

# **NTS GAS CHARGING DISCUSSION DOCUMENT (NTS GCD)**

***NTS GCD 12 – Informal consultation on  
Modifications raised to introduce a Conditional  
Discount to Avoid Inefficient Bypass of the NTS***

**28 April 2020**

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## 1 Version History

Version	Date of update	Detail
1.0	28 April 2020	Initial publication

## 2 Summary

This document is being issued by National Grid Gas plc (“National Grid”) in its role as holder of the Gas Transporter Licence (the “Licence”) in respect of the National Transmission System NTS.

This document sets out for discussion the options, previously raised in Modification 0718 and alternatives, for introducing a new Conditional Discount to Avoid Inefficient Bypass of the NTS. This document details the proposals expected to be re-raised once a final decision on Modification 0678 and its alternatives has been published.

From the initial suite of Modification Proposals under the banner of 0678, the minded-to-position published by Ofgem on 23<sup>rd</sup> December 2019 left only Modifications 0678 and 0670A “on the table”. Both modifications propose a Capacity based charging model compliant with the EU Tariff Network Code (TAR NC), in doing so both also remove the current NTS Optional Commodity Charging product, originally introduced in 1998 to seek to avoid inefficient by-pass of the NTS by large sites located near to entry terminals.

Modifications 0718/A/B/C proposed to introduce a new capacity based discount for sites deemed to be at high risk of Bypassing the NTS. This was done on the condition that one of the two remaining compliant Modifications, 0678 or 0678A, would be implemented. Alongside this, a request for urgency was raised due to the anticipated tight time-scales between publication of the final 0678 decision and the potential 01 October 2020 implementation date.

Due to the conditional aspect of the proposals, Ofgem rejected the urgency request on procedural grounds. No comment was made on the validity of the Modifications themselves or on the requirement for urgency. The Proposers each believe that the proposed modifications are compliant with TAR NC and that Urgency is still a requirement to enable implementation alongside 0678/A once a decision is published, but once the Urgency Status had been requested it could not be re-requested and so withdrawal of the current Modifications and resubmission under a new Modification number is required.

Considering this, and the reduced timeline, we are seeking to run an informal consultation on the four proposals, originally raised under the banner of Modification 0718, to enable a quicker than normal turnaround for the formal consultation which will be required as part of the process for the new Modifications, to be raised as and when the 0678 decision is published.

This discussion document is being issued to seek views and comments on the four proposed options for a new Capacity based discount to Avoid Inefficient Bypass of the NTS.

This discussion document is particularly seeking views on:

- a) Whether you believe the proposals further the relevant objectives
- b) Whether you have a preference for any of the four options proposed
- c) Any other comments you wish to make on the existing proposals

The closing date for submission of your responses to this discussion document is **15th May 2020** however we welcome any responses ahead of this date. Responses will be published as part of this discussion unless marked as confidential.

### **3 Background**

The topic of managing inefficient bypass as part of the Transportation Charging Methodology has been extensively discussed during the development of Modifications 0621 (and alternatives), 0678 (and alternatives), 0636 and 0653.

A more targeted review has been undertaken under the remit of Request 0670R with further discussions taking place in the NTS Charging Methodology Forum (NTSCMF). Pre-Modification discussions have taken place at Request 0670R and/or the NTSCMF.

The Modifications originally raised proposed a new product to build on Modification 0678A or 0678, where there is no such product for managing inefficient bypass as part of the proposed Charging Methodology.

If the Charging Methodology does not incorporate measures to address potential bypass of the NTS in the circumstances described, there will likely be more active consideration of bypass of the NTS.

Should the relevant consumers elect to bypass the NTS, large volumes could be lost from the NTS whilst the Maximum Allowed Revenue (MAR) nevertheless remains unchanged. This could create a significant increase in charge rates for all remaining Users of the NTS, with no contribution towards this revenue from those electing to bypass.

#### **Consequences if Not Addressed**

In some instances, doing so could reduce transportation charges significantly for selected Users, resulting in large savings over a relatively short period of time for such points.

