bid is so accepted and those IAA Shippers whose bids were not accepted;

(c) register on ISIS those IAA Shippers whose bids were accepted as holding Entry Capacity (in the quantity so allocated) in respect of the Entry Point and Exit Capacity (in the quantity so allocated) in respect of the Exit Point for Gas Day D.

5.3. **ISIS Accounts:** By 17.00 hours (UKT) / 18.00 hours (CET) on Gas Day D-1, Interconnector shall transfer the Entry and Exit Capacity associated with the allocation pursuant to paragraph 5.1 for each IAA Shipper to their respective ISIS accounts.

5.4. **Obligation to Pay:** Each IAA Shipper who bids for daily Capacity for Gas Day D:

(a) for each Entry Point, shall pay, the bid price for Gas Day D in respect of the Entry Capacity allocated in accordance with this paragraph 5 pursuant to such bid for daily Capacity;

(b) for each Exit Point, shall pay the bid price for Gas Day D in respect of the Exit Capacity allocated in accordance with this paragraph 5 pursuant to such bid for daily Capacity;

5.5. **Invoicing:** Entry Capacity Charges and Exit Capacity Charges will be invoiced and payable in accordance with the IAA Appendix A Clause 2.

SECTION C
NOMINATIONS AND MATCHING PROCEDURES

1. Nomination and Renomination Requirements

1.1. **Nominations:** An IAA Shipper's "Nominations" shall mean:

(a) in relation to any Gas Day, its Entry Nominations and its Exit Nominations for that Gas Day; and

(b) in relation to any hour, its Entry Nominations and Exit Nominations for that hour.

1.2. **Entry Nominations:** An IAA Shipper's "**Entry Nominations**" shall mean:

(a) in relation to any Gas Day and each Entry Point, the Quantities of Natural Gas to be delivered by that IAA Shipper at that Entry Point on that Gas Day in accordance with its Confirmed Nominations and/or Confirmed Renominations; and

(b) in relation to any hour on a Gas Day and each Entry Point:

(i) (where that IAA Shipper has submitted a profile in accordance with paragraph 2.5.1), that part of its Entry Nominations for that Gas Day and that Entry Point which, in accordance with that profile, relates to that hour; or

(ii) (in any other case) that part of its Entry Nominations for that Gas Day and that Entry Point as is equal to the total of those Entry Nominations divided by the number of hours in that Gas Day.

1.3. **Exit Nominations:** An IAA Shipper's "**Exit Nominations**" shall mean:

(a) in relation to any Gas Day and each Exit Point, the Quantities of Natural Gas to be redelivered by Interconnector to that IAA Shipper at that Exit Point on that Gas Day in accordance with its Confirmed Nominations and/or Confirmed Renominations; and

(b) in relation to any hour on a Gas Day and each Exit Point:

(i) (where that IAA Shipper has submitted a profile in accordance with paragraph 2.5.1) that part of its Exit Nominations for that Gas Day and that Exit Point which, in accordance with that profile, relates to that hour; or

(ii) (in any other case) that part of its Exit Nominations for that Gas Day and that Exit Point as is equal to the total of those Exit Nominations divided by the number of hours in that Gas Day.

2. Nominations and Renominations

2.1. **IAA Shippers' Nominations and Renominations:**

2.1.1. An IAA Shipper may submit to Interconnector at any time Matching Data for Gas Day D, together with the relevant Coded Counterparty Information. In submitting such Matching Data, the IAA Shipper shall specify:

(a) the hour in which such Matching Data is to be effective, being not earlier than the hour which is two hours from the commencement of the next hour following the submission of such Matching Data; and

(b) the Quantity of Natural Gas required to be delivered and redelivered in each remaining hour of Gas Day D commencing with the hour in which such Matching Data takes effect.

2.1.2. An IAA Shipper shall ensure, when submitting Matching Data in accordance with paragraph 2.1.1, that, in each hour on Gas Day D, its Net Flow at each Connection Point does not exceed its Relevant Capacity Rights for that hour at that Connection Point, as determined on the basis of such Matching Data and any other Matching Data submitted by the IAA Shipper in relation to the same hour in Gas Day D.

2.2. **Nominations and Renominations Matching Process**

2.2.1. The Equivalent Matching Procedures shall provide that each ATS Agent shall supply Interconnector with any Matching Data of an ATS Shipper with respect to Gas Day D submitted to the ATS Agent, together with relevant Coded Counterparty Information.

2.2.2. Interconnector shall:

(a) compare and seek to match any Matching Data which is provided by IAA Shippers with Coded Counterparty Information pursuant to paragraph 2.1 with the latest Matching Data which has been provided through the ATS Agent by ATS Shippers with Coded Counterparty Information pursuant to paragraph 2.2.1; and

(b) advise each IAA Shipper individually as to whether or not its Matching Data is Matched in terms of (i) the Quantities of Natural Gas to be delivered or received, and (ii) the relevant ATS Shipper counterparties. Each IAA Shipper shall be responsible for communicating with its relevant counterparties where its Matching Data is Unmatched and may submit revised Matching Data and/or Coded Counterparty Information as necessary to Interconnector.

2.2.3. If an IAA Shipper's Matching Data remains Unmatched under the foregoing provisions of this paragraph 2.2, the following default rules shall apply:

(a) if an IAA Shipper and an ATS Shipper (through the relevant ATS Agent) specify different Quantities of Natural Gas, then the Quantities to be used for the purposes of paragraph 2.3 shall be:

(i) where the relevant AT System is the NTS:

(1) if National Grid Gas has not advised Interconnector of an AT System Entry Constraint or an AT System Exit Constraint in accordance with Section I paragraph 2.1, the aggregate of the IAA Shippers' Matching Data;

(2) if the relevant ATS Agent has advised Interconnector following an AT System Entry Constraint or an AT System Exit Constraint of new Matching Data with respect to the reduced Quantities referred to in Section I paragraph 2.1, the lesser of the aggregate of the relevant ATS Shippers' Matching Data as so advised by the ATS Agent and the aggregate of the

IAA Shippers' Matching Data; or

(ii) where the relevant AT System is the FTS, the lesser of the aggregate of the relevant ATS Shippers' Matching Data as advised by the ATS Agent and the aggregate of the IAA Shippers' Matching Data.

(b) If an IAA Shipper has not identified an ATS Shipper counterparty and/or that ATS Shipper (through the relevant ATS Agent) has not identified the same IAA Shipper as its counterparty, then Interconnector will not act on the IAA Shipper's Matching Data or such other Quantities as may be applicable under sub-paragraph (a) above.

2.3. **Confirmed Nominations and Renominations**

2.3.1. Subject as provided in paragraphs 2.3.2 and 2.4, Interconnector shall in relation to each IAA Shipper and each relevant AT System aggregate and confirm to the IAA Shipper the Quantities of Natural Gas (a) specified by that IAA Shipper in its Matching Data submitted in accordance with paragraph 2.1 and which has been Matched by not later than 02.59 hours (UKT) / 03:59 hours (CET)on Gas Day D and/or (b) such other Quantities as may be applicable by virtue of paragraphs 2.2.3 except where Interconnector is precluded by paragraph 2.2.3(b) from acting on such Matching Data or other applicable Quantities. Each such confirmed aggregation shall be a **"Confirmed Nomination"** or "**Confirmed Renomination**".

