Modification proposal:	**Uniform Network Code (UNC) 728/A/B/C/D (Urgent) - Introduction of a Conditional Discount for Avoiding Inefficient Bypass of the NTS**		
Decision:	The Authority[1] directs modification UNC728B be made[2]		
Target audience:	UNC Panel, Parties to the UNC and other interested parties		
Date of publication:	27 April 2021	Implementation date:	1 October 2021

Background

On 28 May 2020 we approved modification proposal UNC678A – 'Amendments to Gas Transmission Charging Regime (Postage Stamp)'[3] and decided that it should be implemented on 1 October 2020. UNC678A introduced far-reaching changes to the Great Britain (**"GB"**) gas transmission charging arrangements and ensured compliance with Commission Regulation (EU) 2017/460 of 16 March 2017 establishing a network code on harmonised transmission tariff structures for gas (**"TAR NC"**).[4]

UNC678A removed the Optional Commodity Charge, which was available under the previous regime. The Optional Commodity Charge (or "short-haul" discount) provided a discount to eligible users for transportation of gas with the aim of avoiding inefficient bypass of the National Transmission System (**"NTS"**).

In our final UNC678A decision, we said that: "the construction or usage of alternative network infrastructure to the NTS which leads to higher costs overall would not represent an efficient outcome. We welcome the industry's efforts, through the NTS Charging Methodology Forum (**"NTS CMF"**), to develop options for new short-haul arrangements that could be part of a TAR NC compliant transmission charging regime. Preventing inefficient bypass of the NTS, in a

[1] References to the "Authority", "Ofgem", "we" and "our" are used interchangeably in this document. The Authority refers to GEMA, the Gas and Electricity Markets Authority. The Office of Gas and Electricity Markets (Ofgem) supports GEMA in its day to day work. This decision is made by or on behalf of GEMA.

[2] This document is notice of the reasons for this decision as required by section 38A of the Gas Act 1986.

[3] Amendments to Gas Transmission Charging Regime: Decision and Final Impact Assessment (UNC678/A/B/C/D/E/F/G/H/I/J) (28 May 2020) https://www.ofgem.gov.uk/publications-and-updates/amendments-gas-transmission-charging-regime-decision-and-final-impact-assessment-unc678abcdefghij

[4] Now incorporated in UK law by the European Union (Withdrawal) Act 2018 and the European Union (Withdrawal Agreement) Act 2020, as amended by Schedule 5 of the Gas (Security of Supply and Network Codes) (Amendment) (EU Exit) Regulations SI 2019/531.

targeted, proportionate, and compliant manner is desirable. Ofgem is committed to working with the industry and the Joint Office of Gas Transporters to facilitate the development and, depending on the assessment and approval process, timely consideration and where appropriate implementation of modification(s) that seeks to address inefficient bypass of the NTS".[5]

The modification proposal

On 9 June 2020, National Grid Gas raised UNC728 - 'Introduction of a Conditional Discount for Avoiding Inefficient Bypass of the NTS' and requested that it should be treated as urgent and proceed under a timetable approved by the Authority. UNC728 proposes to introduce a discount for dis-incentivising inefficient bypass of the NTS.[6] The discount is proposed to be available to directly connected NTS users located at or near NTS entry points. Four more alternatives proposals (UNC728A/B/C/D) were submitted to the Joint Office on the same day. While the modifications share a number of common attributes, they each have some characteristics which require careful consideration as explained in our minded to decision ("**MTD**").[7] On 12 June 2020, we decided to grant urgent status for UNC728/A/B/C/D.[8]

UNC Panel[9] recommendation

At the UNC Panel meeting on 3 July 2020, a majority of the UNC Panel considered that UNC728/A/B/C/D would not better facilitate the UNC objectives and the Panel therefore did not recommend approval of any of the modifications.

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[5] Page 3 of Amendments to Gas Transmission Charging Regime: Decision and Final Impact Assessment (UNC678/A/B/C/D/E/F/G/H/I/J) (28 May 2020).

[6] The UNC728 modifications state 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"*. Also, UNC670R Workgroup noted that: *"Inefficient bypass is defined in this context from the existing network perspective. The construction and use of independent pipelines bypassing the NTS risks increased costs as they are spread over a smaller base"*, https://www.gasgovernance.co.uk/sites/default/files/ggf/book/2019-08/Request%20Workgroup%20Report%200670R%20v1.0.pdf

[7] Section 2 (Background) of our MTD (22 January 2021), https://www.ofgem.gov.uk/publications-and-updates/unc728abcd-introduction-conditional-discount-avoiding-inefficient-bypass-nts-minded-decision-and-impact-assessment

[8] UNC728/A/B/C/D Introduction of a Conditional Discount for Avoiding Inefficient Bypass of the NTS: Urgency Application (12 June 2020), https://www.ofgem.gov.uk/publications-and-updates/unc728abcd-introduction-conditional-discount-avoiding-inefficient-bypass-nts-urgency-application

[9] The UNC Panel is established and constituted from time to time pursuant to and in accordance with the UNC Modification Rules.

