**UNC Workgroup Report**

**UNC 0678/B/C:** Amendments to Gas Transmission Charging Regime

**UNC 0678A:** Amendments to Gas Transmission Charging Regime (Postage Stamp)

**Purpose of Modification:**

The purpose of these Modification proposals is to amend the Gas Transmission Charging regime in order to better meet the relevant charging objectives and customer/stakeholder provided objectives for Gas Transmission Transportation charges and to deliver compliance with relevant EU codes (notably the EU Tariff Code).

- The Workgroup recommends that this modification should be:  
  - subject to Authority Direction.

In line with the Urgent timetable agreed with the Authority for Modification 0678, the Workgroup Report will be finalised at the last Workgroup on 06 March 2019.

- The Draft Modification Report will be issued for consultation on 08 March, representations can then be made as usual, with consultation close out on 05 April 2019.

- The Final Modification Report will be made available to UNC Modification Panel on 12 April 2019 for consideration at the scheduled UNC Modification Panel meeting on 18 April 2019.

- The Final Modification Report with the UNC Modification Panel recommendation will then be issued to Ofgem for their ultimate consideration on 23 April 2019.

<table>
<thead>
<tr>
<th>Impact Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Impact</td>
<td>All parties that pay NTS Transportation Charges and / or have a connection to the NTS, and National Grid NTS.</td>
</tr>
<tr>
<td>Medium Impact</td>
<td>N/A</td>
</tr>
<tr>
<td>Low Impact</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Contents

1 Report structure and how to use the report 3
2 Introduction 4
3 Comparison table 7
4 Key issues 10
5 Legal Text 32
6 Recommendations 33
7 Appendix 1: Impacts of Proposals on NTS Capacity Auctions 34
8 Appendix 2: Differences between Modification 0621 and Modifications 0678/A/B/C/xx. 35

Timetable

The Proposer recommends the following timetable:

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ofgem decision on urgency</td>
<td>25 January 2019</td>
</tr>
<tr>
<td>Workgroup 1 - “Approach. Compliance”</td>
<td>29 January 2019</td>
</tr>
<tr>
<td>Workgroup 2 - “Integration of RPM, FCC, Revenue Recovery and existing contracts”</td>
<td>31 January 2019</td>
</tr>
<tr>
<td>Workgroup 3 - “Multipliers and Discounts. ‘Shorthaul’ approach” (part of NTSCMF)</td>
<td>05 February 2019</td>
</tr>
<tr>
<td>Workgroup 4 - “Compliance. FCC”</td>
<td>11 February 2019</td>
</tr>
<tr>
<td>Workgroup 5 - “Non-transmission charges. Final overview”</td>
<td>13 February 2019</td>
</tr>
<tr>
<td>Workgroup 6 - “Workgroup Report”</td>
<td>14 February 2019</td>
</tr>
<tr>
<td>Workgroup 7 - “Workgroup Report”</td>
<td>18 February 2019</td>
</tr>
<tr>
<td>Workgroup 8 - “Workgroup Report”</td>
<td>20 February 2019</td>
</tr>
<tr>
<td>Workgroup 9 - “Workgroup Report”</td>
<td>25 February 2019</td>
</tr>
<tr>
<td>Workgroup 11 - “Finalise Workgroup Report”</td>
<td>04 March 2019</td>
</tr>
<tr>
<td>Draft Modification Report issued for consultation</td>
<td>06 March 2019</td>
</tr>
<tr>
<td>Consultation Close-out for representations</td>
<td>08 March 2019</td>
</tr>
<tr>
<td>Final Modification Report available for Panel</td>
<td>05 April 2019</td>
</tr>
<tr>
<td>Modification Panel decision</td>
<td>12 April 2019</td>
</tr>
<tr>
<td>Final Modification Report issued to Ofgem</td>
<td>18 April 2019</td>
</tr>
<tr>
<td></td>
<td>23 April 2019</td>
</tr>
</tbody>
</table>

Any questions?

Contact: Joint Office of Gas Transporters

enquiries@gasgovemance.co.uk

0121 288 2107

Proposer: Colin Williams

colin.williams@nationalgrid.com

01926 655916 or 07785 451776

Transporter: National Grid

Systems Provider: Xoserve

commercial.enquiries@xoserve.com

Questions?
Joint Office of Gas Transporters

List of Tables

- Table 1: Definitions used in the Modification ........................................ Error! Bookmark not defined. 13
- Table 2: Key steps in the CWD calculations ........................................ Error! Bookmark not defined. 17
- Table 3: Publication dates for Transportation Charges .......................... Error! Bookmark not defined. 25
- Table 4: Impact of the Modification on the Relevant Objectives .......... Error! Bookmark not defined. 35
- Table 5: Impact of the Modification on the Relevant Charging Methodology Objectives . Error! Bookmark not defined. 37

List of Figures

- Figure 1: Proposed CWD Model for calculation of Entry and Exit Capacity Base Reference Prices ... Error! Bookmark not defined. 17
- Figure 2: Entry Point Reference Prices calculation model .................... Error! Bookmark not defined. 18
- Figure 3: Exit Point Reference Prices calculation model ...................... Error! Bookmark not defined. 18
- Figure 4: Reserve Price derivation ...................................................... Error! Bookmark not defined. 21
- Figure 5: Transmission Services Revenue Recovery Mechanism .......... Error! Bookmark not defined. 22

1 Report structure and how to use the report

Workgroups have been well attended with wide industry participation. Workgroup has met frequently to develop and discuss these proposals. Managing the number of Alternative Modifications (and amendments to these), combined with the timescales for delivery of the Workgroup Report to the Modification Panel, in line with the Urgent timetable agreed for Modification 0678 has constrained some aspects of debate.

It has therefore been necessary to produce this Workgroup Report in a different way to what is normally presented.

The Workgroup Report is divided into two parts. Part I is the overarching Workgroup Report containing all the key material relating to Modification 0678 and the Alternative Modifications (0678A, 0678B, 0678C, ...). The content for this section comprises the following:

- How to use the report, including navigation;
- Comparison Tables – an ‘at a glance’ comparison of the key elements of Modification 0678 and the Alternative Modifications and how they relate to Ofgem’s views on 0621;
- Key Issues – provides Workgroup analysis and views of the key regime changes and differences in the proposed approaches;
- Relevant Objectives – contains the Workgroup assessment on how the Modifications better facilitate the objectives;
- Workgroup Conclusions and Recommendations; and
- Definitions.
**Joint Office** of Gas Transporters

**Part I: Workgroup Report**

(0621/A/B/C/D/E/F/H/J/K/L)

**Part II: Workgroup Reports**

0621 WGR 0621A WGR 0621B WGR 0621C WGR 0621D WGR 0621E WGR 0621F WGR 0621H WGR 0621J WGR 0621K WGR 0621L WGR

NOTE NEED 0678 version of this diagram above.

Part II provides an individual Workgroup Report for each Modification containing all the information specific to that Modification. The content of each Part II report comprises the following:

- **Modification (including Solution)**
- **Proposer’s Analysis** – Where provided by each proposer or National Grid to illustrate the impact of the Modification. Workgroup will review the additional information in these Part II reports wherever possible, noting time constraints inherent in the timetable.
- **Relevant Objectives** – As provided by each proposer in the final version of their Modification.
- **Legal Text** – This will be published as a separate document. Workgroup is keen to review the final legal text for all of the Modifications wherever possible.

## 12 Introduction

National Grid submitted Modification 0678 to the Authority on 17 January 2019 for consideration of Urgency; Ofgem published its decision granting Urgency and agreeing with the proposed timetable on 25 January 2019. The aim of the Modification was to design an amendment to the gas charging regime to better meet the relevant charging objectives and customer/stakeholder provided objectives and deliver compliance with the forthcoming EU Tariff Code (Regulation 2017/460).

Modification 0678 and all of its alternative Modifications 0678A, 0678B, 0678C, 0678D, 0678E, xxx and 06xxx aim to replace the current charging methodology, which is based on Long Run Marginal Cost (LRMC).

Modification 0678 and xxx alternative Modifications 0678B, xxx and xxx all propose Capacity Weighted Distance (CWD) as the replacement methodology. Modifications 0678A and xxx proposes Postage Stamp (PS) instead.