2.3.2. Interconnector shall not be required to accept or act on, and may reject, any Matching Data submitted after 01.00 hours (UKT) / 02.00 hours (CET) on Gas Day D if Interconnector in its discretion (taking account of other IUK Shippers' nominations, any applicable Operating Arrangements and other operating conditions) determines that any Confirmed Nomination or Confirmed Renomination which would result from such Matching Data would, or would be likely to, result at any Connection Point in an Excess Steering Difference where none would otherwise arise or an Excess Steering Difference which is greater than any Excess Steering Difference which would otherwise arise.

2.4. **Capacity Limits**

2.4.1. An IAA Shipper's Matching Data shall not be confirmed by Interconnector in accordance with paragraphs 2.3 if such confirmation would in any hour result in:

(a) that IAA Shipper's Net Flow at either Connection Point exceeding its Relevant Capacity Rights for that hour at that Connection Point; or

(b) that IAA Shipper's Net Flow at any Entry Point not equalling its Net Flow at any Exit Point for that hour.

In any such case Interconnector shall endeavour to advise the IAA Shipper as soon as practicable of the amount of any such excess if such Matching Data had been confirmed.

2.4.2. Where Interconnector advises an IAA Shipper in accordance with paragraph 2.4.1, the IAA Shipper shall submit to Interconnector not later than one hour from the commencement of the next hour following such notice being given, such revised Matching Data as may be necessary in order to ensure that in each hour on the relevant Gas Day:

(a) its Net Flow at each Entry Point equals its Net Flow at each Exit Point for that hour; and

(b) its Net Flow at each Connection Point does not exceed its Relevant Capacity Rights for that hour at that Connection Point.

If the IAA Shipper shall, for whatever reason, fail to submit such revised Matching Data by the relevant time, Interconnector, for the purposes of paragraph 1 of Section D, shall be entitled at its discretion to adjust and/or cancel any or all Matching Data and/or Nominations of the IAA Shipper save to the extent that such Nominations have already been satisfied by the offtake and redelivery of Natural Gas during the Gas Day.

2.5. **Nomination Flow Rates**

2.5.1. An IAA Shipper, in submitting its Matching Data may provide Interconnector with a profile of its preferred hourly flow rates for each Gas Day and provided that:

(a) the Quantities of Natural Gas required from hour to hour are matched hour to hour under the provisions of paragraphs 2.2.2;

(b) the variations in the hourly flow rate are within such operational limits of the average hourly flow rate as may be reasonably determined by Interconnector on a case-by-case basis; and

(c) such profile does not result in any hour in its Net Flow at any Connection Point exceeding its Relevant Capacity Rights for that hour at that Connection Point,

the IAA Shipper's Confirmed Nomination or (as the case may be) any Confirmed Renomination for Gas Day D will be confirmed on the basis of such profile.

2.5.2. For the avoidance of doubt, an IAA Shipper may not on any Gas Day or in any specified hour on a Gas Day, submit Matching Data specifying an aggregate Quantity of Natural Gas for redelivery at an Exit Point which is different from the aggregate Quantity of Natural Gas made available by the IAA Shipper for offtake by Interconnector at any Entry Point.

2.5.3. If in relation to any Gas Day the Nominations of all Shippers are such as would require a physical flow of Natural Gas at the Entry or Exit Measurement Facilities at a low rate, then (subject to agreement with the applicable Approved Operator) Interconnector may offtake or (as the case may be) redeliver the relevant Quantities intermittently in batches throughout the Gas Day or on any subsequent Gas Day.

3. Contractual Congestion Management

3.1. **Buy-back**

3.1.1. **Commencement:** If aggregate nominations of IUK Shippers exceed, or are predicted to exceed, the physical capability of the Transportation System on any Gas Day or a period commencing at the beginning of any hour on a Gas Day and ending at the end of that Gas Day (the "**Buy-back Period**"), then Interconnector shall determine the amount of such excess and will offer to buy back that amount (the "**Buy-back Requirement**") of Capacity under the IAA and/or STA Capacity under the STA.

3.1.2. **Announcement:** Interconnector will publish the Buy-back Requirement on the Bulletin Board on ISIS and the Interconnector website and the period for IUK Shippers to offer Capacity and STA Capacity for buy-back.

3.1.3. **Offers to Release Capacity:** Interconnector shall allow both offers to release Capacity under the IAA and STA Capacity under the STA for the Buy-back Period and, under the STA, shall apply equivalent procedures to those set out in this Section C.

3.1.4. **Offers:** IAA Shippers may offer on ISIS to release Entry Capacity in respect of the Bacton Entry Point and/or the Zeebrugge Entry Point for the Buy-back Period and Exit Capacity in respect of the Zeebrugge Exit Point and/or the Bacton Exit Point in response to the information published by Interconnector in accordance with this paragraph 3.1.

3.1.5. **Information Required:** An offer on ISIS to release Capacity shall specify:

(a) the Entry Point;

(b) the quantity of Entry Capacity offered;

(c) the minimum quantity of Entry Capacity for which the IAA Shipper is willing to have the offer accepted ;

(d) the amount (in p/kWh/h/day), which the IAA Shipper wishes to be paid for the offered Entry Capacity;

(e) the Exit Point;

(f) the quantity of Exit Capacity offered;

(g) the minimum quantity of Exit Capacity which the IAA Shipper is willing to have the offer accepted;

(h) the amount (in p/kWh/h/day), which the IAA Shipper wishes to be paid in respect of the offered Exit Capacity;

(i) such other information as Interconnector may stipulate from time to time;

and the "**Total Offer Price**" shall be the sum of the offer prices in (d) and (h).

3.1.6. **Submission:** An offer to release Capacity:

(a) may be submitted at any time until one (1) hour after the time Interconnector publishes the request for offers ("**Offer Deadline**"); and

(b) may be withdrawn or amended at any time before the Offer Deadline.

3.1.7. **Withdrawal:** An offer to release Capacity may not be withdrawn after the Offer Deadline.

3.1.8. **Non-compliant offers:** Interconnector:

(a) shall reject an offer to release Capacity where any requirement of paragraph 3.1.5 is not complied with; and

(b) shall reject such an offer where the amount of Entry Capacity or Exit Capacity offered exceeds the amount of the IAA Shipper's registered Entry Capacity or Exit Capacity.

3.1.9. **Offer Selection:** After the Offer Deadline expires, Interconnector shall rank all offers received in accordance with this Section C and the equivalent procedures under the STA ("**Buy-back Offers**") in ascending price and shall select one or more Buy-back Offers as follows:

(a) Buy-back Offers will be accepted in ascending price order;

(b) where the amount of Capacity or STA Capacity offered under a Buy-back Offer exceeds the amount of the unfulfilled Buy-back Requirement, Interconnector shall accept that Buy-back Offer for the amount of the unfulfilled Buy-back Requirement only, unless paragraphs (d) or (e) apply;

(c) where:

(i) each of two or more Buy-back Offers specifies the same offer price, and

(ii) the aggregate amount of Capacity and STA Capacity so offered exceeds the unfulfilled Buy-back Requirement, then

Interconnector shall accept each such Buy-back Offer but the amount accepted shall be limited to an amount representing its pro rata share of the unfulfilled Buy-back Requirement, unless paragraph (d) applies;

(d) where the amount to be accepted in respect of a Buy-back Offer pursuant to paragraph (b) or (c) is less than the minimum amount specified in the Buy-back Offer, the Buy-back Offer will be disregarded (and of no effect), and Interconnector shall accept the next priced Buy-back Offer or remaining equal price Buy-back Offer(s) under paragraph (c).

(e) No Buy-back Offer will be accepted where the offer price exceeds the Maximum Buy-back Price set in accordance with Section F paragraph 3.2.