Incentivising those points genuinely at risk of bypassing to continue to use the NTS would create some additional costs for other Users, but these should be less than the figures possible should there be no incentive put in place and this demand be 'lost' from the NTS along with contributions towards Allowed Revenue collection.

With any arrangement that results in a discounted treatment for some Users, the amount of the 'discount' or benefits realised will adjust other charges. This can often be referred to as a cross subsidy, given it results in an amount not paid by some, and picked up by others. As a result, the level of this redistribution should also play a part in the assessment of the Proposals. The level of redistribution should always be kept under review and should it become necessary to update any element of the method outlined in the Proposals, it would be via a UNC change at the appropriate time.

Ultimately a network User's primary driver, as to whether to remain on the NTS or bypass the network entirely, will be based on which option is more cost effective for their business. This decision will take in to account the up-front capital expenditure for construction and/or commissioning of a pipeline, potentially lengthy planning and construction times, cost of use of the NTS during that period, and long-term operational expenses including upkeep and maintenance of the asset. This would be compared with the Transportation Charges related to alternatively accessing and using the NTS. This decision would likely consider the less easily quantifiable advantages inherent in remaining connected to the NTS such as security of supply and access to the National Balancing Point (NBP).

In practice, bypassing the network requires a single pipeline from Entry point to Exit point, the planning, development and construction of which could take months or years in some instances. As an indication of timescales, the current Planning and Advanced Reservation of Capacity Agreement (PARCA) process sets timescales between 12 and 90 months (between 1 and 7.5 years).

It should be noted that any access to the proposed conditional discount would be immediate and has the benefit, where eligibility and accessibility permits. This is also an advantage in remaining connected to the NTS compared to the process that would lead up to and include building and commissioning and operating a bypass pipeline.

Those Modification 0678 alternatives which proposed a new charge to avoid the inefficient bypass of the NTS were considered non-compliant with the EU Tariff Code as outlined in Ofgem's minded to decision on Modification 0678 and suite of alternatives.

One concern highlighted was, amongst other points, Users potentially being able to take advantage of some preferential charges, regardless of whether a genuine consideration is bypass of the NTS. Under the NTS OCC this issue is also seen whereby, the uptake of the product, in combination with the impacts and interactions in the Charging Methodology results in a disproportionate use over its intended usage and resulting in unrealistic distances for a potential bypass.

Therefore, National Grid proposed that both the charge rate, and more importantly eligibility for a new product, must be more informed by the risk of bypass. National Grid are of the view that distance between exit and entry point, as well as forecasted volumes, must be accounted for in calculating the potential costs or savings available to those looking to bypass the network. Whilst difficult to quantify, Users should also be aware of the additional benefits described above.

Industry must also be aware that a reduced rate for some Users does result in an increase to the costs for others. As described above, not replacing the NTS OCC, and affected Users choosing to bypass, would generate significant shortfall in the revenue recovered and so charge rates would increase. Therefore, the methodology for this product must balance the potential loss of demand from the NTS (and the resultant increase in revenue recovery from those remaining connected) with the potential level of cross subsidy due to discounts being provided to those at risk of bypassing the system.

National Grid acknowledges that some level of socialisation is required to suitably incentivise Users to remain connected to the NTS and avoid the potentially larger costs associated with the loss of large volumes of demand from the NTS. Nonetheless, National Grid also recognises the need to target only those points where a risk is clear and present, in particular those Users who have situated their businesses near an Entry point.

Socialisation of some costs and charges can typically be a feature of a regime with multiple Users and specific access arrangements. Where discounts or alternative charges are a feature (e.g. the Storage discount to Transmission Services (TS) capacity reserve prices in Modification 0678 and 0678A, Storage exemption from General Non-Transmission Services (Gen Non-TS) Commodity charges or the Interruptible Discount to TS capacity reserve prices) they result in amounts effectively not levied on some Users and paid for by others. Providing these further the relevant objectives these can be viewed as positive when applied in the overall methodology.