Impact assessment and consultation

On 16 July 2020, we published a letter stating that we would carry out an impact assessment (**"IA"**) to explore the impacts arising from the above modifications.[10] On 22 January 2021, we published our MTD and IA on UNC728/A/B/C/D.[11] As part of our IA, we commissioned CEPA to undertake modelling of the options. We published CEPA's analytical report (dated 16 December 2020) as a subsidiary document to our MTD and IA. We make references to CEPA's analytical report throughout this letter.

Our MTD was to approve UNC728B. Our assessment concluded that UNC728B better facilitates the applicable UNC objectives relative to the status quo and approving this modification proposal would be consistent with our principal objective and statutory duties. UNC728B envisages a maximum discount of 90% and a minimum of 10% applied to transmission services charges for distances of up to 28 kilometres. We proposed that UNC728B should be implemented on 1 October 2021.

Our MTD concluded that UNC728D might also better facilitate the applicable UNC objectives compared to the status quo and we considered that the very short distance cap proposed under this modification (ie 5km) has advantages. However, we concluded that the proposed discount under this modification (ie 90% discount on Transmission Services charges and 94% on Non-Transmission Services charges) is too high for the purposes of dis-incentivising bypass. However, we said that when making our final decision, we would take into account any new information submitted to us.

Finally, our MTD concluded that UNC728/A/C would not better facilitate the applicable UNC objectives and approving any of these modification proposals would not be consistent with our principal objective and statutory duties.

Our consultation

We consulted on our MTD from 22 January 2021 to 19 February 2021 and we received 22 consultation responses (of which three were confidential or part-confidential). Today, we are publishing all non-confidential responses submitted to us on our MTD web page.[12]

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[10] Uniform Network Code 728/A/B/C/D (Urgent) - Introduction of a Conditional Discount for Avoiding Inefficient Bypass of the NTS (16 July 2020), https://www.ofgem.gov.uk/publications-and-updates/uniform-network-code-728abcd-urgent-introduction-conditional-discount-avoiding-inefficient-bypass-nts

[11] UNC728/A/B/C/D ('Introduction of a Conditional Discount for Avoiding Inefficient Bypass of the NTS'): minded to decision and impact assessment (22 January 2021), https://www.ofgem.gov.uk/publications-and-updates/unc728abcd-introduction-conditional-discount-avoiding-inefficient-bypass-nts-minded-decision-and-impact-assessment

[12] UNC728/A/B/C/D ('Introduction of a Conditional Discount for Avoiding Inefficient Bypass of the NTS'): minded to decision and impact assessment (22 January 2021), https://www.ofgem.gov.uk/publications-and-updates/unc728abcd-introduction-conditional-discount-avoiding-inefficient-bypass-nts-minded-decision-and-impact-assessment

We asked interested parties to provide answers to eight questions,[13] and considered all views and evidence presented to us.

Our decision

We have considered the issues raised by the UNC728/A/B/C/D modification proposals and the Final Modification Report (**"FMR"**) dated 8 July 2020. We have considered the responses to the industry consultation on the modification proposals which are attached to the FMR[14] and responses to the IA and consultation we carried out. We have concluded that:

- implementation of UNC728B will better facilitate the achievement of the applicable UNC objectives;[15] and
- directing that modification UNC728B be made is consistent with our principal objective and statutory duties.[16]
- implementation should take place on 1 October 2021 (which coincides with the start of the gas year).

Our IA is presented in the Appendix.

Reasons for our decision

As part of our MTD consultation, we invited stakeholders' views on our assessment of the applicable UNC objectives and our statutory duties. We did not receive any evidence that would cause us to change our MTD position. Instead of repeating our entire MTD assessment, in this letter we will summarise our previous findings and address comments and evidence submitted to us as part of the consultation.

Response to our consultation

Question 1: Do you agree with our assessment of the modification options against the applicable UNC objectives? If you disagree, please provide a fully reasoned explanation.

Of those who commented on our assessment against the applicable UNC objectives, a majority agreed with us. Two disagreed, in particular with our conclusion that the proposed discount under UNC728D is "too high for the purposes of dis-incentivising bypass", and our assessment

[13] Our consultation questions were set out in Appendix 1 of our MTD (22 January 2021).