Whilst the underlying methodology of CWD or PS is proposed across the Modifications, these proposals also include additional charges/aspects that make up the overall charging framework for GB Transportation Charges. These include those charges for managing revenue recovery. These changes may be significant. (For further information regarding System Changes see [Section 7](#)).
### Definitions

Table 1 gives a definition of terms used in these Modifications.

<table>
<thead>
<tr>
<th>Term (Abbreviation)</th>
<th>Description</th>
</tr>
</thead>
</table>
| **Capacity Weighted Distance (CWD) Model** | The CWD approach fundamentally requires three main inputs:  
- A revenue value is required, which will be the target revenue required to be recovered from Transmission Services;  
- A distance matrix for the average connecting distances on the NTS; and  
- A capacity value for each Entry and Exit point that will be the Forecasted Contracted Capacity (FCC) (which is mentioned later in this section).  
The CWD model produces the Transmission Services Reference Prices and with additional adjustments produces the Transmission Services Reserve Prices. |
| **Effective Date** | The later of:  
- the last day of the month in which Ofgem issues its letter directing implementation of this Proposal; and  
- 31 May 2019 |
<p>| <strong>Existing Contracts (ECs) (for the purposes of this Modification)</strong> | Arrangements relating to Long Term Entry capacity allocated before 06 April 2017 (Entry into Force of EU Tariff Code) |
| <strong>Forecasted Contracted Capacity (FCC)</strong> | The capacity input to the RPM that will be used in the Transmission Services capacity charges calculation that will be determined via a CWD methodology. An FCC value is required for every Entry and Exit point. |
| <strong>Long Run Marginal Costs (LRMC) Model</strong> | The current underlying RPM used in the calculation of the Entry and Exit Capacity Prices. Whilst there are different approaches in Entry and Exit as to how secondary adjustments are applied, the underlying LRMC principles are there in both. The LRMC approach is an investment focused methodology where the intention is to have strong locational signals to facilitate decision making. More information is available in TPD Section Y of the UNC. |
| <strong>Multipliers</strong> | The factor applied to the respective proportion (runtime) of the Base Reference Price in order to calculate the Reference Price for non- yearly standard capacity product |
| <strong>Network Distances (for the purposes of modelling in the RPM)</strong> | A matrix of distances used in the RPM that are the pipeline distances on the NTS. |</p>
<table>
<thead>
<tr>
<th><strong>Non-Transmission Services</strong></th>
<th>The regulated services other than transmission services and other than services regulated by Regulation (EU) No 312/2014 that are provided by the transmission system operator;</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Non-Transmission Services Revenue</strong></td>
<td>The part of the allowed or target revenue which is recovered by non-transmission tariffs</td>
</tr>
<tr>
<td><strong>Reference Price</strong></td>
<td>Price for a capacity product for firm capacity with a duration of one year, which is applicable at entry and exit points and which is used to set capacity based transmission tariffs. This will be produced in p/kWh/a (pence per kWh per annum).</td>
</tr>
<tr>
<td><strong>Reference Price Methodology (RPM)</strong></td>
<td>The methodology applied to the part of the transmission service revenue to be recovered from capacity based transmission tariffs with the aim of deriving Reference Prices. Applied to all entry and exit points in a system. The RPM therefore is the framework to spread certain costs / revenues (relevant to the methodology in place) to the Entry and Exit points and thereby on to network users.</td>
</tr>
</tbody>
</table>
| **Reserve Price** | Reserve Price for Yearly standard capacity = the Reference Price  
Reserve Price for Non-yearly standard capacity is calculated by applying any Multipliers (if applicable).  
This will be produced in p/kWh/d (pence per kWh per day). |
| **Target Revenue** | This is the revenue required to be recovered from a particular set of charges. |
| **Transmission Services** | The regulated services that are provided by the transmission system operator within the entry-exit system for the purpose of transmission. |
| **Transmission Services Revenue** | The part of the allowed or target revenue which is recovered by transmission tariffs. |
| **Transportation Statement** | The Transportation Statement containing the Gas Transmission Transportation Charges |
Comparison table: Differences between Modification 0621 and Modifications 0678/A/B/C/D/E.

The Comparison Table is published here: [https://www.gasgovernance.co.uk/0678](https://www.gasgovernance.co.uk/0678)

The following comparison table has been developed to show the differences between Modification Proposal 0621 (which was rejected for implementation by Ofgem in late 2018) and these Modification Proposals (0678/A/B/C/D/E). A rationale is provided for those elements where a different approach has been taken by any current Modification and extracts have been included from Ofgem's decision letter for 0621 which evidence the compliance concern. Blue cells show variation in treatment of that element from UNC Modification Proposal 0678. Workgroup thanked National Grid for its initial work to provide this useful table.

The comparison table has been used to aid in the formulation of the key issues section and the production of the legal text, especially where alternatives differ from the original National Grid UNC0678 proposal.

Note: The table is presented in two halves for legibility.
### Ofgem Decision

*Ofgem concluded that individual features of the transition period were non-compliant with TAR hence the interim arrangements have been removed.*

*“TAR NC makes no provision... for a transition period as proposed... however, we note that any methodology in effect from 31 May 2019 must in itself be compliant with... TAR NC.”*

*Ofgem concluded that use of obligated values was not consistent with TARs requirement for use of a forecast.*

*Ofgem concluded that use of obligated values was not consistent with TAR NC... the revenue reconciliation principle set out in TAR NC, [is] that under- or over recovery... should be minimised to the extent possible.*

*Ofgem concluded that use of a commodity (flow) based revenue recovery mechanism in the interim period was not compliant with TAR NC... “part” of the revenue may be recovered via a commodity-based charge*.

*Use of obligated capacity... would lead to... more than 50% of... revenue being recovered by this charge. ... use of a commodity-based charge to recover most of the... revenue is inconsistent with the intention of Article 4(3) TAR NC, which provides “as an exception” that a “part” of the revenue may be recovered via a commodity-based charge.*

### Reference Price Methodology

<table>
<thead>
<tr>
<th>Component</th>
<th>Reference Price Methodology (interim)</th>
<th>Reference Price Methodology (enduring)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>Capacity Weighted Distance</td>
<td>Capacity Weighted Distance with adjustment to minimise Revenue Recovery</td>
</tr>
<tr>
<td>Target Revenue</td>
<td>Net of existing and interim contracts</td>
<td>Net of existing Contracts</td>
</tr>
</tbody>
</table>

### Treatment of Zero Reference Prices

- Uses Weighted Average Distance to determine price using nearest non-zero Reference Priced Entry or Exit Point’s WAD.

### Forecasted Contracted Capacity (FCC)

- Obligated capacity for first 2 years
- Enduring arrangements

### Target Revenue

- Net of existing and interim contracts

### Transmission Services Charges

| Multiplier (Annual Capacity Product) | 1.0 |
| Multiplier (Annual Capacity Product) | 1.0 |
| Multiplier (Capacity Product) | 1.0 |

### Revenue Recovery Charges

- Pre-rated according to forecast flows at FN / net 4% versus forecast target flows
- Inflation (2%)
- Non-FP Exclusions

## Table

<table>
<thead>
<tr>
<th>Component</th>
<th>Reference Price Methodology (interim)</th>
<th>Reference Price Methodology (enduring)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>Capacity Weighted Distance</td>
<td>Capacity Weighted Distance with adjustment to minimise Revenue Recovery</td>
</tr>
<tr>
<td>Target Revenue</td>
<td>Net of existing and interim contracts</td>
<td>Net of existing Contracts</td>
</tr>
</tbody>
</table>

### Reference Price Methodology

<table>
<thead>
<tr>
<th>Component</th>
<th>Reference Price Methodology (interim)</th>
<th>Reference Price Methodology (enduring)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>Capacity Weighted Distance</td>
<td>Capacity Weighted Distance with adjustment to minimise Revenue Recovery</td>
</tr>
<tr>
<td>Target Revenue</td>
<td>Net of existing and interim contracts</td>
<td>Net of existing Contracts</td>
</tr>
</tbody>
</table>

### Treatment of Zero Reference Prices

- Uses Weighted Average Distance to determine price using nearest non-zero Reference Priced Entry or Exit Point’s WAD.