A critique of the current NTS Charging Methodology undertaken as part of the Gas Transmission Charging Review identified that it is too volatile, unpredictable and does not provide stability of charges for Users. Modification 0678 and 0678A will, if implemented, introduce a new NTS Charging

Methodology that produces stable and predictable transportation charging and is compliant with EU Tariff Code (Regulation 2017/460). Under Modification 0678 and 0678A, the NTS OCC will cease with effect from implementation of Modification 0678 or 0678A.

Despite the absence of a mechanism to dis-incentivise inefficient bypass of the NTS in Modification 0678A, National Grid NTS recognises that there remains an enduring need for the prospective Charging Methodology to include bespoke charging arrangements to ensure the efficient use of the network, in this case to avoid inefficient bypass of the NTS by large consumers located close to points of entry to the NTS. To facilitate this aspiration, National Grid initiated the review under Request 0670R to provide a suitable forum to discuss and consider outside of the main charging developments under Modification 0678.

### **Recent Developments**

A critique of the current NTS Charging Methodology undertaken as part of the Gas Transmission Charging Review identified that it is too volatile, unpredictable and does not provide stability of charges for Users. Modification 0678 and 0678A will, if implemented, introduce a new NTS Charging Methodology that produces stable and predictable transportation charging and is compliant with EU Tariff Code (Regulation 2017/460). Under Modification 0678 and 0678A, the NTS OCC will cease with effect from implementation of Modification 0678 or 0678A.

Despite the absence of a mechanism to dis-incentivise inefficient bypass of the NTS in Modification 0678 and 0678A, National Grid NTS recognises that there remains an enduring need for the prospective Charging Methodology to include bespoke charging arrangements to ensure the efficient use of the network, in this case to avoid inefficient bypass of the NTS by large consumers located close to points of entry to the NTS. To facilitate this aspiration, National Grid initiated the review under Request 0670R to provide a suitable forum to discuss and consider outside of the main charging developments under Modification 0678.

Through Request 0670R several options have been discussed. Following the minded to position from Ofgem on Modification 0678 and alternatives on 23 December 2019, National Grid discussed a new conditional discount proposal for managing inefficient bypass through the Charging Framework at workgroups held in the first quarter of 2020. This sought to address issues presented in this minded to position in addition to the issues highlighted above.

## 4 Proposed options for Conditional Discount

Four options have been presented under Modification 0718. All four use the same underlying mechanics, which are detailed in the Modification 0718 Proposals, and are summarised below along with details of the variances between each of the proposals.

Full detail of the 0718 proposals, including Legal Text and Analysis provided by the proposers, can be found on the Joint Office website at <https://www.gasgovernance.co.uk/0718>. This will include links to workgroup discussions undertaken as part of Review Group 0670.

In all proposals, a Discount is offered to Capacity based on an exponential curve which peaks at 0km, offering a discount of 90% and reducing as the distance increases to a defined limit where a user can access a 10% discount. Beyond this limit there is no discount available. The Distance is calculated based on the straight-line distance measured between the grid references for an Entry Point and an Exit Point. This Entry/Exit combination can be defined by a shipper and this combination is known as a Route.

Proposals 0718/A/C allow for a maximum Route distance of 18km. The rationale for this can be found in the analysis presented as part of the Modification Proposal. 0718B uses a distance limit of 28km, enabling additional Routes to access the discount and due to the nature of the curve, it also uplifts the discount for Routes with a distance greater than 0km.

0718C differs from the other three proposals, in that it allows discount for all Capacity booked, rather than utilised capacity. Under Modification Proposals 0718/A/B the Eligible Quantity is calculated as the lesser of four figures; Capacity booked at Entry & Exit and Flow at Entry & Exit, ensuring that only utilised Routes achieve a discount.