[14] UNC modification proposals, modification reports and representations can be viewed on the Joint Office of Gas Transporters website, http://www.gasgovernance.co.uk/

[15] As set out in Standard Special Condition A11(1) of the Gas Transporters Licence, available at https://epr.ofgem.gov.uk//Content/Documents/Standard%20Special%20Condition%20-%20PART%20A%20Consolidated%20-%20Current%20Version.pdf

[16] The Authority's statutory duties are wider than matters which the Panel must take into consideration and are detailed mainly in the Gas Act 1986 as amended.

of the impact of UNC72B on competition, and others provided comments. We consider these points below, under 'Assessment of the applicable UNC objectives'.

Question 2: What are your views on our conclusion that the proposed modification proposals constitute a 'benchmarking' adjustment to the application of the reference price methodology (Article 6(4) TAR NC)? If you disagree, please provide a fully reasoned explanation.

Of those who commented on this conclusion, a majority agreed with us. One respondent noted that in Germany the application of a 'benchmarking' adjustment differs in some respects to the UNC728 proposals. We address this in our assessment of UNC Relevant Objective (g) and Charging Methodology Relevant Objective ("**CMRO**") (e).

Question 3: Do you agree with our assessment of the quantitative analysis? If you disagree, please provide a fully reasoned explanation.

Of those who commented on our assessment of the quantitative analysis, a majority agreed with our assessment. One respondent said that our MTD did not sufficiently reference supporting quantitative analysis showing that the discount under UNC728D is too high. Another said that the quantitative assessment "may not have considered current ownership of much of the infrastructure in the [Teesside area]". We address these views in our assessment of UNC Objective (a) and CMRO (b).

Question 4: Do you agree with our assessment that UNC728C is discriminatory because of the risk that the discount may be used for a route other than a qualifying nominated route? If you disagree, please provide a fully reasoned explanation.

A majority of those who commented on this assessment agreed with us. Two stakeholders told us that they support the principle behind UNC728C as being more cost reflective but did not disagree with our assessment that it may be inappropriately used for a route other than a qualifying nominated route.

Question 5: Do you agree with our assessment of the modification options against our statutory duties? If you disagree, please provide a fully reasoned explanation.

A majority of those who commented on our assessment of the options against our statutory duties agreed with us. Two respondents disagreed and said that our MTD would constitute a failure to represent the interests of parties who are likely to bypass if UNC728B is implemented. One respondent also said that our MTD would amount to a failure to represent the interests of users whose costs of using the NTS would be impacted if parties bypass in the event of UNC728B being implemented. Another respondent said they support our assessment of the second order impacts of the proposed modifications in assessing our statutory duties. In our MTD, we considered both the risk of bypass under the options presented and the second order impacts of potential NTS bypass on consumers. We address these views under 'Assessment against our principal objective and statutory duties'.

Question 6: Do you agree with our minded to decision to approve UNC728B?

A majority of respondents agreed with our minded to decision. Five disagreed and would prefer that we approve UNC728D. One respondent disagreed and stated a preference for the status quo. Others provided comments.

Stakeholders who supported our minded to decision included those saying that bypass distances over 5km are a genuine risk and that an 18km cap would be discriminatory. Some noted that UNC728B would provide a discount to offtakes in the Humber region, where proposed decarbonisation projects may increase the economic incentive to bypass. Some stakeholders also said that they had operations which utilise routes under 5km and that if UNC728B is accepted they will not bypass the NTS.

Some of the stakeholders who disagreed with our minded to decision and preferred UNC728D also said that there is no credible risk of bypass for distances greater than 5km. Some additionally said that the discount proposed under UNC728B would be too low to dis-incentivise bypass at routes below 5km in the Teesside region where there are a number of users in close proximity of each other and existing infrastructure that may reduce the costs of potential NTS bypasses. Respondents noted that the Teesside region also has proposed decarbonisation projects.

Two stakeholders warned that any significant discounts to eligible users would be subsidised by other users and may potentially lead to net consumer losses. One disagreed with all proposals, saying that all proposals could eventually result in an unfair cross-subsidy.

Question 7: What are your views on our minded-to decision that implementation of UNC728B should take place from 1 October 2021?

A majority of those who commented support our minded to implementation date. Only one respondent disagreed, saying that "unnecessarily delaying implementation for the remainder of the gas year is damaging to UK industry and inefficient for all GB consumers". One stakeholder did not comment on the specific date but said that any UNC728 proposal should be implemented from the earliest opportunity.

Question 8: Are there any other matters, whether or not addressed in our analysis or minded to findings, which you think we should take into account in reaching our final determination?