### Forecasted Contracted Capacity (FCC)

- Obligated capacity for first 2 years
- Enduring arrangements

### Target Revenue

- Net of existing and interim contracts

### Transmission Services Charges

| Multiplier (Annual Capacity Product) | 1.0 |
| Multiplier (Annual Capacity Product) | 1.0 |
| Multiplier (Capacity Product) | 1.0 |
| Multiplier (Capacity Product) | 1.0 |

### Revenue Recovery Charges

- Pre-rated according to forecast flows at FN / net 4% versus forecast target flows
- Inflation (2%)
- Non-FP Exclusions

## Table

<table>
<thead>
<tr>
<th>Component</th>
<th>Reference Price Methodology (interim)</th>
<th>Reference Price Methodology (enduring)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>Capacity Weighted Distance</td>
<td>Capacity Weighted Distance with adjustment to minimise Revenue Recovery</td>
</tr>
<tr>
<td>Target Revenue</td>
<td>Net of existing and interim contracts</td>
<td>Net of existing Contracts</td>
</tr>
</tbody>
</table>

### Treatment of Zero Reference Prices

- Uses Weighted Average Distance to determine price using nearest non-zero Reference Priced Entry or Exit Point’s WAD.

### Forecasted Contracted Capacity (FCC)

- Obligated capacity for first 2 years
- Enduring arrangements

### Target Revenue

- Net of existing and interim contracts

### Transmission Services Charges

| Multiplier (Annual Capacity Product) | 1.0 |
| Multiplier (Annual Capacity Product) | 1.0 |
| Multiplier (Capacity Product) | 1.0 |
| Multiplier (Capacity Product) | 1.0 |

### Revenue Recovery Charges

- Pre-rated according to forecast flows at FN / net 4% versus forecast target flows
- Inflation (2%)
- Non-FP Exclusions

## Table

<table>
<thead>
<tr>
<th>Component</th>
<th>Reference Price Methodology (interim)</th>
<th>Reference Price Methodology (enduring)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>Capacity Weighted Distance</td>
<td>Capacity Weighted Distance with adjustment to minimise Revenue Recovery</td>
</tr>
<tr>
<td>Target Revenue</td>
<td>Net of existing and interim contracts</td>
<td>Net of existing Contracts</td>
</tr>
<tr>
<td>Component</td>
<td>Target revenue apportionment between IPs and non-IPs</td>
<td>IP application</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>------------------------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Revenue Recovery Charges (Jockeying)</td>
<td>Capacity charge (applied to fully adjusted capacity)</td>
<td>Capacity charge (applied to fully adjusted capacity)</td>
</tr>
<tr>
<td>National Grid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>National Grid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ofgem</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Ofgem concluded that lower capacity was a problem with TANS, hence the exclusion will only extend to Existing Contracts.

**Application**
- 3 years
- Capacity charge (applied to fully adjusted capacity)

**NTS Optional Charge**
- Capacity charge (applied to fully adjusted capacity)

**Application**
- Existing principles

**Capacity Charge**
- Capacity charge (applied to fully adjusted capacity)

**Application**
- Existing principles

**Application**
- Application

**Application**
- Allocation (flow) based charge to recover residual Non-transmission services revenue except non-own-use at storage

**Limitations**
- 60km distance cap

**Application at Bacton ASEPs**
- N/A

**'K' Application at Bacton ASEPs**
- N/A

**DN Pensions Deficit**
- Existing principles

**SSMP Administration**
- Existing principles

**IP Allocation**
- Existing principles

**Entry and Exit Charges**
- Allocation (flow) based charge to recover residual Non-transmission services revenue except non-own-use at storage

**Publication of variables**
- No proposed obligations

**Variation in treatment of element from UNC Modification Proposal 0621**

"Article 4(2) states that "Transmission tariffs may be set in a manner as to take into account the conditions for firm capacity products"... The NTS... is levied on flows, without reference to the underlying capacity booking. TANS NC requires any exempt flow-based charge to be calculated on the basis of 'forecasted' or 'historical' or both... We do not consider 'M' is a suitable proxy for "forecasted" or "historical" capacity allocations and flows."

---

**Rationale in the context of 0621 Ofgem Decision**

"Ofgem concluded that the Optional Charge was not complaint with the criteria for classification as a Transmission Services Charge."
The table below sets out the key issues and differences as highlighted by the comparison table (4.1 to 4.8). Additional issues have also been identified through Workgroup discussions and these are added to the table (4.9 onwards). The Workgroup have provided an assessment of each of these issues in order to provide rationale for the approach taken. Where relevant the report also captures Workgroup participants’ views on the issues and any impacts on the Relevant Objectives.

<table>
<thead>
<tr>
<th>Issue Reference</th>
<th>Charging Regime Element</th>
<th>Issue Description</th>
<th>Commentary/done</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1</td>
<td>Approach</td>
<td>• General</td>
<td>done</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Ofgem input</td>
<td></td>
</tr>
<tr>
<td>4.2</td>
<td>Integration of RPM, FCC Revenue Recovery and Existing Contracts</td>
<td>• Use of Capacity Weighted Distance (CWD) and Postage Stamp over the current LRMC methodology • Revenue Recovery • Revenue Recovery and Existing Contracts</td>
<td>Done?</td>
</tr>
<tr>
<td>4.3</td>
<td>Forecasted Contracted Capacity</td>
<td>• Assessment of methodologies • Treatment of existing capacity • Methodology location • Methodology governance</td>
<td></td>
</tr>
<tr>
<td>4.4</td>
<td>Multipliers</td>
<td>• Multiplier of 1.0 (year 1) and approach to setting it in future years (stay as 1.0 or subject to consultation)</td>
<td></td>
</tr>
<tr>
<td>4.5</td>
<td>Interruptible Discount</td>
<td>• 10% (year 1) and approach to setting it in future years (stay as 10% or subject to consultation) and Exit interruptible at 100%.</td>
<td></td>
</tr>
<tr>
<td>4.6</td>
<td>Specific Capacity Discounts</td>
<td>• Storage Discount - 50% or 80%</td>
<td></td>
</tr>
<tr>
<td>4.7</td>
<td>NTS Optional Charge</td>
<td>• Assessment of methodology where applicable</td>
<td></td>
</tr>
<tr>
<td>4.8</td>
<td>Legislative Compliance</td>
<td>• Applicability of Articles • Concerns raised on specific areas on compliance • Cost Allocation Assessment</td>
<td></td>
</tr>
<tr>
<td>Section</td>
<td>Description</td>
<td>Details</td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
<td>---------</td>
<td></td>
</tr>
</tbody>
</table>
| 4.9 | Topics raised in Ofgem rejection letter on 0621 | - Interim contracts (done)  
- Transition (done)  
- NTS Optional Charge (done)  
- Multipliers and zero prices?  
  - Cost reflectivity  
  - Location signals  
  - Regulatory Impact Assessment |
| 4.10 | Relevant Objectives | - Standard Relevant Objectives  
- Charging Relevant Objectives |
| 4.11 | Periodic process to determine Parameters and information publication | - No periodic consultation process outside of UNC change process proposed  
- All values under Article 26 of EU Commission regulation 2017/460 subject to UNC change process if or when considered necessary |
| 4.12 | General Non-Transmission Services Charges | General Non-Transmission Services Charges are net of any:  
- St Fergus Compression charge  
- DN Pensions Deficit charges  
- NTS Meter Maintenance charges  
- Shared Supply meter point administration charges  
- Interconnection Point Allocation charges  
- General Non-Transmission Services Charges - Flow based for non-IPs (except non-own-use at storage)  
  - Flow based for non-IPs (except non-own-use at storage) |
| 4.13 | K Principles and adjusting revenues in subsequent years | - Transmission Services K to be split between Entry and Exit  
  - Entry K to feed into Entry charges  
  - Exit K to feed into Exit charges  
  - Non-Transmission K to be aggregate value – no split between Entry and Exit |


<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
</table>
| 4.14 Impact Analysis | - Geographic distribution effects (see also section 4.17 DN Impacts)  
- User type effects  
- 'Outlier' charges?  
- Security of Supply and NBP impacts  
Other TBC | How to populate this section? |
| 4.15 DN Impacts | - Analysis, observations and concerns on potential charge changes. | Is this different to geographical distribution effects? If so need a DN User to help and supply material |
| 4.16 Implementation timings | - Feasibility  
- Highlighting how the decision date may impact the charging arrangements for capacity, specifically for QSEC and AMSEC 2019. | |
| 4.17 Independent Assurances on the development of any new Charging Models | - Commentary on illustrative models is available and recognition of the need for assurances prior to using any charging model in setting actual charges. | Commentary to be supplied by NG and reviewed by WG |
| 4.18 Comparisons between the Modifications | - Summary of comparisons between the Modifications on key areas and potential outcomes of the proposals.  
- Assumptions made.  
- Reference material for models and data.  
- Summary of outcomes. | Is this needed? |
| 4.20 Central Systems Impacts | - Timings  
- Costs  
- Updates | Need material from Xoserve |
| 4.21 | | |
|  | | |
4.1 Approach 29 January 2019

Alternatives will be treated in accordance with the Modification rules 6.4.