3.1.10. By one (1) hour after the Offer Deadline, Interconnector will accept Buy-back Offers in accordance with paragraph 3.1.9, and each IAA Shipper whose offer is so accepted will be notified as holding a reduced quantity of Entry Capacity (by the amount so accepted) in respect of the Entry Point and a reduced quantity of Exit Capacity (by the amount so accepted) in respect of the Exit Point for the Buy-back Period.

3.1.11. By three (3) hours after the Offer Deadline, Interconnector shall register and transfer the Entry Capacity and Exit Capacity associated with the accepted Buy-back Offers pursuant to paragraph 3.1.9 for each IAA Shipper out of their respective ISIS accounts and advise those IAA Shippers whose Buy-back Offers were not accepted.

3.1.12. An IAA Shipper agrees, by submitting a daily capacity offer, to surrender in exchange for payment (the "**Buy-back Cost**"), such Entry Capacity and equivalent Exit Capacity accepted by Interconnector in respect of such offer in accordance with this Section 3.1 and to reduce its Entry Nomination and Exit Nomination accordingly.

3.1.13. If the IAA Shipper does not re-nominate appropriately then Interconnector will adjust that IAA Shipper's Nominations accordingly to reflect its reduced Capacity holding.

3.2 **Forced Buy-back**

3.2.1 **Determination:** Where Interconnector, in its absolute discretion, determines that (i) the quantity of Capacity and STA Capacity offered and accepted pursuant to paragraph 3.1 is insufficient to meet the Buy-back Requirement, or (ii) where Buy-back is required after 22.00 (UKT) / 23.00 (CET), or (iii) the Net OS Revenue Account balance is less than the Maximum Deficit, then Interconnector will implement Forced Buy-back.

3.2.2 **Implementation:** When Interconnector determines that a Forced Buy-back is to be implemented, Interconnector will reduce each IAA Shipper's Entry Capacity and Exit Capacity in proportion to their Capacity Related Share to meet the Buy-back Requirement (taking into account any Buy-back Offers accepted pursuant to paragraph 3.1) and the Buy-back Cost payable to each IAA Shipper for such reduction shall be calculated using the Forced Buy-back Price in accordance with Section F paragraph 3.2.

4. Miscellaneous

4.1 Information provided in good faith

Interconnector shall be entitled to rely upon the accuracy and completeness of any information supplied to it by an IAA Shipper, an ATS Agent or the operator of an AT System in accordance with or as contemplated by the provisions of this Section C.

4.2 Equivalent Matching Procedures

Interconnector shall agree Equivalent Matching Procedures with each ATS Agent but it shall be the responsibility of IAA Shippers to ensure that their ATS Shipper counterparties (a) provide the relevant ATS Agent with the information required under the Equivalent Matching Procedures and in accordance with the terms thereof and (b) procure that the ATS Agent acts in accordance with the terms of the Equivalent Matching Procedures.

SECTION D
ALLOCATION PROCEDURES

1. Allocation of Deliveries and Redeliveries

1.1 **Measurement:** The Quantity of Natural Gas delivered at an Entry Point or redelivered at an Exit Point on any Gas Day shall be measured continuously at the relevant Entry or Exit Measurement Facilities and allocated to IAA Shippers with respect to each hour during the Gas Day in accordance with the provisions of this paragraph 1.

1.2 **Offtake and Redelivery:** Interconnector shall manage the offtake and/or (as the case may be) redelivery of Quantities of Natural Gas at each Connection Point, based on IAA Shippers' Net Scheduled Quantities at any relevant time, acting as a Reasonable and Prudent Operator and using reasonable endeavours in order to minimise any Excess Steering Differences so far as practicable and taking account of any applicable Operating Arrangements.

1.3 **Allocations:** Subject to the provisions in relation to any Excess Steering Differences, in respect of each hour on any Gas Day:

(a) an IAA Shipper's Entry Allocations shall be equal to its Scheduled Entry Quantity for that hour; and

(b) an IAA Shipper's Exit Allocations shall be equal to its Scheduled Exit Quantity.

1.4 **Excess Steering Differences Apportionment:** Subject as provided in paragraph 1.5, any Excess Steering Difference which arises in respect of any hour or any Gas Day and any Connection Point shall be apportioned amongst IUK Shippers. The Entry Allocations or Exit Allocations (as the case may be) of each affected IAA Shipper for that hour, or for the hours in that Gas Day, shall be reduced or increased (as the case may be) by an amount equal to that IAA Shipper's share of the Excess Steering Difference in accordance with the principles listed in paragraphs (a) through (d) below:

(a) If the Excess Steering Difference arises in respect of any hour at a Connection Point which is a Commercial Flow Entry Point for that hour, it shall be allocated (as provided in sub-paragraph (d) below) to those IAA Shippers who have a Scheduled Entry Quantity at that Connection Point for that hour;

(b) If the Excess Steering Difference arises in respect of any hour at a Connection Point which is a Commercial Flow Exit Point for that hour, it shall be allocated (as provided in sub-paragraph (d) below) to those IAA Shippers who have a Scheduled Exit Quantity at that Connection Point for that hour;

(c) For the purposes of this paragraph (c):

"**Entry Hours**" shall be the hour or hours (if any, and whether consecutive or not) on that Gas Day during which that Connection Point is a Commercial Flow Entry Point; and

"**Exit Hours**" shall be the hour or hours (if any, and whether consecutive or not) on that Gas Day during which that Connection Point is a Commercial Flow Exit Point for

the purposes of this paragraph.

If the Excess Steering Difference arises in respect of any Gas Day at a Connection Point in which there are Entry Hours and/or Exit Hours, then the following provisions shall apply:

and:

(i) (if there are both Entry Hours and Exit Hours on that Gas Day) the Excess Steering Difference shall first be apportioned between the Entry Hours and the Exit Hours, in the same ratio as the total of the Aggregate Net Scheduled Quantities for all the Entry Hours at that Connection Point bears to the total of the Aggregate Net Scheduled Quantities for all the Exit Hours at that Connection Point; and

(ii) the Excess Steering Difference (or, as the case may be, the part of the Excess Steering Difference) attributable to the Entry Hours shall first be apportioned between those Entry Hours in (for each Entry Hour) the same ratio as the Aggregate Net Scheduled Quantity at that Connection Point for that Entry Hour bears to the total of the Aggregate Net Scheduled Quantities at that Connection Point for all those Entry Hours, and an amount so apportioned to each Entry Hour shall then be allocated (as provided in sub-paragraph (d) below) to those IAA Shippers who have a Scheduled Entry Quantity at that Connection Point for that Entry Hour; and

(iii) the Excess Steering Difference (or, as the case may be, the part of the Excess Steering Difference) attributable to the Exit Hours shall first be apportioned between those Exit Hours in (for each Exit Hour) the same ratio as the Aggregate Net Scheduled Quantity at that Connection Point for that Exit Hour bears to the total of the Aggregate Net Scheduled Quantities at that Connection Point for all those Exit Hours, and an amount so apportioned to each Exit Hour shall then be allocated (as provided in sub-paragraph (d) below) to those IAA Shippers who have a Scheduled Exit Quantity at that Connection Point for that Exit Hour.