In addition to the Capacity based discount 0718A & 0718B offer a flow based discount to the General Non-Transmission Charges. The discount is a set figure applicable to any Route which qualifies for the Transmission Services Discount, it does not vary by distance. The rationale can be found in the Modification Proposals. In brief, the combined Route Distance of all likely routes is calculated as a percentage of the total pipeline making up the NTS. This figure is used as the General Non-Transmission Discount level for these Routes. 0718A gives a figure of 80%, 0718B gives a figure of 69%.

Below is a table (figure 3.1) highlighting the key differences between each of the proposals.

**4.1 Modification Comparison Table**

		0718	0718A	0718B	0718C
		v1.0 (6/3/2020)	v2.0 (10/3/2020)	v2.0 (10/3/2020)	v1.0 (6/3/2020)
Charge Group	Element	National Grid	South Hook Gas Company	Vitol SA Geneva	RWE
Transmission Services Conditional Discount	Charge which the discount is applied to	Entry Capacity Reserve Price and Exit Capacity Reserve Price	Entry Capacity Reserve Price and Exit Capacity Reserve Price	Entry Capacity Reserve Price and Exit Capacity Reserve Price	Entry Capacity Reserve Price and Exit Capacity Reserve Price
	DCSL Distance (km)	18	18	28	18
	Initial Eligible Quantity (Entry)	(Lower of Entry Capacity, Exit Capacity, Entry Allocation, Exit Allocation) less any Existing Contract Capacity	(Lower of Entry Capacity, Exit Capacity, Entry Allocation, Exit Allocation) less any Existing Contract Capacity	(Lower of Entry Capacity, Exit Capacity, Entry Allocation, Exit Allocation) less any Existing Contract Capacity	(Lower of Entry Capacity, Exit Capacity) less any Existing Contract Capacity
	Initial Eligible Quantity (Exit)	Lower of Entry Capacity, Exit Capacity, Entry Allocation, Exit Allocation	Lower of Entry Capacity, Exit Capacity, Entry Allocation, Exit Allocation	Lower of Entry Capacity, Exit Capacity, Entry Allocation, Exit Allocation	Lower of Entry Capacity, Exit Capacity
Non-Transmission Services Conditional Discount	Charge which the discount is applied to	N/A	General Non-Transmission Services Charge	General Non-Transmission Services Charge	N/A
	Discount (%)	N/A	80	69	N/A
	Eligible Quantity	N/A	Lower of Entry Allocation, Exit Allocation	Lower of Entry Allocation, Exit Allocation	N/A

Variation in treatment of element from UNC Modification Proposal 0718

## 5 Analysis

The detailed analysis behind each of the proposals has been produced and published as part of Modification 0718, available via the website of the Joint Office of Gas Transporters. Here we present some comparisons between each to provide some context.

The analysis was run based on the parameters defined in Modification 0678A as the Baseline for the Conditional Product to work against. Analysis was run for Gas Year 2020/21 using version 3.1 of the Sensitivity Tool provided as part of 0678 and its alternatives.

The analysis also uses the Forecasted Contracted Capacity values taken from the FCC model, used as part of the Sensitivity Tool, to simulate Capacity based Charges along with current throughput figures from sites currently using the NTS OCC product to enable calculation of the flow based General Non-Transmission Charges and Socialisation figures. A General Non-Transmission Rate of 0.0104p/kWh/day was calculated using a version of the Non-Transmission Model, originally published alongside 0678A, updated with figures taken from the lasted Charge Setting Report for Apr-20 with an adjustment made to the Forecasted Flow to account for the volumes related to the current NTS Optional Commodity Charge which are not included in the published documents.

This Analysis does not account for Existing Contracts. While they will be present in the period analysed, it is difficult to predict how they will be utilised in the short term, and in the long term these contracts will ultimately expire. It is important to demonstrate the effect these Proposals would have on the charging regime beyond the immediate future to ensure the ongoing impact is proportionate to risks associated with bypass.

Also unaccounted for are any behavioural changes which may arise due to the expected implementation of Modification 0678/A. While the FCC values used do not include any capacity currently booked at a zero price under the current methodology, they do include capacity booked at higher levels of discount that will be available under the proposed methodology. Changes to the levels of discount available may have an impact on the level of Capacity booked which has not been modelled in this analysis.