Bearing in mind the timetable specified in the Ofgem decision letter for 0678, Alternatives will be sent to UNC Modification Panel for consideration as to whether they are a true Alternative to 0678.

Ofgem noted that potential Alternatives should be well formed, properly considered and brought forward in a timely manner; supporting evidence should be included. Ofgem urges Proposers to act responsibly in this regard in order to ensure GB compliance.

Timing of both analysis and Legal Text will have a critical impact on the ability of Workgroup to complete the Workgroup Report. Workgroup noted that the decision on 0621 highlighted that the Workgroup Report should contain sufficient analysis.

Workgroup noted that analysis for shorthaul relies on confidential data held by National Grid. National Grid invited potential proposers of Alternatives to discuss this with National Grid.

Reference table of current prices will be provided by National Grid. (Action?)

Workgroup participants noted that if proposers of Alternatives produce indicative charges generated for their Modification, it removes the objectivity which National Grid would potentially provide.

Workgroup participants noted final charges for all Modifications over the next 3-4 years would be helpful to be produced to put in the Workgroup Report.

Workgroup intended to review FCC methodology draft proposal on Thursday 31 January 2019 alongside a sensitivity model which can be used to replicate the prices. This was not available for discussion at the Workgroup meeting on 31 January 2019. The sensitivity model for 0678 (CWD) will be available w/c 4 February 2019.

Workgroup participants noted that impacts on customers will be covered in the Workgroup report and will not necessarily be provided by National Grid but is also expected to be covered by any Ofgem Impact Assessment.

Workgroup participants asked for clarification on the effect of transfer of title - traded historical capacity contracts (for capacity bought before April 2017) and whether they would attract revenue recovery charges (who is the liability holder)? (Action)

National Grid clarified on 05 February 2019 that if contracts were traded before entry into force of TAR NC (06 April 2017) then revenue recovery would continue; if contracts are traded after this date then the revenue recovery charge will apply.

Approach update 05 February 2019

Some Workgroup Participants noted that Modifications should be properly formulated and should not include blank spaces. This means that some Modification Proposals will need to wait until National Grid releases data. National Grid have indicated it will deliver both the model and FCC methodology by 08 February 2019. Some Workgroup participants indicated they would be waiting until after that date in order to formulate and submit an Alternative.

The Proposer of 0678A indicated that his Modification will be the same as 0678 in all respects except the use of the Postage Stamp.
Ofgem will be preparing for an impact assessment (IA) and will then consider at the point at which the FMR is received whether in fact an IA is required.

Ofgem will endeavour to give feedback to the Workgroup as it goes along, regarding the DMR and FMR.

Ofgem noted on the subject of implementation that in the 0678 decision letter, industry is required to ensure GB compliance with TAR NC and any other relevant legislation as soon as possible. (Implementation by 31 May 2019 or as soon as possible is the target). Some Workgroup Participants recognise this is likely to be after 31 May 2019, since Ofgem will likely need to come to a minded-to decision possibly involving an IA, given TAR NC requirements for 2 months consultation followed by 2 months for ACER feedback, followed by Ofgem’s final decision.

Workgroup noted that a notice period for advising of prices is required. Ofgem advised it will decide on this at a later point.

Some Workgroup participants asked if the date from which charges take effect could be 01 October 2020, noting that contracts tend to start at the start of a Gas Year.

Workgroup participants discussed Implementation date vs Effective date and some Workgroup participants noted the busiest time is March for the following Gas Year beginning 01 October. Some Workgroup participants stated, for the market to have confidence it seems sensible to have an effective date of 01 October 2020. Ofgem noted this observation.

Thus, on 29 January 2019, Workgroup 0678 requested a formal View (reference Modification Rules 12.8) from the Authority. The topics where a View was requested are:

- The feasibility of achieving 01 October 2019 implementation date
- The impact of not achieving this date, and
- The requirement to be compliant as soon as possible.

Some Workgroup Participants felt there is no clarity as to when charges from the new methodology will take effect. Will charges from the new methodology take effect within the Gas Year 2019/2020?

Some Workgroup Participants felt that while mid-year changes are allowed, it was important to have charges based on one given charging methodology for the duration of the Gas Year e.g. 01 October 2019 to 30 September 2020. This would avoid significant within-year changes in charges producing stability within the contract year and allows for the normal publication timings, giving 150 days’ notice. Note that this is indicative notice, 2 months is the usual notice for final charges and less is required for some auctions. (DH 31 Jan 2019) National Grid stated that mid-year changes to capacity charges would most likely require a derogation form the licence.

Other Workgroup Participants did not agree, noting that GB will not be compliant if GB does not have TAR NC compliant charges effective 01 October 2019.

A Workgroup participant noted that in the Netherlands, TAR NC has been implemented with charges taking effect from 01 January 2020. For the Netherlands this is the beginning of the Tariff year. According to Article 38 a compliant methodology shall apply from 31 May 2019.

National Grid referred to the words stated in the implementation section of its Modification 0678; this is also in 0678A.
Workgroup participants discussed financial implications of any potential infringement proceedings, which Ofgem indicated would be against GB. Ofgem noted the case of Frankovich v Italy for damage claims\(^2\).

From a systems perspective, Xserve stated that implementation and effective dates are very important; any Alternatives must take this into account.

4.2 Integration of RPM, FCC Revenue Recovery and Existing Contracts 31 January 2019

The Workgroup considered the current arrangements, the principle drivers, tariff year modelling, allowed revenue and netting-off of allowed revenue for existing contracts.

Some Workgroup participants believed there would be some distortion in charges between contract prices and “new” capacity prices as a result of netting-off allowed revenue for existing contracts. It was noted that the TAR NC does not cover how to treat existing contracts within the RPM. Consideration needs to be given to the interaction between under recovery of costs and the revenue recovery approach.

Some additional considerations will be required, to understand the value for existing contracts (netting-off allowed revenue). Some Workgroup participants believed there was a need for a mechanism to allow more equitable revenue recovery via the revenue recovery charges.

Some Workgroup participants requested clarification from National Grid on their 0678 Modification Proposal as to the treatment of netting-off existing contracts volume and revenue, against Ofgem’s views in their Modification 0621 Decision Letter (appendix page 15 – price differentials).

A Workgroup participant noted that other EU TSOs do not net off within the FCC value. It was also noted that these TSOs do not offer fixed prices as is the case within GB. For estimated under recovery approaches can include or exclude existing contract revenue recovery. It was believed a commodity recovery charge would be consistent with TAR NC and was not explicitly ruled out in the Modification 0621 Decision.

One Workgroup participant believed that the Workgroup needs to consider the impact of including existing contracts in the weighting of cost step in the RPM calculation;

The Workgroup acknowledged there would be a price difference as a result of Article 35. Some Workgroup participants wanted to understand the materiality of this and where the residual charges would reside.

Some Workgroup participants clarified that under the current regime, existing capacity contracts pay a commodity based Revenue Recovery Charge only if the capacity is utilised. Under Modification 0678, it is proposed that in the new regime a capacity based Revenue Recovery Charge will apply on existing contracts, with the exception of existing storage contracts, regardless if the existing capacity is utilised or not. There is concern that the proposal may not be compliant to TAR Article 35

Some Workgroup participants believed there was a need to review capacity hand-backs.

0678A

It was noted by the Workgroup that the intent of Alternative 0678A is for it be aligned with Modification 0678 apart from the weightings and distance.