(d) Any Excess Steering Difference which, in accordance with any of paragraphs (a) – (c) above, is to be allocated to any IAA Shippers in relation to any hour shall be allocated to each of those IAA Shippers:

(i) (in the case of paragraphs 1.4(a) and 1.4(c)(ii)) in the same ratio as its Scheduled Entry Quantity for that hour at the relevant Connection Point bears to the aggregate of all IAA Shippers' Scheduled Entry Quantities, STA Shippers' scheduled delivery quantities and Sub-Lessees' scheduled delivery quantities for that hour at that Connection Point; and

(ii) (in the case of paragraphs 1.4(b) and 1.4(c)(iii)) in the same ratio as its Scheduled Exit Quantity for that hour at the relevant Connection Point bears to the aggregate of all IAA Shippers' Scheduled Exit Quantities, STA Shippers' scheduled redelivery quantities and Sub-Lessees' scheduled redelivery quantities for that hour at that Connection Point.

1.5 **Adjustments:** If:

(a) notwithstanding paragraph 2.3.2 of Section C, Interconnector has accepted or acted on Matching Data as described in that paragraph; and

(b) Interconnector has acted in accordance with paragraph 1.2; and

(c) Interconnector determines that an IAA Shipper's Confirmed Renomination resulting from such Matching Data results at any Connection Point in an Excess Steering Difference where none would otherwise have resulted or an Excess Steering Difference which is greater than any Excess Steering Difference which would otherwise have resulted;

then Interconnector may determine that all or any part of such Excess Steering Difference shall be allocated to that IAA Shipper, and, in any such case, the apportionment of the Excess Steering Difference amongst IAA Shippers under paragraph 1.4 shall be adjusted accordingly.

1.6 **No re-opening of Allocations:** Allocations once made in accordance with this paragraph 1 shall not subsequently be re-opened except for such adjustments as are contemplated in paragraphs 1.4 and 1.5 or in Section G.

2. Allocation of Fuel Gas and Electricity

2.1 **Fuel Gas Description:** Fuel Gas consumed in the operation of the Transportation System comprises :

(a) Fuel Gas used for the operation of compressors at Bacton when the Flow Direction at the Bacton Connection Point is Entry; and

(b) Fuel Gas used for the operation of heaters at Zeebrugge when the Flow Direction at the Zeebrugge Connection Point is Exit; and

(c) Fuel Gas used for the operation of heaters at Bacton when the Flow Direction at the Bacton Connection Point is Exit.

2.2 **Bacton Compressors:** Any Fuel Gas related to paragraph 2.1 (a) shall be allocated to an IAA Shipper in the proportion its Net Entry Allocations bears to the aggregate of all IAA Shippers' Net Entry Allocations, STA Shippers' net delivery allocations and Sub-Lessees' net delivery allocations.

2.3 **Bacton & Zeebrugge Heaters:** Any Fuel Gas related to paragraphs 2.1 (b) or 2.1 (c) shall be allocated to an IAA Shipper in the proportion its Net Exit Allocations bears to the aggregate of all IAA shippers' Net Exit Allocations, STA Shippers' net redelivery allocations and Sub-Lessees' net redelivery allocations.

2.4 **Electricity:** Any Compressor Electricity consumed in the operation of the Transportation System when the Flow Direction at the Zeebrugge Connection Point is Entry shall be allocated to an IAA Shipper in the proportion its Net Entry Allocations bears to the aggregate of all IAA Shippers' Net Entry Allocations, STA Shippers' net delivery allocations and Sub-Lessees' net delivery allocations.

3. Reporting by Interconnector

3.1. Gas Day D Information

Interconnector shall provide IAA Shippers with their individual Entry Allocations, Exit Allocations for (a) the latest hour and (b) up to the latest hour, on Gas Day D.

3.2. Daily Reports

Interconnector shall before 08.00 hours (UKT) / 09.00 hours (CET) on Gas Day D+1 provide each IAA Shipper with a report specifying in relation to Gas Day D:

(a) the IAA Shipper's Entry Nominations and Entry Allocations at each relevant Entry Point for that Gas Day;

(b) its Exit Nominations and Exit Allocations at each relevant Exit Point for that Gas Day;

(c) its allocated share of Fuel Gas for that Gas Day and its allocated share of Compressor Electricity for that Gas Day;

(d) the flow weighted average Gross Calorific Value and Wobbe Index of the Natural Gas delivered to that IAA Shipper at each relevant Entry Point and redelivered to it at each relevant Exit Point on that Gas Day; and

(e) the Quantity of Natural Gas measured at each of the Bacton Measurement Facilities and the Zeebrugge Measurement Facilities.

3.3. Monthly Reports

Interconnector shall before the 12th Business Day of each month provide each IAA Shipper with a report specifying in relation to each Gas Day of the immediately preceding Month:

(a) the IAA Shipper's Entry Nominations and Entry Allocations at each relevant Entry Point;

(b) its Exit Nominations and Exit Allocations at each relevant Exit Point;

(c) its allocated share of Fuel Gas and its allocated share of Compressor Electricity;

(d) any relevant metering adjustments; and

(e) the flow weighted average Gross Calorific Value and Wobbe Index of the Natural Gas delivered to that IAA Shipper at each relevant Entry Point and redelivered to it at each relevant Exit Point.

SECTION E
BALANCING

1. Introduction and definitions

1.1. **Section E Definitions:** In this Section :

(a) **"Balancing Charge"** means the charge payable to an IAA Shipper in respect of a Positive Imbalance or the charge payable by an IAA Shipper in respect of a Negative Imbalance as set out below;

(b) a **"Negative Imbalance"** is where any Entry Allocation of an IAA Shipper at an Entry Point is less than the corresponding Exit Allocation at an Exit Point on any Gas Day;

(c) a **"Positive Imbalance"** is where any Exit Allocation of an IAA Shipper at an Exit Point is less than the corresponding Entry Allocation at an Entry Point on any Gas Day;

(d) the "**Allowed Tolerance**" is the tolerance on the cumulative Negative Imbalance or Positive Imbalance that is allowed for each IAA Shipper before Balancing Charges apply, the value of which will be determined and notified by Interconnector from time to time in the reasonable exercise of its discretion but shall initially be set at ±560,000 kWh.

2. Balancing Obligation

An IAA Shipper shall on any Gas Day or in any specified hour on a Gas Day, submit Matching Data specifying an aggregate Quantity of Natural Gas for redelivery at an Exit Point which is equal to the aggregate Quantity of Natural Gas made available by the IAA Shipper for offtake by Interconnector at any Entry Point.

3. Balancing Charges

3.1 **Carry-forward:** Any Negative Imbalance or Positive Imbalance that is less than the Allowed Tolerance shall be carried forward to the next Gas Day.

3.2 **Positive Imbalance:** On any Gas Day on which the IAA Shipper' accumulated Positive Imbalance exceeds the Allowed Tolerance, a Balancing Charge shall be payable to it calculated in accordance with Section F paragraph 4.

3.3 **Negative Imbalance:** On any Gas Day on which the IAA Shipper's accumulated Negative Imbalance exceeds the Allowed Tolerance, it shall pay a Balancing Charge, calculated in accordance with Section F paragraph 4.

3.4 **Reduction of Imbalance:** Once a Balancing Charge has been applied the Positive Imbalance or as the case may be the Negative Imbalance shall be reduced by the quantity used in the Balancing Charge calculation.

SECTION F
CHARGING

1. Initial Registration Fee

An Initial Registration Fee will be charged by Interconnector on signature of an IUK Access Agreement, and which must be paid before the IAA Shipper can access ISIS and bid for Capacity pursuant to Section B. The amount of the Initial Registration Fee shall be published by Interconnector in the IUK Charging Methodology Statement.