Four stakeholders noted that decarbonisation projects in the Teesside and Humber area are planned. Some told us that these projects may increase the economic life of gas assets in the areas. Offtakes in the Teesside region are close to an entry point and would be able to transport gas over routes eligible for any of the proposed discounts, including UNC728D. Offtakes in the Humber region are further from an NTS entry point and would only be able to transport gas over routes eligible for discounts under UNC728B and some routes eligible for discounts under UNC728/A/C.

Some respondents proposed specific elements which they said would improve cost reflectivity. Three said that a discount on General Non-Transmission Services ("**GNTS**") charges would be more cost reflective. Two other stakeholders suggested that fixed yearly costs over a period of time would represent a more cost reflective short-haul product. Both stated this would better reflect the opportunity costs of building a private pipeline. Another respondent said that the applicable GNTS charges are a proxy for the costs associated with maintaining a bypass pipeline and that a discount to GNTS charges would be inappropriate and not reflective of costs associated with bypass of the NTS. This stakeholder also said that discount to GNTS charges on the level provided by UNC728D is disproportionate and would provide an unwarranted competitive advantage because it would result in a GNTS charge which is not reflective of the likely costs of maintenance and upkeep of a bypass pipeline.

Assessment of the applicable UNC objectives

The FMR includes an assessment of the UNC Relevant Code Objectives and the UNC Charging Methodology Relevant Objectives (**"CMRO"**). Given the similarities between the UNC Relevant Code Objectives and the CMROs, we assess them in tandem. Our assessments of the impact of these modification proposals in facilitating the UNC Relevant Code Objectives and CMROs are set out in the tables below.

UNC Relevant Objectives	728	728A	728B	728C	728D
(a)	Negative	Negative	Positive	Negative	Positive
(b)	Not relevant	Not relevant	Not relevant	Not relevant	Not relevant
(c)	Negative	Negative	Positive	Negative	Positive
(d)	Negative	Negative	Neutral	Negative	Negative
(e)	Not relevant	Not relevant	Not relevant	Not relevant	Not relevant
(f)	Neutral	Neutral	Neutral	Neutral	Neutral
(g)	Negative	Negative	Neutral	Negative	Neutral

CMRO Relevant Objectives	728	728A	728B	728C	728D
(a)	Negative	Negative	Positive	Negative	Positive
(aa)	Negative	Negative	Neutral	Negative	Negative
(b)	Negative	Negative	Positive	Negative	Positive
(c)	Negative	Negative	Neutral	Negative	Negative
(d)	Not relevant	Not relevant	Not relevant	Not relevant	Not relevant
(e)	Negative	Negative	Neutral	Negative	Neutral

Objective (a) Efficient and economic operation of the pipe-line system and CMRO Objective (b) that, so far as is consistent with sub-paragraph (a), the charging methodology properly takes account of developments in the transportation business

We conclude that UNC728D and UNC728B better facilitate UNC Relevant Code Objective (a) and UNC CMRO (b) relative to the status quo, while UNC728/A/C have a negative impact on these objectives. We also conclude that UNC728B better facilitates the relevant code objectives compared to UNC728D.

In our UNC678A decision we said that: "to the extent that a [discount] is well targeted at network users who present a credible risk of bypass and provides a proportionate discount, we believe that the benefits for network efficiency could outweigh the disbenefits".[17] The actual likelihood of bypass is likely to be highly site-specific. For that reason, to inform our MTD and IA, we carried out a holistic route-specific assessment of the risk of bypass, based on confidential stakeholder evidence, CEPA's quantitative analysis, and publicly available evidence (including responses to relevant consultations). We considered a number of relevant factors, such as distance, pipeline size, nature of use, and geography. Based on our assessment, we identified eight routes that may present a "higher" or "medium" risk of bypass under the status quo. In addition, we identified three more routes that we consider would pose a 'lower' risk of bypass. We did not receive any evidence as part of our MTD consultation that would change the conclusions of this assessment – the evidence provided confirmed that the routes that stakeholders consider to pose a risk of bypass were among those we identified as presenting a degree of bypass risk.

UNC728/A/C assessments of Objective (a) and CMRO (b)

In our MTD, we said that UNC728/A/C did not justify the proposed 18km distance cap. This is because some relatively lower risk routes would be eligible for a discount under these modifications, while some relatively higher risk routes would not be eligible, despite only being marginally outside the proposed distance cap. We therefore concluded that the 18km distance cap has the weakest justification among the UNC728 modifications. This remains our conclusion.

UNC728D assessment of Objective (a) and CMRO (b)

We said in our MTD that the proposed 5km distance cap under UNC728D targets the majority of routes that are identified as risks under CEPA's analysis and all of the routes that we have classified as 'higher' risks. However, UNC728D's eligibility criteria would not capture a number of lower and medium risk routes that may bypass under the status quo or if UNC728D were to be implemented. We also found that the proposed discount under UNC728D is more generous than necessary for the purposes of dis-incentivising bypass (90% discount on transmission services charges and 94% discount on non-transmission services charges).