Revenue Recovery 31 January 2019

A Workgroup participant noted that the Distribution Networks (DNs) are currently not exposed to a commodity charge but under Modification 0678 they would pick up a capacity recovery charge in the future, along with other Users.

The Workgroup considered the K Factor and the process of adjustments.

A Workgroup participant expressed concern about within year recovery and the volatility in tariffs. It was noted that National Grid have an incentive to forecast accurately and limit the use of K. It was challenged why the industry should be subject to the volatility of inaccurate information created by National Grid. It was recognised that National Grid should minimise the exposure as any forecasting error is pushed onto Shippers, and Users will see a change in prices for any error. The Workgroup considered the elements that
Joint Office of Gas Transporters

factor into the forecast and the flexible sources, for example the long-term forecast will be dependent on production and the difficulty to derive charges.

National Grid drew the attention of the workgroup to its Licence obligation to set charges to not under or over recovery in any given formula year and it has the ability to set revenue recovery charges to help facilitate this.

Revenue Recovery and Existing Contracts 31 January 2019

One Workgroup participant believed that the Modification 0678’s Solution does not cover a revenue recovery charge for the storage solution.

The Workgroup considered abandoned storage capacity, and that Modification 0662 held the liability of capacity, and dependent on the qualification, charges were not attracted.

National Grid was not proposing to change the capacity process. The Workgroup considered if a Capacity Handback concept would be a valid Alternative or not.

Ofgem stressed that any Modification needs to be compliant with TAR NC.

National Grid recognised that abandoned capacity needs to be dealt with, however this was out of scope for this Modification and could be addressed after the implementation of changes. There was recognition that it was unfair treatment of capacity for this purpose, however this could be remedied at a later point.

The Workgroup considered the Storage Long Term entry capacity if traded before April 2017 and deduced it will not attract the top-up charge.

4.3 Forecasted Contracted Capacity

31 January 2019

The Workgroup noted that the initial Forecasted Contracted Capacity (FCC) will be provided with the sensitivity tool, with a single set of FCC values for each year along with the methodology to derive it.

Some Workgroup participants wished to have more clarity on the options available for how to incorporate PARCA Reservations and new sites, further noting that PARCA should be considered as enduring contracts within the proposed FCC methodology.

Some concern was expressed about the possible variations for the Principles. The Principles should be also be a fair and equitable distribution of costs for users. The Workgroup believes there were a number of options that could be considered, for example, what is booked, what is paid for and what is flowed against.

The Workgroup wished for further clarity on the Principles and how these will be applied, within the methodology.

The Workgroup wanted to understand the timing for the provision of the methodology with some expressing the view that it should be set out in the UNC. Some participants expressed concern about the timing of the visibility of the FCC values to allow an appropriate impact assessment. National Grid expects the methodology to accompany the UNC consultation (which according to the timetable should begin on 08 March 2019), along with clarity on the approach.

Some Workgroup participants believed that further clarity was required on forecasting flows along with actual data to date to demonstrate accuracy of previous forecasts. The Workgroup recognised that there is opportunity for error. The Workgroup wanted to understand the size of the potential error/tolerance in historical forecasts of flows.
Joint Office of Gas Transporters

A Workgroup participant suggested Shipper inputs into flows should be required. Inputs and contributions were invited from any workgroup participant.

National Grid was concerned about the flexibility and change governance with tying wholly into the UNC, as it was anticipated yearly changes may be required to enable periodic reviews. Some Workgroup participants expressed concern with the level of control and visibility for change. It was noted by some that any forecast will have a degree of error and having a methodology statement may be preferable initially over an approach in the UNC.

Noting the existing governance for the methodology statements, Ofgem have had the view they wished to limit their involvement in changing these, with suitable justification for any required Ofgem involvement.

A participant expressed concern about not having the FCC methodology (as at 31 January 2019) and that this could hinder the development and assessment of potential Alternatives.

11 February 2018

A sensitivity tool (spreadsheet) for analysis of Modification 0678 from National Grid was published on Saturday 09 February 2019.

As at 11 February 2018, National Grid had not yet written the FCC Methodology therefore Workgroup discussed the information given which was an initial approach to the FCC methodology.

National Grid noted that the FCC is not defined in TAR NC. The values to be used are a hybrid of historical (preceding year) and forecasted values.

Workgroup Participants on 11 February 2019 had input into the following suggested assumptions/points for consideration for use in the FCC calculations:

- PARCAs reserved capacity and substitution consequences need to be added in.
- When assessing ‘maximum of…’, consideration must be given to the Obligated Capacity as adjusted for substitution.
- Clarification required as to how forecasted values relate to those values given in the various FES scenarios.
- Clarification of treatment of new entry and exit points (possible use of proxy) and points due for closure.
- Consider five-year historical data (for each day: maximum and minimum values to be discarded then average of the three remaining).
- DN 1 in 20 forecast capacity booking for each offtake point (this data is not currently publicly available; July refinement timing of this data may not be suitable).

Workgroup Participants noted Ofgem’s 0621 letter reflecting that the values being proposed must meet the criteria: actual utilisation and capacity bookings.

Workgroup agreed that the current plan is an improvement on using obligated capacity.

FCC data for 5 years from October 2018 (for each of entry and exit) can be found by unhiding the relevant sheets.

The forecast is a consolidated view of the FES forecasted scenarios (http://fes.nationalgrid.com/fes-document/).

PARCA reservations (stage 2, full booked capacity) for forward looking years will (eventually) be included.
Joint Office of Gas Transporters

An average value for xxx is used as the forecast.

Three datasets: Peak, P90 and P50 have not been used. Average has been chosen.

Capacity sales – preceding single completed Gas Year.

Interruptible capacity will be taken into account for revenue recovery.

4.4 Multipliers (Article 13 of EU TAR NC)

The Workgroup recognised that the proposal to include provision for capacity product specific multipliers (applied to the Reference Price to determine Reserve Prices) was proposed in order to comply with Article 13 of Regulation 2017/460. The EU Tariff Code permits multipliers within ranges for different capacity products. These ranges have the potential to increase or decrease prices relative to the annual reference price.

National Grid stated that it has proposed to apply multipliers of one (1.0) for all capacity products on the basis that it had not identified a need to incentivise procurement of one capacity product over another (i.e. to incentivise long term over short term or vice versa) and therefore this aspect of the pricing methodology would not influence Users' capacity procurement strategy if the payable price is ultimately the same. The Workgroup supported the proposed multipliers and noted that they were within the range permitted by Regulation 2017/460 Article 13(1). Modifications 0678 and 0678A have the same multipliers of one (1.0).

Whilst multipliers (as a definition with associated ranges) are only mandated at Interconnection Points under the EU Tariff Code, the proposals apply this approach to all Entry and Exit points. National Grid clarified that this was done with the aim of having one methodology for all points.

4.5 Interruptible Discount

The Workgroup explored the impacts on pricing stability of historical zero priced interruptible capacity products. It also considered the requirements contained in Regulation 2017/460 (Article 16) in relation to the extent of the future discount which can be applied to determine Reserve Prices for Interruptible Capacity. The discount is a product of the predicted probability of interruption allows the economic value, of the interruptible capacity product, to be taken into consideration. National Grid presented analysis covering the previous ten years to the Workgroup, to support the basis for the proposed discounts.

National Grid recognised the views of some Workgroup participants, that attractiveness of the Interruptible capacity product is dependent upon it having a material discount to the equivalent Firm product. On this basis, National Grid put forward a banding approach such that the interruptible discount derived from the calculation prescribed by Regulation 2017/460 Article 16 was rounded up to the nearest 10%. This recognises the "economic value" aspect of Article 16. The outcome for Modification 0678 is that the discount will be 10%.

Workgroup participants noted that any income from sales of Interruptible capacity would contribute to Non-Transmission Services Charges. Workgroup expressed the view that, logically, that Interruptible capacity should be a Transmission Service charge and revenue should feed into the Transmission Owner price control but that this is constrained by the current price control arrangements. Some viewed this as a compliance issue.

Action Ofgem to clarify whether it would consider a change in licence to make interruptible revenue Transmission Services revenue (rather than Non-Transmission Services Revenue)
Joint Office of Gas Transporters

Some Workgroup participants suggested that National Grid should look carefully at its proposal in regard to Transmission and Non-Transmission Services revenues a Workgroup Participant believes that these are not the same as the TO and SO revenue streams mandated in the licence (in reference to the treatment of interruptible revenue streams).

