

## Representation - Draft Modification Report UNC 0761

### Arrangements for Interconnectors with additional Storage capability

Responses invited by: **5pm on 19 November 2021**

To: [enquiries@gasgovernance.co.uk](mailto:enquiries@gasgovernance.co.uk)

*Please note submission of your representation confirms your consent for publication/circulation.*

<b>Representative:</b>	Pavanjit Dhesi
<b>Organisation:</b>	Interconnector Limited
<b>Date of Representation:</b>	19 <sup>th</sup> November 2021
<b>Support or oppose implementation?</b>	Support
<b>Relevant Objective:</b>	<p><b>a)</b> Positive</p> <p><b>b)</b> Positive</p> <p><b>d)</b> Positive</p>
<b>Relevant Charging Methodology Objective:</b>	<p><b>a)</b> Positive</p> <p><b>b)</b> Positive</p> <p><b>c)</b> Positive</p>

**Reason for support/opposition: Please summarise (in one paragraph) the key reason(s)**

Storage services are recognised as providing wide benefits to the market and consumers. These wider benefits have been recognised and reflected in the charging structure of the NTS. **This modification will enable additional storage services to be provided to the GB market and thus contribute to these recognised wider benefits at no additional infrastructure cost.** The dual status solution is critical to a level playing field in the provision of these services and replicates precedents elsewhere in Europe. **The interconnector storage services will increase competition and choice for shippers in acquiring storage flexibility services,** particularly when addressing short term fluctuations in the market. It therefore meets the key UNC relevant objectives (d), and also (c) of the charging methodology objective, by furthering competition between shippers. **It also provides an additional use for existing NTS (and interconnector) infrastructure at Bacton** which is, for periods, not fully utilised for transportation services. The potential for greater use of the NTS at Bacton therefore meets relevant objectives (a) and (b) of the UNC by furthering the efficient and economic operation of the pipeline system.

It is clear that, **without this solution, a barrier to entry will persist.** It will prevent GB shippers from acquiring access to an additional 100 GWh/day of fast cycle storage service

proposed by Interconnector Limited (INT) and potentially more (noting this is a generic solution and other eligible interconnectors could also offer a similar service in the future). We do not believe such a barrier to entry is in the interest of the GB market or consumers.

**Implementation:** *What lead-time do you wish to see prior to implementation and why?*

As soon as possible in order to offer this additional storage service to the GB market, increase competition in storage provision, and increase the utilisation potential of the Bacton NTS interconnection point (IP).

**Impacts and Costs:** *What analysis, development and ongoing costs would you face?*

This will have a positive impact on INT, INT users and NTS Bacton users. INT has already invested in the development of this proposal and the future service offering because it is confident that the investment will be beneficial to the market.

INT will bear the further development and implementation costs of its commercial offering, (as a merchant asset without consumer underwriting).

**Legal Text:** *Are you satisfied that the legal text will deliver the intent of the Solution?*

Yes

**Modification Panel Members have requested that the following questions are addressed:**

*Q1. Do any legal points need to be considered which are relevant to 0761?*

INT has carried out a thorough analysis of the legal compliance of this solution and also the provision of storage services by an interconnector. This has included obtaining external counsel advice. Our analysis has been shared with the proposer and the working group and included in our own consultation on the INT storage service<sup>1</sup>. We also include as an Annex, the external counsel advice in relation to an interconnector operator's ability to provide a storage service under the current regulatory regime (see Annex 1).

The conclusion of this legal assessment is that the modification solution, and indeed the proposed INT storage service itself is compliant.

**Dual storage/ transportation interconnection point precedent**

Whilst recognising the dual status of the Bacton IP, as proposed, is new in the UNC, dual points already exist in other parts of Europe. For example, a dual purpose IP exists at the German/Netherlands border. The Etzel storage facility in Germany connects to both German and Dutch transmission systems. The IP provides storage services and the additional option to utilise the facility for transportation services between Germany and the

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<sup>1</sup> See Annex 1 of INT's consultation letter at <https://www.fluxys.com/en/products-services/empowering-you/customer-interactions/consultations-in-the-uk/2021---consultation-on-the-interconnector-storage-service>.

Netherlands. A shipper using this IP makes an ex-ante decision as to the purpose of the flow (i.e. storage or transportation) with two accounts being maintained for each user; one for storage (attracting a storage discount) and the other for transportation (attracting the standard charges).