Some respondents to our consultation disagreed with our assessment of UNC728D and said it was not supported by the analysis. As stated in our MTD, CEPA modelled 22 eligible routes under UNC728D. These routes would receive significantly higher discounts under UNC728D compared to UNC728B. Our analysis found that 20 of these 22 routes would nevertheless be sufficiently incentivised to remain on the NTS with the lower discounts available under UNC728B. We found that two of the routes located within 5km from an entry point may remain at risk of bypass under UNC728B, though we note that a NTS user would take into

[17] Page 24, UNC678A Decision (28 May 2020), https://www.ofgem.gov.uk/publications-and-updates/amendments-gas-transmission-charging-regime-decision-and-final-impact-assessment-unc678abcdefghij

account many considerations before choosing whether or not they would invest in a bypass pipeline.[18] UNC728D would significantly increase the discount for all 22 routes, whereas under UNC728B, we expect 20 of these would be sufficiently incentivised to stay on the NTS with a lower level of discount relative to UNC728D.

During the consultation, no evidence was submitted to us that would change the conclusions of our route-specific assessment of the risk of bypass, as set out in our MTD. Therefore, our view remains that the level of discount under UNC728D goes beyond what is necessary for dis-incentivising inefficient bypass for the vast majority of routes, leading to an undue cross-subsidy.

UNC728B assessment of Objective (a) and CMRO Objective (b)

In our MTD, we found that UNC728B better facilitates the UNC objectives under assessment relative to the status quo and UNC728D. This remains our conclusion. UNC728B proposes the longest distance cap (28km). In our MTD, we said that the eligible distance under UNC728B is better-justified compared to the 18km modifications (UNC728/A/C), as the latter would allow discounts for some routes that represent a lower risk of bypass while not allowing discounts for other routes with a higher risk of bypass. UNC728B provides higher discounts for the short-distance routes that present a 'higher' risk of bypass and gives lower discounts to longer-distance routes which are proportionate to the lower risk of bypass presented by those routes. During our consultation, a number of stakeholders agreed with us that there are indeed some bypass risks beyond 5km distances which include exit points up to 28km away from an entry point that would be eligible for a discount under UNC728B. One stakeholder said that "a mechanism that varies the available discount with route length is the most efficient approach rather than one that provides a flat discount for all eligible sites".

One respondent told us that *"the 28 km cap might introduce a higher risk of excessive, wasteful discounts than would be associated with the 18 km cap"* and that *"both [UNC728B and UNC728D] might confer too generous a discount on some loads and that therefore either of these proposals might be suboptimal".* UNC728B proposes the higher number of eligible routes compared to the other UNC728 alternatives. However, due to its proposed declining discount, the discounts granted to routes beyond 18km (the cut-off point of UNC728/A/C) are significantly lower than those envisaged for short-distance routes and are proportionate to the risk of bypass presented by those routes.

Objective (c) Efficient discharge of the licensees' obligations and CMRO Objective (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

[18] As noted in our MTD, there are a number of cost areas that are very difficult to establish that a private operator would consider: for example, those relating to use of land, legal costs, or risks associated with supply or network constraints over the gas pipeline. See §3.8. of our MTD (22 January 2021).

We conclude that UNC728D and UNC728B better facilitate UNC Relevant Code Objective (c) and UNC CMRO (a) relative to the status quo. UNC728/A/C would have a negative impact on these objectives. We also conclude that UNC728B better facilitates the relevant code objectives compared to UNC728D.

While the majority of respondents agreed with our MTD position to approve UNC728B, some suggested that UNC728B is not a complete solution as it does not include a discount to non-transmission services charges.[19] In addition, one respondent said that Ofgem should have provided more detail regarding the modifications that contain a discount to non-transmission charges (UNC728A/D). In our MTD we made clear that our assessment of the UNC728 modifications considered whether the *total* (effective) level of the discount is appropriate (ie sufficient to dis-incentivise inefficient bypass without offering an undue cross-subsidy) rather than on which element of the overall tariff (transmission or non-transmission services) the discount is applied to. Our MTD to approve UNC728B was based on the *total* effective levels of discount offered by this modification which we concluded was sufficient to dis-incentivise inefficient bypass for the vast majority of routes without offering an undue cross-subsidy. We think that a modification introducing a further discount on non-transmission services charges would not be warranted based on the evidence submitted to us and would introduce an undue cross-subsidy unless that modification also sought to reduce the discount on transmission services charges so as to ensure that the *total* effective discount introduced by UNC728B remained unchanged.