	0718	0718A	0718B	0718C
<b>Contribution: TS Standard Rate</b>	£91,050,510.89	£91,050,510.89	£112,398,543.94	£0.00
<b>Contribution: TS Discounted Rate</b>	£12,599,653.97	£12,599,653.97	£29,932,749.22	£39,190,887.90
<b>Contribution: Gen Non-TS</b>	£23,335,962.13	£4,667,192.43	£9,566,479.33	£23,335,962.13
<b>Potential TS Socialisation</b>	£54,825,410.84	£54,825,410.84	£59,230,544.91	£120,262,440.82
<b>TS Socialisation as % of TO MAR</b>	7.2%	7.2%	7.8%	15.9%
<b>Gen Non-TS Socialisation</b>	£0.00	£18,668,769.70	£21,293,131.42	£0.00
<b>Gen Non-TS Socialisation as % of SO MAR</b>	0.0%	8.8%	10.0%	0.0%
<b>Total Socialisation as % of Total MAR</b>	5.7%	7.6%	8.3%	12.4%
<b>Routes Considered</b>	17	17	22	19
<b>Max Effective Rate Discount</b>	67%	87%	85%	90%
<b>Longest Route Considered</b>	17.7	17.7	27.2	17.7

0718 & 0718A offer the same Transmission Services discount across the same 17 routes, so the socialisation relating to Transmission Services are identical. The two Modifications diverge when considering the discount and subsequent socialisation relating to General Non-Transmission Services as discussed previously.

0718B works over a longer distance than the other proposals, which enables 5 additional routes and increases the discount available to all Routes greater than 0km in length (up to the 28km distance boundary). This increases the Transmission Services socialisation compared with 0718/A. The General Non-Transmission Services discount is slightly lower here than under 0718A, but is applicable to a greater number of Routes so the Socialisation level increases.

0718/A/B apply a discount to utilised capacity bookings, to calculate the Eligible Quantity we use the minimum of the Entry & Exit Capacity bookings and the Entry and Exit flows to determine the Capacity which is utilised along that Route. 0718C applies a discount to all booked Capacity. In this analysis, we have used the minimum of the Entry and Exit Forecasted Contracted Capacity figures to calculate the Capacity eligible for discount along a Route. Because of this there is no Capacity charged at the standard rates under 0718C, all Capacity is charged at the discounted rate. The Transmission Services socialisation figure is therefore higher than under the other proposals.

This variation in the Eligibility criteria also means two additional routes within the same distance boundary become eligible for the capacity discount. This is because they have an FCC value greater than zero, but no flow registered meaning they become eligible for a capacity discount. The additional Routes, with no additional flow against them mean the General Non-Transmission Services contribution still matches 0718.

## 6 Tools and Resources Available

### Online Support Sessions

To support this document and the informal consultation period, National Grid, alongside the other proposers will be hosting two online sessions to present and discuss the analysis provided. This will be run via Webex and links will be available via the Charging pages of the National Grid Gas website.

### Route Calculator

A simple calculator has been created to enable users within the distance boundaries set out within each of the Proposals to predict potential variations in costs associated with each of the proposals against Baseline using 0678A. This will be published in the GCD12 Section of the Charging pages of the National Grid Gas website.

### Reference Documents

National Grid Gas – Charging Discussion Papers:

<https://www.nationalgridgas.com/charging/gas-charging-discussion-gcd-papers>

National Grid Gas – NTS Quarterly Charge Setting Report:

<https://www.nationalgridgas.com/charging/transmission-system-charges>

UNC Request 0670R:

<https://www.gasgovernance.co.uk/0670>

UNC Modification Proposal 0678 and Alternatives:

<https://www.gasgovernance.co.uk/0678>

UNC Modification Proposal 0718 and Alternatives:

<https://www.gasgovernance.co.uk/0718>

Existing NTS Optional Commodity Charge (NTS OCC) Methodology (Part A1 of UNC TPD Y):