2. Monthly Administration Fee

A Monthly Administration Fee will be invoiced as part of the Monthly Charge in an amount published by Interconnector in the IUK Charging Methodology Statement.

3. Capacity Charges

3.1. IAA Shipper Capacity Purchases

3.1.1. For each Gas Day that Entry Capacity has been allocated to an IAA Shipper pursuant to Section B, an Entry Capacity Charge shall be paid by the IAA Shipper to Interconnector in an amount equal to the quantity of allocated Entry Capacity multiplied by that IAA Shipper's bid price for such Capacity.

3.1.2. For each Gas Day that Exit Capacity has been allocated to an IAA Shipper pursuant to Section B, an Exit Capacity Charge shall be paid by the IAA Shipper to Interconnector in an amount equal to the quantity of allocated Exit Capacity multiplied by that IAA Shipper's bid price for such Capacity.

3.1.3. Interconnector shall, from time to time, update and publish the minimum prices (the "**Reserve Price**") to be paid for each of the Entry Capacity and Exit Capacity by IAA Shippers. Such Reserve Price shall be published by Interconnector in the IUK Charging Methodology Statement.

3.2. Interconnector Buy-back Costs

3.2.1. For each Gas Day that Interconnector has bought back Capacity pursuant to Section C paragraph 3, Interconnector shall pay to the IAA Shipper a Buy-back Cost equal to:

(a) where Interconnector has selected Buy-back Capacity pursuant to Section C paragraph 3.1, the quantity of selected Entry Capacity and Exit Capacity multiplied by that IAA Shipper's offer price for such Capacity.

The maximum price that Interconnector will accept for a daily capacity offer from a IUK Shipper pursuant to Section C paragraph 3.1 (the "**Maximum Buy-back Price**") shall be published by Interconnector in the IUK Charging Methodology Statement.

(b) where Interconnector has implemented Forced Buy-back pursuant to Section C paragraph 3.2, the quantity of reduced Entry Capacity and Exit Capacity multiplied by

the relevant price published by Interconnector in the IUK Charging Methodology Statement (the "**Forced Buy-back Price**").

4. Balancing Charge

4.1. **Positive Imbalance:** On any Gas Day on which an IAA Shipper has a Positive Imbalance that exceeds the Allowed Tolerance a Balancing Charge shall be payable to it by Interconnector of the value of the Positive Imbalance multiplied by the Positive Imbalance Daily Gas Price.

4.2. **Negative Imbalance:** On any Gas Day on which an IAA Shipper has a Negative Imbalance that exceeds the Allowed Tolerance it shall pay a Balancing Charge equal to the value of the Negative Imbalance multiplied by the Negative Imbalance Daily Gas Price.

5. Fuel Charges

5.1. **Fuel Gas**

5.1.1. A Fuel Gas Charge shall be payable by an IAA Shipper in respect of any Gas Day any Fuel Gas is allocated to the IAA Shipper in accordance with paragraph 2.1 of Section D.

5.1.2. In respect of each Gas Day, each IAA Shipper's Fuel Gas Charge shall be an amount (in Pounds Sterling) equal to the Negative Imbalance Daily Gas Price multiplied by the total quantity of Fuel Gas allocated to that IAA Shipper on that Gas Day.

5.2. **Electricity Charges**

5.2.1. The Monthly Electricity Charge shall be payable by an IAA Shipper in respect of any Gas Day during a Month any Compressor Electricity is allocated to the IAA Shipper in accordance with paragraph 2 of Section D.

5.2.2. Before each Gas year Interconnector shall in respect of that Gas Year notify all IAA Shippers of its best estimate of the "Estimated Compressor Electricity Unit Cost", expressed in Euro/kWh based on historical reverse flowrate data, forecast information concerning reverse flowrates for that Gas Year, the costs for the supply to Interconnector of Compressor Electricity and any other available and relevant information.

5.2.3. In respect of each Month, each IAA Shipper's Monthly Electricity Charge, shall be an amount (in Euros) equal to the Estimated Compressor Electricity Unit Cost multiplied by the total amount of Compressor Electricity allocated to that IAA Shipper in that Month in accordance with the provisions of paragraph 2.2 of Section D.

5.2.4. As soon as practicable (but in any event within 60 days, or such longer period as may be necessary to allow for the receipt by Interconnector of all relevant invoices and data relating to the supply of Electricity) after the end of each Gas Year, Interconnector shall calculate in respect of that Gas Year the "Actual Compressor Electricity Unit Cost", expressed in Euros/kWh, based on the actual total consumption of Compressor Electricity and the actual total Compressor Electricity Costs.

5.2.5. Interconnector shall then calculate:

(a) the aggregate amount of all Monthly Electricity Charge payments made by each IUK Shipper to Interconnector in respect of each Month during that Gas Year; and

(b) the aggregate amount of all Monthly Electricity Charge payments that would have been made by each IAA Shipper to Interconnector over the same period had the Monthly Electricity Charge payments of that IAA Shipper in respect of each Month during that Gas Year been calculated and paid by reference to the Actual Compressor Electricity Unit Cost (rather than the Estimated Compressor Electricity Unit Cost) for each Month in such Gas Year.

5.2.6. Interconnector shall send each IAA Shipper a copy of such calculations in respect of its Monthly Electricity Charge (together with reasonable supporting details).

5.2.7. The excess of the aggregate amount referred to in 5.2.5(a) above over the aggregate amount referred to in 5.2.5(b) above or (as the case may be) the excess of the aggregate amount referred to in 5.2.5(b) above over the aggregate amount referred to in 5.2.5(a) above shall be payable by Interconnector to the applicable IAA Shipper or (as the case may be) by the applicable IAA Shipper to Interconnector together with interest (from the date when each successive Monthly Electricity Charge fell due for payment until payment of such excess) at a rate equal to the aggregate of Euro LIBOR plus two per cent (2%).

5.2.8. If, for any Gas Year, the Actual Compressor Electricity Unit Cost exceeds the Estimated Compressor Electricity Unit Cost by more than 15%, then notwithstanding paragraph 5.2.4, the Actual Compressor Electricity Unit Cost shall be deemed to be an amount equal to 115% of such Estimated Compressor Electricity Unit Cost.

6. Monthly Charge

6.1 **Obligation to Pay:** Each Month, the IAA Shipper shall pay Interconnector for Transportation Services by way of a Monthly Charge, invoiced as described in Clause 2 of Appendix A to the IUK Access Agreement.

6.2 **Monthly Charge:** The Monthly Charge shall comprise:

(a) the Monthly Administration Fee , and

(b) the summation of daily Entry Capacity Charges calculated in accordance with paragraph 3.1.1, and

(c) the summation of daily Exit Capacity Charges calculated in accordance with paragraph 3.1.2, and

(d) the summation of daily Balancing Charges where the IAA Shipper has a Negative Imbalance in accordance with Section E paragraph 2.2, and

(e) the summation of daily Fuel Gas Charges calculated in accordance with paragraph 5.1, and

(f) the Monthly Electricity Charges calculated in accordance with paragraph 5.2;

less

(g) the summation of daily Buy-back Costs calculated in accordance with paragraph 3.2.1, and

(h) the summation of daily Balancing Charges where the IAA Shipper has a Positive Imbalance in accordance with Section E paragraph 2.1, and

(i) any reduction in the Capacity Charges due to Lost Capacity calculated in accordance with Section I paragraph 1.5.

7. Net OS Revenue Account

7.1. **Account** : Interconnector will keep an account of the net revenue received from the sales of IAA Capacity made available from oversubscription on a cumulative basis over the Gas Year, less payments made for Buy-back (**"Net OS Revenue Account"**).