### **Consistent with the definition of an interconnector**

The prevailing definition of an interconnector indicates that an interconnector may provide services other than Transmission. The below definition is taken from the Gas Regulation<sup>2</sup>:

*“interconnector”*

*(a) in relation to Great Britain, means a transmission line which crosses or spans a border between Great Britain and a member State, or between Great Britain and Northern Ireland, for the sole or main purpose of connecting the transmission systems of those countries or territories;*

Although section 5(8) of the Gas Act<sup>3</sup> sets out a similar definition of interconnector, post Brexit, we have been advised that the Gas Regulation (which is retained in domestic UK law<sup>4</sup>) definition of “interconnector” prevails over the definition set out in the Gas Act<sup>5</sup>.

### **Consistent with the definition of a storage facility**

Below is the prevailing definition of a Storage Facility as per the Gas Regulation:

*“storage facility”*

*means a facility used for the stocking of natural gas and owned or operated by a natural gas undertaking, including the part of LNG facilities used for storage but excluding the portion used for production operations, and excluding facilities reserved exclusively for transmission system operators in carrying out their functions;*

The latter half of the definition beginning “excluding facilities reserved...” refers to storage facilities which are reserved for the sole use of a TSO to carry out balancing and system stability actions, meaning that the storage facility is not available for third party use. This is confirmed in the interpretive note published by the European Commission<sup>6</sup>. INT does not require the exclusive use of the storage facility for carrying out its business and will make its services available to third parties.

### **Consistent with Licensing obligations**

As the owner and operator of an asset used as an interconnector, INT holds a GB Gas Interconnector Licence. This licence contemplates that interconnectors may offer services other than transportation, including the provision of storage. This is by virtue of Standard Licence Condition 6 which requires an interconnector to keep separate accounts for the various activities undertaken;

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<sup>2</sup> Regulation (EC) 715/2009 as amended by UK SI 2018/1286 and 2019/530

<sup>3</sup> Gas Act 1986 as amended from time to time

<sup>4</sup> Pursuant to section 3 of the European Union (Withdrawal) Act 2018

<sup>5</sup> Sections 5(1) to 5(3) Of the European Union (Withdrawal) Act 2018.

<sup>6</sup> [https://ec.europa.eu/energy/sites/ener/files/documents/2010\\_01\\_21\\_third-party\\_access\\_to\\_storage\\_facilities.pdf](https://ec.europa.eu/energy/sites/ener/files/documents/2010_01_21_third-party_access_to_storage_facilities.pdf)

*“The licensee shall, in their internal accounting, keep separate accounts for each of their gas activities: interconnection; transmission (in the instance of an integrated transmission system, this will also include interconnection activities); distribution; storage;”*

INT indeed will operate the INT storage service with clear separation between transportation and storage accounts, as well as separate contractual terms. Similar regimes are in place in other European countries, where the same company provides both transportation and storage services.

### **Consistent with the Exemption Regime under the Gas Act**

Section 5.1 of the Gas Act outlines the activities that must be authorised by a licence. The activities that require a licence are as follows;

*“(a) otherwise than by means of a gas interconnector conveys gas through pipes to any premises, or to a pipe-line system operated by a gas transporter;*

*(aa) participates in the operation of a gas interconnector;*

*(b) supplies to any premises gas which has been conveyed to those premises through pipes;*

*(c) arranges with a gas transporter for gas to be introduced into, conveyed by means of or taken out of a pipe-line system operated by that transporter; or*

*(d) provides a smart meter communication service,”*

Participation in the operation of an interconnector requires a licence, which INT holds pursuant to section 7ZA of the Gas Act. It is clear that the conveyance of gas between an interconnector and a public gas transporter does not, pursuant to section 5.1(a) of the Gas Act require a licence.

Section 5.2 of the Gas Act provides class and named exemptions for the activities in Section 5.1. These exemptions are available and granted where the requirement to hold a licence would be excessive or onerous. Government guidance issued when the exemption regime was introduced specifically states that interconnector operators do not need a licence exemption to be able to convey gas into the NTS<sup>7</sup>:

*“Facilities covered by a named exemption include the IUK Interconnector...We propose not to renew the exemption for Interconnector (UK) Limited (IUK) to convey gas from the Interconnector to a gas pipeline operated by a licensed gas transporter, as it is no longer required. The exemption was granted prior to the licensing of gas Interconnectors...[which enables] an Interconnector operator to convey gas into the gas network without the need for a licence exemption.”<sup>8</sup>*

Storage Operators have a class exemption under section 5.2 of the Gas Act. Without such an exemption, Storage Operators would require a Gas Transporter licence which would be unduly onerous - or in some cases impossible as many Storage Operators hold

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<sup>7</sup> Quote taken from Page 4.