<https://www.gasgovernance.co.uk/TPD>

Gas Transmission Charging Review (GTCR) and associated update letters:

<https://www.ofgem.gov.uk/gas/transmission-networks/gas-transmission-charging-review>

Customer and Stakeholder Objectives developed within NTSCMF:

<http://www.gasgovernance.co.uk/ntscmf/060916>

EU Tariff Code (Regulation 2017/460):

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32017R0460>

## 7 Relevant Objectives

### 7.1 Assessment against Licence Objectives

The Licence requires that proposed changes to the Charging Methodology better facilitate the relevant methodology objectives. Respondents are therefore asked to consider how the different options would best satisfy the relevant objectives as part of their responses to this discussion paper.

- a) Efficient and economic operation of the pipe-line system.
- b) Coordinated, efficient and economic operation of
  - i) the combined pipe-line system, and/ or
  - ii) the pipe-line system of one or more other relevant gas transporters.
- c) Efficient discharge of the licensee's obligations.
- d) Securing of effective competition:
  - i) between relevant shippers;
  - ii) between relevant suppliers; and/or
  - iii) between DN operators (who have entered into transportation arrangements with other relevant gas transporters) and relevant shippers.
- e) Provision of reasonable economic incentives for relevant suppliers to secure that the domestic customer supply security standards... are satisfied as respects the availability of gas to their domestic customers.
- f) Promotion of efficiency in the implementation and administration of the Code.
- g) Compliance with the Regulation and any relevant legally binding decisions of the European Commission and/or the Agency for the Co-operation of Energy Regulators.

#### **And, for Section Y (Charging Methodology) Modifications**

- a) Save in so far as paragraphs (aa) or (d) apply, that compliance with the charging methodology results in charges which reflect the costs incurred by the licensee in its transportation business;
- aa) That, in so far as prices in respect of transportation arrangements are established by auction, either:
  - i) no reserve price is applied, or
  - ii) that reserve price is set at a level –
    - I) best calculated to promote efficiency and avoid undue preference in the supply of transportation services; and
    - II) best calculated to promote competition between gas suppliers and between gas shippers;
- b) That, so far as is consistent with sub-paragraph (a), the charging methodology properly takes account of developments in the transportation business;
- c) That, so far as is consistent with sub-paragraphs (a) and (b), compliance with the charging methodology facilitates effective competition between gas shippers and between gas suppliers; and
- d) That the charging methodology reflects any alternative arrangements put in place in accordance with a determination made by the Secretary of State under paragraph 2A(a) of Standard Special Condition A27 (Disposal of Assets).
- e) Compliance with the Regulation and any relevant legally binding decisions of the European Commission and/or the Agency for the Co-operation of Energy Regulators.

## 8 Questions for discussion and contact details

National Grid would welcome responses to the following questions in preparation for the Formal Consultation expected to take place upon resubmission of the proposals:

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

Insert Text Here

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

Insert Text Here

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

Insert Text Here

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

Insert Text Here

The closing date for submission of your responses is **Friday 15<sup>th</sup> May**. Responses will be published as part of this discussion unless marked as confidential. Your response should be emailed to:

[box.gsoconsultations@nationalgrid.com](mailto:box.gsoconsultations@nationalgrid.com)

In support of this informal consultation we are proposing to run online sessions to discuss the analysis presented here and in the 0718 Proposals available via the Joint Office website. These sessions will cover the same material so attendance at both is not essential.

If you wish to discuss any matter relating to this proposed change, please contact:

Colin Williams ([colin.williams@nationalgrid.com](mailto:colin.williams@nationalgrid.com) or 07785451776)

Laura Johnson ([laura.johnson@nationalgrid.com](mailto:laura.johnson@nationalgrid.com) or 07970842400)

Daniel Hisgett ([daniel.hisgett@nationalgrid.com](mailto:daniel.hisgett@nationalgrid.com) or 07971500855)

We welcome any responses ahead of the closing date of **Friday 15<sup>th</sup> May**.