Action National Grid to clarify licence vs UNC links.

4.6 Specific Capacity Discounts

Storage

The Workgroup recognised that the requirement for application of at least a 50% discount to the Reserve Price at Storage Connection Points was proposed in order to comply with Article 9 of EU Tariff Code.

LNG

The Workgroup recognised the proposal to include the potential provision for application of discount to the Reserve Price at LNG Connection Points. Article 9 of Regulation 2017/460 says this may be applied. Modifications 0678 and 0678A propose a 0% discount.

Workgroup participants noted that this level can be changed in the future through a UNC Modification.

National Grid clarified that it does not recognise any of the GB assets as falling under the definition of "Infrastructure ending Isolation" (Article 9).

4.7 'Shorthaul' approach 05 February 2019

Some Workgroup Participants noted that Modifications should be properly formulated and should not include blank spaces. This means that some Modification Proposals will need to wait until National Grid releases data. National Grid have indicated it will deliver both the model and FCC methodology by 08 February 2019. Some Workgroup participants indicated they would be waiting until after that date to submit an Alternative proposal.

Modification 0678 contains no provision for avoidance of inefficient bypass of the NTS, aimed at being a compliant Modification, with any proposal for this aspect in Modification 0670R.

Some Workgroup Participants noted that this could be construed as tacit acceptance that a shorthaul concept is required, which in turn highlights this Modification 0678 could be seen as being incomplete. This leads to a fragmented approach. Compliance with EU Regulation is essential, and the Workgroup must also consider Proposals as measured against all Relevant Objectives.

National Grid clarified it believed the Modification 0678 was complete. RWE clarified that 0678A was also complete.

Other Workgroup participants did not agree that a shorthaul concept is an essential part of compliance with TAR NC.

Action National Grid

4.7 Compliance

Key points are drawn out in Appendix 2 – comparison table and compliance table. Proposers of potential Alternatives are asked to ensure that this is updated with each potential new Alternative.

Workgroup agreed that compliance can only be assessed to the best of the ability of the Workgroup.
Joint Office of Gas Transporters

The Joint Office suggested a compliance table based on going through article by article of TAR NC.

A comparison table format suggested by National Grid places the onus on Proposers to note which parts of TAR NC are applicable for their proposal. National Grid envisages this table will become part their Modification in the Relevant Objectives.

Workgroup Participants discussed the best route to assess compliance: either article by article or articles as applicable to each Modification.

e.g. Article 7a requires some information coming from National Grid.

Interim Contracts 29 January 2019

Interim Contracts as a concept proposed under Modification 0621 are not now being used in 0678 and not in 0678A and are therefore not going to be recognised. This means that any long-term entry capacity allocated after entry into force of TAR NC (06 April 2017) will float, in terms of pricing.

Workgroup participants noted Article 35 and explored compliance of top up charges (revenue recovery) on legacy contracts.

Issue:

How is the principle of levying a top-up charge on legacy contracts compatible with Article 35?

National Grid clarified that the mechanism of Revenue Recovery will be subject to change, as with the current framework. Currently it is commodity based; under 0678 and 0678A it will be capacity based.

Action 01-2901 update expected on 11th Feb

National Grid stated that historical storage capacity under 0678 and 0678A would not attract transmission services entry revenue recovery charges.

Q. What is the effect/materiality of this change from commodity to capacity?

Q. Is there an option to sell back unused capacity?

Q. Treatment for Combined ASEPs: the issue remains unclear in terms of discrimination against certain storage facilities.

Some Workgroup participants agreed that principles being developed under Modification 0662 should be incorporated into 0678 and 0678a. Workgroup sought clarification from National Grid on how this works for storage capacity at combined ASEPs. NG to supply some relevant wording here:

If the ASEP is not defined as a storage in the licence...

18 February 2019

The Workgroup observed that in terms of compliance the following should be noted for all Modifications:

There was a difference in opinion in relation to the application of transmission services revenue recovery charges to existing contracts. The Workgroup were not able to provide a legal opinion on the merits of legal compliance in relation to the TAR NC Article 35 issue in relation to protecting existing contracts.

Not having a transition period the methodology required needs to avoid large stepped changes in charges, which may be inconsistent with Article 17.1C.

The proposed reference price methodologies show no consideration of relevant flow scenarios for Article 8.1.
The proposed CWD methodology is a variant of the CWD Proposal in TAR NC.

The Workgroup considered the risk of interruption and the discount to be applied if incremental capacity is more than 20% and that the Modification may not be compliant with Article 12.3.

In relation to Article 16 the Workgroup considered that the probability of interruption under such a scenario would be very low. One Workgroup participant expressed concern for IP connection points and all domestic points and the probability of interruption. The Workgroup recognised that when purchasing interruptible capacity there is a risk.

By exception the Workgroup observed in terms of the Proposer’s provided compliance assessment against TAR NC that: **WG to consider comments for inclusion in the Workgroup Report**

---

**Cost Allocation Assessment (TAR NC Art. 5)**

Output required in Article 26 consultation.

Needs to use data supplied by the NRA or TSO

Workgroup discussed at length who should provide the data to produce the Cost Allocation Assessment. Some Workgroup Participants put forward the view that the NRA or TSO provides independence.

Other Workgroup Participants noted the wording “the final consultation referred to in Article 26” implying the CAA is to be assessed when there is only one Proposal left standing. Other Workgroup Participants noted that Article 7 requires the assessment to be done, potentially for each Proposal.

The Proposer of 0678A stated that RWE would not be able to supply the Cost Allocation Assessment. Other Workgroup Participants agreed that it would not be appropriate for Proposers to perform this assessment.

Under 0621 National Grid carried out the Cost Allocation Assessment.
4.8 Topics raised in Ofgem’s 0621 Rejection Decision Letter:

The Workgroup considered the 3 issues relevant to the Modifications: Interim Contracts (none), Transition Period (none), NTS Optional Charges, and an assessment of relevant elements in the appendix: Postage Stamp, Optional Charge

1) Interim Contracts

Modifications 0678, 0678A & 0678B do not propose interim contracts. The Workgroup agreed this consideration mitigated the concerns raised by Ofgem in their decision letter.

2) Transition Period

Modifications 0678, 0678A & 0678B do not propose transition periods. The Workgroup agreed this consideration mitigated the concerns raised by Ofgem in their decision letter.

3) NTS Optional Charge

Modifications 0678 & 0678A does not propose an optional charge. National Grid’s view is there is not a need for an optional charge for Modification 0678. Request 0670R is progressing independently through NTSCMF and is envisaged to provide a product to avoid the inefficient bypass of the NTS.

Modification 0678B has proposed an optional charge, solely applying to firm capacity entitlements, that is capacity based and does not impose an artificial distance cap. Ofgem’s decision letter in the view of the Proposer was primarily concerned with the use of commodity charges within the some of the 0621 solutions and also stated the distance cap should be fully justified.

Cost Reflectivity in relation to Capacity Weighted Distance (CWD) approach is enhanced by the inclusion of the optional charge solution.

Transition 29 January 2019

There is no phased delivery proposed under Modification 0678 0678A nor 0678B. The FCC approach is thus brought forward to day 1; a methodology outlined in a Methodology Statement will be developed.

Assessment of Appendix

Workgroup noted Ofgem provided non-binding views within its Modification 0621 Decision Letter, some of which are addressed by the Proposer’s in their Modifications.

Location of Red Text to be considered and potentially moved

Assessment of relevant elements in the Appendix relevant to the Modifications:

Cost Reflectivity

Workgroup noted Ofgem’s view in the 0621 Modification decision letter relating to Cost Reflectivity (Pg14).

Workgroup noted that National Grid have a Licence obligation to provide cost reflective prices.

Locational Signal

The Workgroup had mixed views on whether locational signals should be a feature of the RPM which reflected a lack of consensus if Ofgem’s 0621 decision letter.
Some members noted that Locational Signals may provide incentives to connect or increase connections or flows at certain points. The ability for some entry parties to respond to location signals is limited and therefore the non-inclusion of location signals is not necessarily out of line with the Code objectives.

The Workgroup considered Location Signals and in relation to Postage Stamp (need to consider and expand) [without a form of location signals it could lead to high and unnecessary costs on the NTS].