7.2. **Maximum Deficit :** The balance of Net OS Revenue Account will be allowed to go negative up to the Maximum Deficit. At this level, if further Buy-back is required, IUK will implement Forced Buy-back pursuant to Section C paragraph 3.2. The value of the Maximum Deficit will be published by Interconnector in the IUK Charging Methodology Statement.

7.3. **Account Balance :** Interconnector will publish the balance of the Net OS Revenue Account periodically and, at the end of each Gas Year, shall calculate the closing balance.

7.4. **Distribution:** If the closing balance of the Net OS Revenue Account is positive Interconnector shall then determine the proportion of that amount that will be distributed amongst all IUK Shippers pro-rata to each IUK Shipper's share of the total flows in that Gas Year and the next invoice issued by Interconnector to the IUK Shipper shall be adjusted to reflect the appropriate amount. The proportion (expressed as a percentage) to be distributed to all IUK Shippers will be published in the IUK Charging Methodology Statement.

8. IUK Charging Methodology Statement

8.1. **Publication:** Interconnector shall publish the IUK Charging Methodology Statement in accordance with its licence conditions, setting out the current values of fees and prices under this IUK Access Code and shall only amend such document following a period of consultation.

SECTION G
MEASUREMENT, SAMPLING AND ANALYSIS

1. General

1.1 **Overall Build Standards:** All facilities for the measurement, sampling and analysis of Natural Gas required in connection with the allocation procedures set out in Section D shall be designed, installed, maintained and operated in accordance with this Section G.

2. Design of Measurement Facilities

2.1 **Design Principles:** Unless any Governmental Authority require otherwise, the principles described below shall apply with respect to the design of the metering equipment used for the purposes of the procedures for the allocation of Natural Gas described in Section D.

2.1.1 The Quantity of Natural Gas in each hour which is:

(a) offtaken by Interconnector at an Entry Point, or

(b) redelivered by Interconnector at an Exit Point,

shall be determined by flow meters with a determination of density at meter conditions from direct measurement or from measured temperature, measured pressure, on-line analysis and determination of Gross Calorific Value and standard density from on-line analysis.

2.1.2 The measurement facilities referred to in paragraph 3 of this Section G shall have an accuracy consistent with Good Industry Practice and shall be consistent with each other such measurement facility.

2.2 **Good Industry Practice:** For the purposes of this Section G, "**Good Industry Practice**" shall mean any practice or standard generally recognised within the gas industry in the country where the relevant measurement facilities are located including compliance with any non-statutory code of practice and guidance notes issued by the relevant Governmental Authority and as applicable from time to time.

3. Location and Identification of Measurement Facilities

3.1 Bacton Measurement Facilities

The "**Bacton Measurement Facilities**" shall mean and include the facilities owned and operated by Interconnector and forming part of the Bacton Facilities for measuring the offtake of Natural Gas at Bacton from the NTS or the redelivery of Natural Gas at Bacton to the NTS.

3.2 Zeebrugge Measurement Facilities

The "**Zeebrugge Measurement Facilities**" shall mean and include the facilities owned and operated by Fluxys for measuring the redelivery of Natural Gas to the Fluxys Transmission

System at Zeebrugge or the offtake of Natural Gas from the Fluxys Transmission System at Zeebrugge.

3.3 **Fuel Gas Measurement Facilities**

Fuel Gas consumption for compressor operation at Bacton will be measured by facilities forming part of the Bacton Facilities. Fuel Gas consumption in heaters at Bacton and Zeebrugge will be estimated by Interconnector.

3.4 **Compressor Electricity Measurement Facilities**

Facilities for the measurement of Compressor Electricity consumed by Interconnector at Zeebrugge, are those operated by or on behalf of the Belgian electricity transmission system operator.

3.5 **Entry and Exit Measurement Facilities**

3.5.1. In relation to the transportation of Natural Gas from Bacton to Zeebrugge, the "**Entry Measurement Facilities**" shall be the Bacton Measurement Facilities and the "**Exit Measurement Facilities**" shall be the Zeebrugge Measurement Facilities.

3.5.2. In relation to the transportation of Natural Gas from Zeebrugge to Bacton, the "**Entry Measurement Facilities**" shall be the Zeebrugge Measurement Facilities and the "**Exit Measurement Facilities**" shall be the Bacton Measurement Facilities.

3.5.3. The expressions "**Entry Measurement Facilities**" and "**Exit Measurement Facilities**" when used in this IUK Access Code shall be construed accordingly.

4. Maintenance and Calibration

4.1 **Tolerance:**

4.1.1 All measurement equipment shall be maintained in accordance with applicable Governmental Authority requirements, applicable codes and standards and manufacturer's specifications to ensure that measurement accuracy is maintained within the appropriate tolerance limits.

4.1.2 Tolerance limits for all measurement equipment shall be on the basis of Governmental Authority requirements, manufacturer's specifications, applicable codes and standards and operational experience.

4.1.3 Calibration tests of the measurement equipment shall be made at such frequencies as reasonably needed to ensure that such equipment remains within the above tolerance limits.

4.2 **Equipment Unavailable:**

4.2.1 This sub-paragraph 4.2 applies if, for any reason, any measurement equipment is out of service or out of repair so that the Quantity of Natural Gas offtaken or redelivered is not correctly indicated by the reading thereof, for any known or unknown period of time,

4.2.2 In those circumstances, the Quantity offtaken or redelivered during such period shall be

calculated using the best data available using the first of the following methods determined by Interconnector to be feasible :

(a) by using the registration of any alternative or back-up measuring equipment installed and reasonably believed to be accurately registering; or

(b) by correcting the error if the percentage of error is ascertainable by calibration, test or mathematical calculations in accordance with Good Industry Practice; or

(c) by estimating in accordance with Good Industry Practice using the readings from the Exit Measurement Facilities (where it is the Entry Measurement Facilities which are affected) or the Entry Measurement Facilities (where it is the Exit Measurement Facilities which are affected) and taking account (in each such case) of system stock changes; or

(d) by estimating in accordance with Good Industry Practice the relevant Quantity by Quantities offtaken or redelivered and recorded during preceding or subsequent periods under similar conditions when the measuring equipment was registering accurately.

5. Measurement Errors

5.1 **Adjustments to Measurements:**

5.1.1 If, upon test, any error in measuring equipment is found to affect the Quantities being measured by an amount exceeding one per cent, such measuring equipment shall:

(a) forthwith be adjusted to record accurately; and

(b) previous recordings of such equipment shall be corrected to zero discrepancy for any period which is known definitely, or agreed upon.

5.1.2 Where the period is not known or is not agreed upon, such corrections shall be for a period extending over one half of the time elapsed since the last test date.

5.2 **Adjustment to Allocations**: If it is determined that there has been an error in the measurement of the Quantity of Natural Gas delivered at an Entry Point or redelivered at an Exit Point, the Entry Allocations or Exit Allocations may be adjusted in accordance with paragraph 1 of Section D.

5.3 **Adjustments to Charges and Payments:** If there are any adjustments to the Entry Allocations or Exit Allocations, Interconnector shall:

(a) calculate any Balancing Charges due in respect of any relevant Gas Day; and

(b) recover any under payment from and repay any overpayment to IAA Shippers accordingly in the next invoice issued to the IAA Shipper following such recalculation.

6. Sampling and Analysis

For all offtaken and redelivered streams entering or leaving the Transportation System, composition shall be measured by on-line gas chromatography for determination of density at line conditions, density at standard conditions and Gross Calorific Value.