One stakeholder stated that "the CEPA assessment of the likelihood of bypass of the Teesside cluster may not have considered the current ownership of much of the infrastructure in the area". When we carried out our holistic route-specific assessment of the risk of bypass described above, we took into account factors that could increase the risk of bypass in some cases, such as the ability of 'clusters' of neighbouring exit points to collectively bypass the network. This was informed among other things by CEPA's modelling of three potential groups of exit points that stakeholders suggested to us may consider collective bypass.[20] We also took into account confidential information from stakeholders regarding the ownership of alternative infrastructure in the area.

UNC728/A/C assessment of Objective (c) and CMRO (a)

The 18km proposals (UNC728/A/C) do not provide a strong justification for the proposed distance cap and for this reason these modifications would introduce unjustified discrimination

[19] As described in our MTD, three modifications (UNC728/B/C) propose that the discount only be applied to "transmission services charges", whereas two modifications (UNC728A/D) propose that the discount be applied to both transmission services charges and "non-transmission services charges". The terms "transmission services charges" and "non-transmission services charges" are defined in Article 3 TAR NC. Section 2 of our MTD (22 January 2021).

[20] §4.4, CEPA Analytical Support (22 January 2021), https://www.ofgem.gov.uk/system/files/docs/2021/01/cepa_unc728_analytical_support.pdf

between routes eligible for the discount and routes just outside the distance cap that are not eligible for the discount even though they pose a similar or greater risk of bypass.

UNC728D assessment of Objective (c) and CMRO (a)

UNC728D has the shortest eligible distance (5km) and captures all routes that we consider pose a 'higher' risk of bypass. Nevertheless, our MTD said that the proposed discount under this modification goes beyond the minimum necessary to dis-incentivise bypass. This remains our conclusion for the reasons explained above (under UNC Relevant Code Objective (a) and UNC CMRO (b)).

UNC728B assessment of Objective (c) and CMRO (a)

We found that UNC728B does not lead to discriminatory outcomes, as is the case with the 18km modifications (UNC728/A/C). UNC728B proposes a distance cap significantly longer than the 5km distance (where the 'higher' risks are located) but has the benefit of providing higher discounts for the short-distance routes that present a 'higher' risk of bypass, while it affords lower discounts to longer-distance routes which are proportionate to the risk of bypass presented by those routes. For these reasons, we confirm that UNC728B better facilitates the relevant code objectives under assessment relative to the status quo and UNC728D.

Objective (d) Securing of effective competition and CMRO Objective (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 CMRO Objective (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

We conclude that UNC728B would have a neutral impact on UNC Relevant Code Objective (d) and UNC CMRO (c) and (aa) relative to the status quo, whereas UNC728/A/C/D would have a negative impact on these objectives.

In general, competition is best facilitated by tariff arrangements which are cost-reflective and non-discriminatory. However, in a meshed network largely operating below capacity with expected declining demand, the main consideration is the appropriate and fair recovery of costs that is not likely to lead to inefficient behaviour and distortions.[21]

[21] Page 26, UNC678A Decision (28 May 2020).

UNC728/A/C assessment of Objective (d), and CMROs (c) and (aa)

The 18km modifications (UNC728/A/C) lead to discriminatory outcomes, for the reasons noted previously. Specifically, they allow discounts for some routes that represent a lower risk of bypass while not allowing discounts for other routes with a higher risk of bypass.

UNC728D assessment of Objective (d), and CMROs (c) and (aa)

In our MTD, we said that UNC728D provides the highest total discount for eligible routes under the UNC728 modifications, despite its narrower eligibility criteria. UNC728D and UNC728A lead to the highest exit tariff for users not eligible for the short-haul discount when considering the 'first order' effects.[22,23] As a result of these features, UNC728D would increase tariffs for non-eligible users while affording a very high discount to eligible users.[24] Any discount which is given to some users but not others will necessarily give rise to a cross-subsidy. As stated in our UNC678 IA,[25] the theoretical optimum would be to reduce the number of routes which continue to present a credible bypass risk, while minimising the amount of discount that is provided to achieve this.[26]

We also noted that CEPA's modelling observed one route which falls outside the 5km distance cap that does not pose a risk of bypass under the status quo but does so under UNC728D. We said that while we think this may be an over-estimate of bypass risk, it nevertheless demonstrates the potential distortive impacts of an excessively high discount. We concluded that the discount under UNC728D goes beyond the minimum necessary to dis-incentivise bypass. Following our consultation, we remain of the view that UNC728D goes beyond the minimum necessary to dis-incentivise bypass and has a negative impact on competition.

[22] See Figure 1 of our MTD (22 January 2021).

[23] CEPA modelled 32 eligible routes under UNC728B, 24 routes under UNC728/A and 22 routes under UNC728D.