<sup>8</sup> Interconnector (UK) Limited registered a name change in June 2021 becoming Interconnector Limited. Resolution available at <https://find-and-update.companyinformation.service.gov.uk/company/02989838/filing-history>

Shipping Licences (as foreseen in The Gas (Exemptions) Order 2011). This is discussed in the same government guidance issued when the exemption regime was introduced (Section 9). In the case of the INT Storage Service, as conveyance of gas into the NTS from an interconnector does not require a license under section 5.1, Interconnector does not need an exemption from this section 5.1 so the provisions available under section 5.2 are not relevant.

### **Consistent with Market Access Rules**

Although sitting outside, what we consider is the UNC consideration, we have, for completeness, included a review of the market access rules for INT providing these services.

INT is an independent and fully ownership unbundled operator and will offer all the storage capacity it makes available under the proposed INT storage service to the market. This is in line with INT's current business model for its transportation services which is negotiated Third Party Access ("nTPA"). INT is therefore not seeking an exemption from this regime for its proposed storage activities nor will it seek a minor facility exemption from section 19B of Gas Act Section 19B (which is an exemption that several GB Storage Facilities have the benefit of).

The provision of the storage service by INT will be in line with the requirements of the Gas Regulation, the commercial access regime as set out in the Gas Act<sup>9</sup> and the Petroleum Act<sup>10</sup> as well as following the guidance published by Ofgem for Storage Operators.

Ofgem's guidance includes the establishment of a Storage Services Agreement (SSA) which has to be consulted upon with market users. INT is currently consulting on the proposed SSA. The current regulatory framework along with the SSA will ensure that the INT storage service will be offered by objective, non-discriminatory and transparent mechanisms to the market.

Finally, as outlined in the proposed arrangements, the service will be short term when the interconnector is not being fully utilised for transportation services. Transportation services will continue to have priority and capacity will continue to be offered for transportation. This will ensure continued compliance with existing transportation obligations. The arrangements are thus designed in such a way to ensure no impact to cross border transportation services and flows.

Further details on the proposed commercial arrangements of this service can be viewed in the consultation documents published in INT's website<sup>11</sup>.

### *Q2. Do you have any views in relation to the delivery costs and potential benefits associated with delivering this solution?*

The benefits to the GB market and shippers will outweigh any delivery costs in implementing this proposal.

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<sup>9</sup> Section 19B of the Gas Act 1986

<sup>10</sup> Section 17D of the Petroleum Act 1998

<sup>11</sup> See link in footnote 1.

## **A new storage service contributing to the valuable short term flexibility needs of the GB market**

Short term flexibility is frequently used in the GB market and plays a vital role in helping balance the market. It is also recognised within the approved framework that storage services provide wider benefits to the market, which justifies a significant NTS discount for these services. We note the Ofgem UNC727 decision<sup>12</sup> which increased the GB NTS storage discount to 80% noted on p3 that:

*“Storage can improve the efficiency of system operation and reduce operating costs by providing additional pressure to the system. The Proposer argues that storage provides a benefit to the transmission system in terms of avoided investment in additional capacity. We agree that there is merit in these arguments. We consider that the proposed higher storage discount would facilitate the continued contribution of storage to the efficient and economic operation of the pipe-line system.”*

This solution enables a new 100 GWh/day fast cycle storage service to enter the market via INT and provide all these benefits using existing infrastructure. The INT storage service will have a higher injection and withdrawal capability than most of the other fast cycle storage providers, enhancing the options available for shippers. It will contribute to the efficiency of the system operation, and provide an additional use of existing infrastructure at Bacton (when it is not being fully used for transportation). It therefore furthers the efficient and economic operation of the pipeline system (relevant objectives (a) and (b)). These benefits can help better facilitate the GB market's security of supply and have the potential to lower balancing costs thus benefiting GB consumers. It should be noted that, as a generic solution (not exclusive to Interconnector Limited), there is also the potential for other eligible interconnectors to provide storage services, which can further increase competition and market benefits.