SECTION H
QUALITY REQUIREMENTS AND OPERATING CONDITIONS

1. Entry Conditions

1.1. **Compliance with Specification:** The Natural Gas made available, or caused to be made available, by the IAA Shipper at any Entry Point shall comply with the relevant quality requirements and operating conditions specified in Schedule 1 of this Section H.

1.2. **Notification of Non-compliance:** If Natural Gas is made available by the IAA Shipper at any Entry Point which does not comply with the said quality requirements and operating conditions, the IAA Shipper shall notify Interconnector or cause Interconnector to be notified of such non-compliance as soon as the IAA Shipper or the Approved Operator of any Approved Transmission System through which the Natural Gas is being made available to Interconnector becomes aware (or ought reasonably to have become aware) of such non-compliance.

1.3. **Right to Refuse:** Interconnector shall at all times have the right to refuse to offtake Natural Gas made available by the IAA Shipper at that Entry Point, and shall have the right to shut off such Natural Gas, if it does not comply with such quality requirements and operating conditions.

1.4. **Reasonable Endeavours to Offtake:** Notwithstanding its right to refuse to offtake, Interconnector shall use its reasonable endeavours to offtake such Natural Gas if it is satisfied that neither Interconnector nor other IUK Shippers will be adversely affected thereby. Interconnector shall promptly inform the IAA Shipper of any decision taken by it either to shut off or to offtake such non-complying Natural Gas pursuant to paragraph 1.3 or paragraph 1.4.

1.5. **Indemnity by IAA Shipper:** If Natural Gas is made available by the IAA Shipper at any Entry Point which does not comply with the quality requirements and operating requirements specified in this Section H, the IAA Shipper shall indemnify Interconnector and each of the other IUK Shippers in accordance with IAA Appendix A Clause 7.1.

1.6. **Actions:**

1.6.1. **Offtake:** Following the offtake by Interconnector of any Natural Gas made available by an IUK Shipper at an Entry Point which does not comply with the quality requirements and operating conditions specified in Schedule 1 of this Section H, Interconnector shall promptly notify each IUK Shipper of any Quantities of Natural Gas which it requires each such IUK Shipper to offtake and remove from the Transportation System at the said Entry Point and the timing thereof.

1.6.2. **IAA Shipper Action:** Except in relation to an IAA Shipper who, within sixty (60) minutes of being advised by Interconnector as aforesaid (or within such other longer period as Interconnector may in its discretion allow), confirms to Interconnector that it is able and willing to offtake and remove the specified Quantities referred to under paragraph 1.6.1 and then replace such Quantities and submits the Matching Data required to give effect thereto (any such IAA Shipper a "**Compliant IAA Shipper**"), Interconnector shall make such arrangements as it shall consider appropriate in order to:

(a) clear and/or clean the Transportation System, including arranging for all or any of the Natural Gas to be offtaken and sold or otherwise disposed of at the discretion of Interconnector; and

(b) replace any Quantity of Natural Gas in such manner and upon such terms at the discretion of Interconnector.

1.6.3. **Actions required:** Interconnector shall promptly advise each IAA Shipper other than a Compliant IAA Shipper of:

(a) any Quantities of Natural Gas to be disposed of or acquired by each such IAA Shipper pursuant to such arrangements and the timing thereof;

(b) the identity of the relevant ATS Shipper counterparty or counterparties in relation to such disposal and/or acquisition; and

(c) the Matching Data which it should submit in order to give effect to such arrangements.

1.6.4. **Matching Data:** Each IAA Shipper other than a Compliant IAA Shipper shall, within sixty (60) minutes of being advised by Interconnector as aforesaid, submit the Matching Data required to give effect to such arrangements with regard to both Quantities and timing as advised by Interconnector, failing which, Interconnector shall be entitled to submit such Matching Data on the IAA Shipper's behalf.

2. Exit Conditions

2.1. **Compliance with Specification:** Interconnector shall (subject to the provisions of this paragraph 2) make Natural Gas available at the relevant Exit Point in accordance with the IAA Shipper's Exit Nominations:

(a) which meets the relevant quality requirements and operating conditions specified in Schedule 1 of this Section H, provided that Natural Gas made available by the IAA Shipper and all other IUK Shippers complies with such operating conditions and quality requirements at all Entry Points; and

(b) at such pressure (within the range specified in Schedule 1 of this Section H) as is sufficient to meet the pressure at the Exit Point set from time by the Approved Operator of the FTS (in the case of the Zeebrugge Exit Point) or by the Approved Operator of the NTS (in the case of the Bacton Exit Point), provided that Natural Gas made available by the IAA Shipper and all other IUK Shippers complies with the pressure for delivery at all Entry Points specified in Schedule 1 of this Section H.

2.2. **Compliance with Specification:** If Natural Gas made available to the IAA Shipper at any relevant Exit Point does not comply with the relevant quality requirements and operating conditions specified in Schedule 1 of this Section H (other than, in any hour during a Flow Transition, in relation to the pressure for redelivery), and provided that the Natural Gas made available by the IAA Shipper at all Entry Points complies with the relevant quality requirements and operating conditions, Interconnector, as soon as it becomes aware of the situation, shall notify the IAA Shipper of such deviation and the IAA Shipper shall have the right to refuse to offtake such Natural Gas at that Exit Point and shall have the right to shut off such Natural Gas. The IAA Shipper shall immediately notify Interconnector of its intention

to exercise such rights.

2.3. **Non-compliant Gas:** If in accordance with paragraph 2.3 the IAA Shipper refuses to offtake such Natural Gas at the relevant Exit Point, then unless Interconnector has been affected by an event of Force Majeure, the Capacity Charges to be paid by the IAA Shipper for that Gas Day shall be reduced by an amount equal to the "**Failed Delivery Quantity"** multiplied by the price paid for the Capacity.

The Failed Delivery Quantity is the total Quantity of Natural Gas which is made available by the Shipper and offtaken by Interconnector at the relevant Entry Point but which Interconnector is deemed to have failed to make available at the relevant Exit Point.

2.4. **Indemnity by Interconnector:** In the event the IAA Shipper shall offtake Natural Gas made available by Interconnector at the Exit Point which does not comply with the quality requirements and operating conditions specified in this Section H, and provided that the Natural Gas made available by the IAA Shipper and all other IUK Shippers complies with such operating conditions and quality requirements at all Entry Points, Interconnector shall indemnify the IAA Shipper in accordance with IAA Appendix A Clause 7.2.

3. Changes to NTS or FTS Specifications:

3.1 If Interconnector shall at any time consider that changes in the specifications or requirements applicable to the NTS or FTS necessitate changes being made to the quality requirements and operating conditions specified in Schedule 1 of this Section H, Interconnector shall give notice in writing to all IAA Shippers of the changes proposed by Interconnector.

3.2 If the changes in relation to the specifications applicable to the NTS or FTS involve narrower or more restrictive specifications being imposed, Interconnector shall, if it considers it necessary to do so, make appropriate changes to the quality requirements and operating conditions specified in Schedule 1 of this Section H with immediate effect.