[24] CEPA has calculated 'first order tariff effects' (which assume that all users of the NTS will remain on the network) as well as 'second order tariff effects' (which are based on certain assumptions of bypass). CEPA Analytical Support (22 January 2021).

[25] Page 40 of UNC678/A/B/C/D/E/F/G/H/I/J Final Impact Assessment (28 May 2020), https://www.ofgem.gov.uk/publications-and-updates/amendments-gas-transmission-charging-regime-decision-and-final-impact-assessment-unc678abcdefghij

[26] We are also conscious that due to the existence of a significant volume of existing contracts which are due to expire in the coming years (Article 35 TAR NC), any under-recovery of the Transmission Services revenue caused by the UNC728 modifications will be levied on a narrower base of entry capacity. CEPA found that UNC728A and UNC728D would lead to the highest entry tariff for non-short haul users. §3.2.1, CEPA Analytical Support (22 January 2021).

UNC728B assessment of Objective (d), and CMROs (c) and (aa)

UNC728B would have a neutral impact on competition. While we recognise that UNC728B would also give rise to a cross-subsidy, this cross-subsidy is broadly proportionate to the risk of bypass posed by the eligible routes.

One consultation response said they did not believe that UNC728B has a favourable impact and stated that "[p]rices should be set at levels that minimise distortions. It is therefore critical that tariff arrangements should seek to minimise the extent of discounts offered to ensure consistency with minimising the average cost of transportation for all those that retain [sic] on the system. However, a concern arises because historical discounts have not passed through to consumers with consequential distortion of competition". When considering the "second-order" effects of the modifications, we found that UNC728B is effective in minimising the cost of transportation for NTS users. This is demonstrated in more detail in the next section, 'Assessment against our principal objective and statutory duties'.

Objective (g) Compliance with the Regulation and any relevant legally binding decisions of the European Commission and/or the Agency for the Cooperation of Energy Regulators and CMRO Objective (e) compliance with the Regulation and any relevant legally binding decisions of the European Commission and/or the Agency for the Cooperation of Energy Regulators

UNC728B/D have a neutral impact on UNC Relevant Code Objective (g) and UNC CMRO (e) but we note our preference for UNC728B as it benchmarks more closely to the costs of an alternative pipeline. UNC728/A/C would have a negative impact on these objectives.

In our MTD decision, we said that the proposed adjustments under UNC728/A/B/C/D constitute a "benchmarking" adjustment under Article 6(4)(a) TAR NC.[27] We asked respondents to our consultation (Question 2) to provide views on this conclusion. A majority of stakeholders who provided comments in relation to this question agreed with our conclusion.

Article 6(4) TAR NC allows adjustments to the application of the reference price methodology with the purpose of meeting "the competitive level of reference prices". In our MTD we said that we are aware of at least one example in the European Union where the benchmarking adjustment has been applied by reference of the cost of a pipeline that could be built rather

[27] Article 6(4)(a) TAR NC provides that: "Adjustments to the application of the reference price methodology to all entry and exit points may only be made in accordance with Article 9 or as a result of one or more of the following: (a) benchmarking by the national regulatory authority, whereby reference prices at a given entry or exit point are adjusted so that the resulting values meet the competitive level of reference prices".

than by reference of the cost of an existing competing pipeline.[28] One respondent said "it is not clear that the German example provides a direct comparator" for the UNC728/A/B/C/D proposed adjustments. We note that Article 6(4) refers specifically to the "competitive level of reference prices". The competitive level of prices at a given point in time within a market may be affected by both current and future costs and pricing behaviour of parties, especially where the risk of future pricing variation is real and imminent. We do not think this provision imposes a requirement that the adjusted values exactly match the competitive level of reference prices, since such calculation is subject to many uncertainties and likely depends on the specific methodology employed to approximate the competitive level of reference prices. However, any methodology must provide a reasonable relationship between the resulting values and the competitive level of references prices.

Gas transmission charging arrangements must also be compliant with the general tariff requirements set out in TAR NC and Regulation (EC) No 715/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the natural gas transmission networks (**"Gas Regulation"**).[29] Among other things, TAR NC and the Gas Regulation set out the legal requirement that tariffs must comply with the principle of non-discrimination while avoiding undue cross-subsidies.

Finally, we note that in the context of the proposed modifications, the assessment of whether UNC728/A/B/C/D give rise to an "undue" cross-subsidy involves very similar considerations to the preceding compliance assessment regarding Article 6(4)(a). Specifically, UNC728D has the narrower eligibility criteria which would indicate that it minimises the cross-subsidisation in that regard but the proposed discount under UNC728D goes beyond the minimum necessary to dis-incentivise bypass. The determination of eligible routes under the 18km modifications (UNC728/A/C) is not objectively justified, which indicates that the resulting cross-subsidy is 'undue'. UNC728B proposes the highest number of eligible routes but its discount reflects a reasonable relationship between the resulting values and the "competitive level of references prices".