### **Enhanced competition**

Facilitating the availability of additional short term storage capability connected to the NTS will increase competition and choice for market participants, thereby better facilitating competition between shippers using the different storage points and services. It therefore meets UNC relevant objectives (d), and also (c) of the charging methodology objective. It will provide shippers additional optionality in dealing with short term market fluctuations and balancing positions. A number of shippers that INT has spoken to have welcomed such an additional service.

The utilisation of INT for transportation varies, as a marginal flexibility source into the GB market. There can be periods where the Interconnector and consequently NTS Bacton IP capacity is not fully utilised for transportation. On average since GY-2018/19 there has been 292 days per year when transportation bookings of INT capacity was less than 60% of technical capacity and additional storage services could have comfortably been provided to the GB market. This indicates there will be a significant number of days in the year when this service can be offered and fully utilised by the GB market.

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<sup>12</sup> Ofgem 18<sup>th</sup> December 2020 decision on UNC 727: Increasing the Storage Transmission Capacity Charge Discount to 80%: <https://www.ofgem.gov.uk/publications/unc727-increasing-storage-transmission-capacity-charge-discount-80-decision>



**Table 1: INT storage availability**

	# of Days >60% for BE to GB for transportation (A)	# of Days >60% for GB to BE transportation (B)	Days <60% in either flow direction = (365-(A+B))
GY-2018/19	90	92	183
GY-2019/20	0	32	333
GY-2020/21	1	5	359
			<b>Average = 292 days a year INT can comfortably offer a storage service</b>

### **The benefits to the GB market will far exceed any implementation costs**

As was well documented in the UNC 727 process<sup>13</sup>, Shippers can capture intrinsic value associated with market price spreads over the short term duration of the product. Both National Grid and shippers benefit from this as it provides assistance in balancing the network and contributes to dampening price volatility and thus delivers positive externalities. Storage services also help National Grid in terms of avoided investment in additional capacity and helps reduce its activity/costs associated with participation in the balancing market. This solution enables INT to offer a storage service contributing to these benefits. This fast cycle storage will also be available to the network close to demand. A study, by Baringa, on the benefits of the Interconnector storage service<sup>14</sup> is included in INT's own consultation material highlighting these benefits. All these benefits are very pertinent in relation to the current challenge of high NBP gas prices and UNC proposals/workshops which are seeking to improve GB energy balancing arrangements.

INT's analysis of 1-day price spreads in the period between October 2018 to September 2021, and accounting for days when the 1-day spread was positive (i.e. price tomorrow > price today), found that on average, relevant spreads were 3.8p/th – pointing towards increased volatility in the NBP market in the recent past. After allowing for National Grid's capacity costs plus Interconnector's energy related costs, this suggests an approximate market value >£5M for a 100GWh/d of Interconnector storage offered for ~100 days per year<sup>15</sup>.

We have noted the rough order of magnitude (ROM) implementation cost provided by Xoserve in the draft working group report, and note it is not unusual for actual costs to be lower than the ROM. We do not believe, in reality, the implementation costs will be as high as £605 - £730k, given the changes needed are incremental to current arrangements,

<sup>13</sup> See the final UNC727 (Urgent) – “Increasing the Storage Transmission Capacity Charge Discount to 80%” modification report for example: <https://www.gasgovernance.co.uk/sites/default/files/ggf/book/2020-07/Final%20Modification%20Report%200727%20%28Urgent%29%20v2.0.pdf>

<sup>14</sup> The study can be found at: <https://www.fluxys.com/en/products-services/empowering-you/customer-interactions/consultations-in-the-uk/2021---consultation-on-the-interconnector-storage-service>

<sup>15</sup> The 100 days allows for periods when the 1-day spread was sufficiently high to cover assumed NGG and INT costs associated with the provision of this service, and INT transportation bookings in either flow direction was < 60%.

most of which are adopting existing storage point rules at Bacton. Even if this rough cost estimation did materialise however, the overall benefit to the GB market will still outweigh this implementation cost. As highlighted earlier, the INT commercial benefit estimation of exploiting 1-day price fluctuations is in excess of £5m per annum, which is considerably above this implementation cost without considering the wider benefits to the GB market. It is also noted this is an enduring generic solution, so benefits relative to cost will accrue over time and that, as a generic solution, there is also scope for other eligible interconnectors to offer storage services. These storage services will provide wider benefits to the GB market and increase competition.