Schedule 1 Quality Requirements and Operating Conditions

	Unit	Min	Max
Gross Calorific Value	MJ/Nm^3	38.9*	44.6
Wobbe Index	MJ/Nm^3	49.8	54.25
Pressure for offtake at Bacton Entry Point(s)	Barg	45	70
Pressure for redelivery at Bacton Exit Point	Barg	45	70
Pressure for offtake at Zeebrugge Entry Point	Barg	55	80
Pressure for redelivery at Zeebrugge Exit Point	Barg	55	80
Temperature at Bacton Entry Point connected with the NTS	°C	1	28
Temperature at Bacton Exit Point	°C	1	38
Temperature at Zeebrugge Exit Point	°C	2	38
Temperature at Zeebrugge Entry Point	°C	2	38
Hydrocarbon dewpoint	°C from 1 Barg up to 69 Barg		minus 2
Water dewpoint	°C at 69 Barg		minus 10
Oxygen content	ppm by vol		1000
Carbon Dioxide	Mole %	-	2.5
Hydrogen Sulphide content (inclusive of COS)	ppm by vol		3.3
Total Sulphur at any time	mg/m^3		30
Hydrogen	Mole %		0.1 ♦
Incomplete Combustion Factor			0.48 ♦

Soot Index	0.6 ♦

Gas entering the Transportation System shall comply with the statement as to impurities contained in the table set out in Schedule 3, Part 1 of GSMR or that statement as amended, modified, re-enacted or replaced from time to time.★

Gas entering the Transportation System shall have no added odorant.

Notes

* Subject to IAA Shipper's reasonable endeavours to provide gas at a minimum of 39.4 MJ/Nm^3 at the Entry Point.

♦ As required by GSMR. The Incomplete Combustion Factor and the Soot Index are to be calculated in accordance with those Regulations

★ The text of the said statement as to impurities set out in GSMR as at 1.1.00 is as follows:

"[Natural Gas] shall not contain solid or liquid material which may interfere with the integrity or operation of pipes or any gas appliance (within the meaning of regulation 2(1) of the [Gas Safety (Installation and Use) Regulations 1994] which a consumer could reasonably be expected to operate".

All quality requirements and operating conditions apply to both Entry and Exit Nominations except where otherwise stated above.

SECTION I
INCIDENT MANAGEMENT

1. Transportation System Constraints

1.1 **Offtake and Redelivery Quantities:** If Interconnector advises IAA Shippers at any time after Entry and Exit Capacity has been allocated to IAA Shippers that the Transportation System will be operating on the Gas Day or any part thereof subject to a Transportation System constraint, then:

(a) if that Transportation System constraint affects Interconnector's ability to offtake or redeliver Natural Gas at the Bacton Connection Point or the Zeebrugge Connection Point (the "**Constrained Connection Point**") the provisions of paragraph 1.2 shall apply; and

(b) Interconnector shall advise IAA Shippers which Connection Point is a Constrained Connection Point and the maximum total Quantity of Natural Gas per hour which Interconnector is able to physically offtake or (as the case may be) physically redeliver at the Constrained Connection Point (the "**Maximum Constrained Quantity**").

1.2 **Constraints:** For each hour of the Gas Day affected by the Transportation System constraint during which Interconnector is unable to offtake or redeliver Natural Gas at the Constrained Connection Point in accordance with IUK Shippers' aggregate nominations:

(a) When the Flow Direction at the Constrained Connection Point is Entry, Interconnector shall constrain the Entry Nominations for that hour at the Constrained Connection Point of those IAA Shippers whose Entry Nominations for that hour at the Constrained Connection Point exceed their Exit Nominations for that hour at the Constrained Connection Point, so that the amount of the Aggregate Entry Nominations (after applying that constraint) for that hour at the Constrained Connection Point less the amount of the Aggregate Exit Nominations for that hour at the Constrained Connection Point shall be equal to the Maximum Constrained Quantity; and

(b) When the Flow Direction at the Constrained Connection Point is Exit, Interconnector shall constrain the Exit Nominations for that hour at the Constrained Connection Point of those IAA Shippers whose Exit Nominations for that hour at the Constrained Connection Point exceed their Entry Nominations for that hour at the Constrained Connection Point, so that the amount of the Aggregate Exit Nomination (after applying that constraint) for that hour at the Constrained Connection Point less the amount of the Aggregate Entry Nomination for that hour at the Constrained Connection Point shall be equal to the Maximum Constrained Quantity.

1.3 **Maximum and Proportionate Constraints:**

(a) In any hour, the maximum constraint of an IAA Shipper's Nominations pursuant to paragraph 1.2 shall be such that at the Constrained Connection Point that IAA Shipper's Entry Nominations are equal to its Exit Nominations.

(b) If it is not necessary to constrain all of the nominations, then each affected IAA Shipper's share of the constraint of those nominations shall be equal to:

(i) when paragraph 1.2(a) applies, the IAA Shipper's Entry Flow Related Share at the Constrained Connection Point; and

(ii) where paragraph 1.2(b) applies, the IAA Shipper's Exit Flow Related Share at the Constrained Connection Point.

1.4 **Advice to ATS Agents:** If during the course of a Gas Day an IAA Shipper's deliveries or redeliveries of Natural Gas shall be constrained in accordance with paragraphs 1.2 and 1.3, Interconnector shall as soon as possible advise the ATS Agent in relation to each relevant AT System of the reduced Quantities which that IAA Shipper is entitled to offtake from or redeliver to such AT System on that Gas Day.

1.5 **Lost Capacity Reduction :** If on any Gas Day the Entry Capacity or Exit Capacity available to an IAA Shipper (after any Buy-back is taken into account) is at least three per cent (3%) less than the capacity required to satisfy the IAA Shipper's unconstrained Nominations (the "**Lost Capacity**"), then unless Interconnector has been affected by an event of Force Majeure or an AT System Constraint, the Capacity Charges to be paid by the IAA Shipper for that Gas Day shall be reduced by an amount equal to the Lost Capacity multiplied by the price paid for the Capacity.

2. AT System Constraints

2.1 **Reduction of Offtake or Redelivery:** If the operator of an AT System shall notify Interconnector of a constraint affecting the rate at which Quantities of Natural Gas may be offtaken from that AT System at an Entry Point (an "**AT System Entry Point Constraint**") or redelivered to that AT System at an Exit Point (an "**AT System Exit Point Constraint**") Interconnector shall proceed to reduce its rate of offtake or redelivery accordingly.

2.2 **Actions:** Upon the occurrence of an AT System Entry Point Constraint or an AT System Exit Point Constraint:

(a) the relevant ATS Agent shall identify through new Matching Data supplied to Interconnector in accordance with paragraph 2.2 of Section C the IAA Shippers affected and the reduced Quantities which the relevant ATS Shippers will be able to deliver to the IAA Shippers at the relevant Entry Point or (as the case may be) which the IAA Shippers will be able to deliver to the ATS Shippers at the relevant Exit Point; and

(b) Interconnector shall as soon as reasonably practicable confirm to each affected IAA Shipper:

(i) the reduced Quantities which that IAA Shipper may make available at the relevant Entry Point (such confirmation, a "**Constrained Entry Nomination**"); or

(ii) the reduced Quantities which Interconnector will redeliver to it at the relevant Exit Point (such confirmation, a "**Constrained Exit Nomination**"),

and subject as provided in paragraph 2.3 of this Section I, such Constrained Entry Nomination shall take effect as the IAA Shipper's Entry Nomination at the relevant Entry Point and/or such Constrained Exit Nomination shall take effect as the IAA Shipper's Exit Nomination at the relevant Exit Point on the Gas Day in question.

2.3 The provisions of paragraph 2.2(b) shall be without prejudice to the right of any affected IAA Shipper to submit new or revised Matching Data to Interconnector in accordance with paragraph 2.1.1 of Section C.