Postage Stamp:
Provide a simple description of Postage Stamp and Locational Signals...

The Workgroup noted Ofgem’s views on both Postage Stamp and CWD (page 13 quote) better approaches....

Locational Signals had a degree of importance however it was unclear...

One Workgroup participant noted that

The Workgroup considered Location Signals and in relation to CWD (need to consider and expand)

The Workgroup considered the unintended consequences (need to consider and expand)

The Workgroup considered Revenue Collection and costs to consumers (need to consider and expand)

Regulatory Impact Assessment

Some Workgroup Participants noted that it was felt the RIA was a statutory requirement for an issue as important as this and as such if this process step was not carried out it would expose the Authority to Judicial Review. Workgroup sought urgent clarification on whether the RIA would be carried out.

(Small Business, Enterprise and Employment Act 2015.)


0678A Compliance Assessment 14 February 2019 (This maybe removed – see comment 32 in summary.

The Workgroup considered the compliance assessment for Modification 0678A.

Article 4 - Transmission and non-transmission services and tariffs. It was viewed that the cost drivers were met, the cost drivers in relation to distance is not relevant. The Workgroup considered if this assessment for dealing the Reference Price Methodology was in the right place. Following consideration of the views provided for Article 4. It was believed that the Postage Stamp method would be compliant with TAR NC for Article 4.

Article 6 - Reference price methodology application. The Workgroup considered the adjustment element of the RPM. There was a challenge that x.....

Article 7 - Choice of a reference price methodology. The Workgroup considered historical sunk costs and recovery a residual in a non-distortive manner.

Article 8 - Capacity weighted distance reference price methodology. The Workgroup considered the NRA/TSO requirements and to provide the relevant obligations for the inputs. It was recognised this would be a requirement when considering the Legal Text. For the relevant elements to be calculated the relevant tariffs would need to be within the methodology. The Proposer believed that the counterfactual needed to be within the UNC. Some Workgroup participants believed that....
Article 9 - Adjustments of tariffs at entry points from and exit points to storage facilities and at entry points from LNG facilities and infrastructure ending isolation. The Workgroup.

Article 12 - General provisions. The Workgroup considered Article 12.3.a and 12.3.b the recalculation of interruptible products, the probability of interruption and the recalculation will be required if more than 20%. The Proposer believed that the Legal Text would need to capture this probability and that the modification needs to address this within the solution. National Grid were asked to consider this also for Modification 0678.

Article 18 – Under and Over Recovery. The Workgroup considered the K value and that further clarity was required within the Modifications.

Article 31 - Form of publication. The Workgroup considered whether the platform needed to be referred to in the UNC. National Grid believed that this element would not be required in the UNC in order for it to apply. National Grid explained that not every element of the TAR NC needs to be incorporated in the UNC in order for TAR NC to apply, similar to the EU legislation. The Workgroup considered the setting of tariffs and methodology.

4.10 Relevant Objectives

Table 24: Impact of the Modification on the Relevant Objectives

<table>
<thead>
<tr>
<th>Impact of the Modification on the Relevant Objectives:</th>
<th>Identified impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relevant Objective</td>
<td></td>
</tr>
<tr>
<td>a) Efficient and economic operation of the pipe-line system.</td>
<td>None</td>
</tr>
<tr>
<td>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.</td>
<td>None</td>
</tr>
<tr>
<td>c) Efficient discharge of the licensee’s obligations.</td>
<td>Positive</td>
</tr>
<tr>
<td>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.</td>
<td>Positive</td>
</tr>
<tr>
<td>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.</td>
<td>None</td>
</tr>
<tr>
<td>f) Promotion of efficiency in the implementation and administration of the Code.</td>
<td>None</td>
</tr>
</tbody>
</table>
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.

Demonstration of how the Relevant Objectives are furthered:

c) Efficient discharge of the licensee’s obligations.

The proposed changes to TPD B and EID B (where applicable) support the implementation of the new charging methodology and arrangements. Standard Special Condition A5(5) of the NTS Licence sets outs the relevant methodology objectives and National Grid believes that these objectives are better facilitated for the reasons detailed below in Table 5 (‘Impact of the Modification on the Relevant Charging Methodology Objectives’).

d) Securing of effective competition between relevant shippers;

The proposed changes to TPD B and EID B (where applicable) support the implementation of the new charging methodology and arrangements. To the extent that the application of a new Reference Price Methodology is expected to provide a more stable and predictable price setting regime, Shippers will have a greater level of confidence in their forecasts of prospective use of network costs and therefore set their own service costs more accurately (potentially with a lower risk margin) thereby enhancing effective competition.

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.

The proposed changes to TPD B and EID B (where applicable) support the implementation of the new charging methodology and arrangements including those elements required to comply with the EU Tariff Code. The decision to reject UNC0621 and its Alternatives highlighted three areas of compliance that needed to be addressed (Interim Contracts, Transition Period and Shorthaul). This Modification proposes changes that will address these. Appendix 2 gives a comparison between Modification 0621 and this new Modification 0678, highlighting steps taken to address compliance in line with Ofgem’s 0621 Rejection Letter. In order to provide a compliant proposal to address these areas, National Grid is proposing:

- Not to propose the creation of Interim Contracts;
- Not to use a transition period for the introduction of the methodology changes; and
- The removal of the charge to manage avoidance of inefficient bypass (as highlighted in this proposal, National Grid has raised a separate review group (UNC0670R) to address this aspect of charging in the longer term).
Table 35: Impact of the Modification on the Relevant Charging Methodology Objectives

<table>
<thead>
<tr>
<th>Impact of the Modification on the Relevant Charging Methodology Objectives:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relevant Objective</td>
</tr>
<tr>
<td>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;</td>
</tr>
<tr>
<td>aa) That, in so far as prices in respect of transportation arrangements are established by auction, either:</td>
</tr>
<tr>
<td>(i) no reserve price is applied, or</td>
</tr>
<tr>
<td>(ii) that reserve price is set at a level -</td>
</tr>
<tr>
<td>(I) best calculated to promote efficiency and avoid undue preference in the supply of transportation services; and</td>
</tr>
<tr>
<td>(II) best calculated to promote competition between gas suppliers and between gas shippers;</td>
</tr>
<tr>
<td>b) That, so far as is consistent with sub-paragraph (a), the charging methodology properly takes account of developments in the transportation business;</td>
</tr>
<tr>
<td>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</td>
</tr>
<tr>
<td>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).</td>
</tr>
<tr>
<td>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.</td>
</tr>
</tbody>
</table>

This Modification proposal does not conflict with:

(i) Paragraphs 8, 9, 10 and 11 of Standard Condition 4B of the Transporter’s Licence; or
(ii) Paragraphs 2, 2A and 3 of Standard Special Condition A4 of the Transporter’s Licence;

as the charges will be changed at the required times and to the required notice periods.

Demonstration of how the Relevant Objectives are furthered:

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; and
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

National Grid believes that the proposed utilisation of a new Reference Price Methodology which re-distributes National Grid’s costs on a geographical basis, weighted by capacity will enhance cost reflectivity and competition between gas suppliers and between gas shippers when compared to the current application of a Long Run Marginal Cost Methodology (LRMC). The proposed model is better suited to the current and expected future usage of the NTS and the current model is more suitable for an expanding network requiring an investment-based RPM.

A sub-group of the NTS Charging Methodology Forum identified that as the inputs into the LRMC model are varied the resulting price changes are not intuitive and the changes can cause unpredictable results, and the changes to prices can be volatile. As a result, similar offtake points (in terms of offtake volumes and distances from points of entry) may incur materially different charges. Use of a methodology which delivers more comparable costs would better facilitate these objectives.

b) That, so far as is consistent with sub-paragraph (a), the charging methodology properly takes account of developments in the transportation business;

The update to the Transmission Services methodology proposal takes into account developments which have taken place in the transportation business, in particular that the network is no longer expanding.

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.