The Baringa study also noted that the GB market's need for flexibility is likely to increase despite the expected fall in gas demand as GB transitions to Net Zero. UKCS has historically provided flexible swing gas to the market but these fields will decline reducing this flexibility provision. Furthermore on the demand side the increased use of intermittent renewable generation on the system increases the need and unpredictability of gas flexibility to the NTS system. INT's storage service will help the GB market address these challenges and therefore should be facilitated by this UNC modification change.

### **Additional revenue for the NTS Bacton IP and no tariff implications for other users of the NTS**

It is also noted there is no material tariff charging implications for other users of the NTS from this solution. This has been confirmed in the analysis shared by National Grid in the working groups. The INT storage service provides an additional use for Bacton IP capacity when it is not being fully used for transportation. This can potentially positively contribute to additional National Grid NTS revenues generated at Bacton IP. If 100 GWh/day of capacity was purchased at the NTS Bacton IP for 100 days a year, this equates to potentially ~£2M additional NTS capacity revenue at the Bacton IP<sup>16</sup>. If this increases use of short term storage flexibility in the GB market (rather than competing for the same short term storage flexibility volumes), this can overall provide more capacity revenue and thereby contribute to dampening future capacity price rises benefiting all NTS users.

### **Service contributes to maintaining cross border infrastructure benefiting GB security of supply and market trading**

Finally, the revenues this additional service generates will also help maintain interconnection infrastructure with its wider market integration and security of supply benefits to GB consumers. Noting interconnector assets at Bacton are merchant operators, the solution enables these assets to be used more efficiently. This will contribute to supporting the significant fixed costs associated with operating, maintaining the assets and maintaining a high degree of availability for the GB market consumers.

### *Q3. Do you have any views as to whether implementation will increase overall NTS throughput volumes?*

This will be an additional 100 GWh/day storage service added to a GB market with limited storage relative to other European markets. This service will be accessible for large parts of the year. The Baringa study has suggested the need for flexibility in the GB market is likely to increase as UKCS declines and offers less swing flexibility. It also suggested the

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<sup>16</sup> Assuming 80% storage discount applies for these bookings.



increased use of intermittent renewable generation will also increase the need/unpredictability of gas flexibility needs on the network. INT's storage service will help the GB market address these challenges and increase the likelihood of NTS Bacton capacity being utilised through an additional use. This would therefore suggest that this service should increase overall throughput onto the NTS network. Even in the worst case, where overall throughput does not change, there would still be positive benefits through increased competition for the different users of GB storage points.

**Q4. Please explain whether you believe this solution has any impacts on other available storage services.**

We do not believe there will be an impact on other available storage services other than some healthy competition for short term flexibility in parts of the year. It can also complement the wider range of storage services provided by these providers. This solution has no material tariff charging implications for other users of the NTS. Users of other storage services will not face higher NTS charges. This modification only seeks to allow interconnectors with storage services to operate on a level playing field and enable NTS shippers to access these different storage services on a level playing field.

What this solution does is provide an additional use for Bacton IP capacity when it is not being fully used for transportation. It positively impacts the GB market by increasing competition in the market for short term storage flexibility with all the benefits noted already in answering question 2. It therefore furthers effective competition between shippers at the different storage points on the network. Increasing competition in the provision of GB storage services will benefit the GB market and shippers through competitive pressure on product pricing and services.

**Are there any errors or omissions in this Modification Report that you think should be taken into account?** *Include details of any impacts/costs to your organisation that are directly related to this.*

None

**Please provide below any additional analysis or information to support your representation**

Interconnectors have the capability to store gas in the same manner as any other storage facility offering short term storage services. This UNC modification proposal enables NTS shippers seeking to use such storage services to be treated in a similar manner to other shippers using other storage points on the network with storage services connected there. The INT storage service will offer the same short term services of injecting, parking and withdrawing gas over short periods as these other storage providers.

This solution provides a level playing field in the NTS charging treatment of storage services provided by qualifying interconnectors and avoids the double charging of NTS users of this service. The solution is critical to facilitate this service and increase the range of commercial storage services available to GB shippers leading to greater competition in the market and associated wider market benefits.

Without the solution there will be a barrier to entry which is not in the interest of GB consumers.

**Annex 1: External legal advice in relation to an interconnector operator's ability to provide a storage service under the current regulatory regime**

(please see attached legal advice from Fieldfisher)