The EU Tariff Code compliance is taken into account in this Modification proposal. Accordingly, implementation of this Proposal would ensure that the GB arrangements are compliant with the EU Tariff Code. The decision to reject UNC0621 and its Alternatives highlighted three areas of compliance that needed to be addressed (Interim Contracts, Transition Period and ‘Shorthaul’). This Modification proposes changes that will address these. In order to provide a compliant proposal to address these areas, National Grid is proposing:

- Not to propose the creation of Interim Contracts;
- Not to use a transition period for the introduction of the methodology changes; and
- The removal of the charge to manage avoidance of inefficient bypass (as highlighted in this proposal, National Grid has raised a separate review group (UNC0670R) to address this aspect of charging in the longer term.

Please see also Appendix 2 for a comparison table between Modification Proposal 0621 (which was rejected by Ofgem) and this Modification Proposal (0678).
4.15 Impact Analysis

Consistent presentation of analysis (formatting) is important for comparison purposes (Action 04-2901 Richard Fairholme). National Grid to facilitate the numbers into some consistent output for comparison purposes – update expected with sensitivity tool on Monday 11 February, (tool to come Friday 8th February)

National Grid clarified that areas of the proposal which are not covered by 0678 this must be discussed with National Grid. National Grid will provide this ONLY where the numbers required are not publicly available.

11 February 2019: Workgroup Participants expressed concern that National Grid does not have the required resources to satisfy Ofgem’s requirements for adequate workgroup development and analysis required to produce a well thought-through and robust Workgroup Report.

Workgroup requested that this is noted at the extraordinary UNC Modification Panel on 12 February 2019.

UNC Panel noted the concern and have asked for an update at the next Modification Panel meeting on 21 February 2019.

**Does this Modification impact a Significant Code Review (SCR) or other significant industry change projects, if so, how?**

N/A

**Consumer Impacts**

There will be impact on different consumer groups but the allowed revenue collected by National Grid NTS will not change.

---

**Consumer Impact Assessment**

(Workgroup assessment of proposer initial view or subsequent information)

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Extent of Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which Consumer groups are affected?</td>
<td>Please consider each group and delete if not applicable.</td>
</tr>
<tr>
<td></td>
<td>• Domestic Consumers</td>
</tr>
<tr>
<td></td>
<td>• Small non-domestic Consumers</td>
</tr>
<tr>
<td></td>
<td>• Large non-domestic Consumers</td>
</tr>
<tr>
<td></td>
<td>• Very Large Consumers</td>
</tr>
<tr>
<td>What costs or benefits will pass through to them?</td>
<td>Please explain what costs will ultimately flow through to each Consumer group. If no costs pass through to Consumers, please explain why. Use the General Market Assumptions approved by Panel to express as 'cost per consumer'. Insert text here</td>
</tr>
<tr>
<td>When will these costs/benefits impact upon consumers?</td>
<td>Unless this is 'immediately on implementation', please explain any deferred impact. Insert text here</td>
</tr>
</tbody>
</table>
Are there any other Consumer Impacts?

Prompts:
Are there any impacts on switching?
Is the provision of information affected?
Are Product Classes affected?

Insert text here

**General Market Assumptions as at December 2016** (to underpin the Costs analysis)

<table>
<thead>
<tr>
<th>Category</th>
<th>Assumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Domestic consumers</td>
<td>21 million</td>
</tr>
<tr>
<td>Number of non-domestic consumers &lt;73,200 kWh/annum</td>
<td>500,000</td>
</tr>
<tr>
<td>Number of consumers between 73,200 and 732,000 kWh/annum</td>
<td>250,000</td>
</tr>
<tr>
<td>Number of very large consumers &gt;732,000 kWh/annum</td>
<td>26,000</td>
</tr>
</tbody>
</table>

**Cross Code Impacts**

None

**4.16 DN analysis**

This will be provided with the model forthcoming by close of play on 08 February 2019.

**4.17 Implementation timings**

Implementation of any of these Modifications is proposed to be in line with an Ofgem decision.

Modifications 0678 and xx and yy propose that it should be by 31 May 2019 or as soon as possible after this date.

Modification 0678 and its resulting methodology change will take effect for prices from 01 October 2019 or any other date in line with the Ofgem decision, in order to achieve compliance with the EU Tariff Code (or the relevant Statutory Instrument) as soon as possible.

Modifications 0678x and yy propose that their changes will take effect for process from 01 October 2020 or any other date in line with the Ofgem decision.

Many Workgroup participants sought to highlight that it is not feasible to implement this suite of Modifications by October 2019 and therefore questioned why Urgency was sought by National Grid. Issues include opportunity to develop Alternatives, impact assessments by Ofgem, requirement for Article 26 consultation and notice given to industry for potentially significant/unknown changes to prices.

National Grid noted the Modification 0678 aims to deliver compliant implementation “by October 2019 or as soon as possible after implementation”. The aim is to get the FMR to Ofgem as soon as possible and by 23 April 2019 (in line with the Urgency timetable) in order to enable Ofgem to begin work on this as soon as possible, aiming at new prices being effective for October 2019. Modifications coming out of 0670R and Modification 0662 are required.
4.18 Independent Assurances on the development of any new Charging Models

4.12 General Non-Transmission Charges

Text

4.13 K Principles and adjusting revenues in subsequent years

4.20 Central Systems Impacts

There will be impacts on Gemini and UK Link invoicing systems. These impacts are being assessed. The CDSP, Xoserve, has been consulted on all stages of development of this project and National Grid will continue to ensure this is the case.

(Cost estimate and issues update from CDSP)

4. Legal Text

Text Commentary

To be provided later

Text

To be provided later
Workgroup’s Recommendation to Panel Industry

The Workgroup asks Panel to agree that:

• This proposal requires further assessment and should be returned to Workgroup.

The Code Administrator may set alternative subheadings appropriate to the specific Code.

Insert subheading here

Insert text here
### Appendix 1: Impacts of Proposal on NTS Capacity Auctions

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full name</th>
<th>Dir.</th>
<th>Class</th>
<th>Product</th>
<th>Transition</th>
<th>Calculation and Publication*</th>
<th>Published Price (at time of auction)</th>
<th>Payable Price</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Y3: indicative, prevailing price plus premium</td>
<td></td>
</tr>
</tbody>
</table>
| iPQ    | Interconnection Point Annual Quarterly | F    | I     | Entry   | May 2019   | May 2018 | Dec 2018, Jan 2019 | May 2019 | $1 - actual,
|         |           |      |       |         |             |                              | Y3: indicative, prevailing price plus premium |
|         |           |      |       |         |             |                              | Y3: indicative, prevailing price plus premium |
|         |           |      |       |         |             |                              | Y3: indicative, prevailing price plus premium |
| iPD   | Interconnection Point Within Day | F    | I     | Entry   | Sep 2019   | Aug 2019, Sep 2019 | May 2019 | $1 - actual,
|         |           |      |       |         |             |                              | Y3: indicative, prevailing price plus premium |
| MSEC   | Monthly System Entry Capacity | F    | I     | Exit    | Mar to May 2019 | Mar to May 2020 | Feb 2019 | $1 - actual,
|         |           |      |       |         |             |                              | Y3: indicative, prevailing price plus premium |
|         |           |      |       |         |             |                              | Y3: indicative, prevailing price plus premium |
| MSEC   | Monthly System Entry Capacity | F    | I     | Exit    | Feb 2019   | Feb 2018 | Feb 2019 | May 2019 | $1 - actual,
|         |           |      |       |         |             |                              | Y3: indicative, prevailing price plus premium |
| WDD    | Within Day Daily System Exit Capacity | F    | I     | Exit    | Sep 2019   | Sep 2018, Oct 2018 | Feb 2019 | $1 - actual,
|         |           |      |       |         |             |                              | Y3: indicative, prevailing price plus premium |
| WDD    | Within Day Daily System Exit Capacity | F    | I     | Exit    | Sep 2019   | Sep 2018, Oct 2018 | Feb 2019 | $1 - actual,
|         |           |      |       |         |             |                              | Y3: indicative, prevailing price plus premium |

* F - Firm, I - Interruptible
* These dates are starting points for the respective calculation and publication processes
7 Appendix 2: Differences between Modification 0621 and Modifications 0678

The following table highlights the differences between Modification Proposal 0621 (which was rejected for implementation by Ofgem) and this Modification Proposal (0678). A rationale is provided for those elements where a different approach has been taken in this Modification Proposal 0678 and extracts have been included from Ofgem’s decision letter for 0621 which evidence the compliance concern.

Note: The table is presented in two halves for legibility.