UNC728/A/C assessment of Objective (g) and CMRO (e)

The 18km modifications demonstrate a reasonable relationship between the proposed transmission services discount and the competitive level of references prices. However, the proposed distance is unduly discriminatory.

[28] See Agency for the Cooperation of Energy Regulators ("ACER"), Agency report - 2nd analysis of the consultation document for Germany (17/07/2020), https://acer.europa.eu/en/Gas/Framework%20guidelines_and_network%20codes/Pages/Harmonised-transmission-tariff-structures.aspx

[29] Now incorporated in UK law in accordance with the European Union (Withdrawal) Act 2018 as amended by the European Union (Withdrawal Agreement) Act 2020.

Under the 18km modifications (UNC728/A/C), some relatively lower risk routes would be eligible for a discount, while some relatively higher risk routes would not be eligible, despite only being marginally longer than the proposed distance cap. This suggests that the proposed distance cap involves a difference in treatment, without objective and proportionate justification. As a result, these modifications involve undue discrimination.

In our MTD we said that UNC728C may be at odds with the principle of non-discrimination due to its particular features.[30] UNC728C carries the risk that the discount may not be used as intended by its proposer because it is conceivable that a user may book discounted entry and exit capacity under UNC728C and then use either or both of these for a route other than the one identified as being at risk of bypass. If that were to happen, UNC728C would breach the principle of non-discrimination as it would provide discounts to some users but not others for the same service of gas transmission, without objective and proportionate justification.

As part of our MTD consultation, we asked respondents if they agree with our assessment that UNC728C is discriminatory (Question 4). The majority of stakeholders that provided a response to this question agreed with our assessment. One told us that Ofgem's concerns "are overstated" and that "[t]here are strong commercial incentives for users to optimise capacity holdings, even at sites with significant discounts". Though we understand that the rationale of UNC728C is to offer discounts to capacity bookings on eligible routes, the determination of eligible quantities under UNC728C gives rise to the risk that the discount may be used for a route other than a qualifying nominated route, even if this was not the intention of the proposer of UNC728C. Therefore, we confirm our conclusion that UNC728C is discriminatory.

UNC728D assessment of Objective (g) and CMRO (e)

In our MTD we concluded that, on balance, UNC728D has a neutral impact on compliance. Given the proposed flat, high discount under UNC728D, in our MTD, we said that we expected stakeholders in support of UNC728D to submit evidence demonstrating that there is indeed a reasonable relationship between the discounts and the "competitive level of references prices". We received representations suggesting that two routes would bypass under all UNC728 modifications except for UNC728D. However, as noted above (under UNC Relevant Code Objective (a) and UNC CMRO (b)), UNC728D would lead to excessively high discounts for 20 routes out of the total 22 routes that would be eligible under this modification. These 20 routes represent the vast majority of eligible short-haul flows.

UNC728B assessment of Objective (g) and CMRO (e)

[30] The discount under UNC728C would apply to capacity bookings regardless of whether and how these capacity bookings would be utilised. On the other hand, the discount under UNC728/A/B/D would apply to capacity bookings only insofar as these bookings are utilised at the nominated entry and exit points.

The proposed discount under UNC728B demonstrates a reasonable relationship between the resulting values and the competitive level of references prices.

One respondent said that "We believe that under UNC728B the difference between the proposed discounts for those routes below or at the 4.4. km mark would introduce unfair discrimination between neighbouring conglomerates, for which gas charges make up a high proportion of their overheads". As stated above, UNC728B ensures that there is a reasonable relationship between the resulting values and the "competitive level of references prices". The proposed discount structure ensures that there is no discriminatory treatment between routes, whilst a flat discount that does not reflect the different degree of risk posed by each route is more difficult to reconcile with the principle of non-discrimination.

Objective (f) Promotion of efficiency in the implementation and administration of the code

The impacts of the proposed modifications on the efficiency in the implementation and administration of the code will be relatively small. We note that the introduction of a benchmarking adjustment (under Article 6(4) TAR NC) in GB would inevitably add complexity to the implementation and administration of the code. However, this complexity is mitigated by the transparent manner in which the proposed discounts and eligibility criteria have been set out under UNC728/A/B/C/D. Overall, UNC728/A/B/C/D would have a neutral impact on UNC Relevant Code Objective (f).

Assessment against our principal objective and statutory duties

The Authority's principal objective is to protect the interests of existing and future consumers in relation to gas conveyed through pipes, including their interests in the reduction of greenhouse gases.[31] In our MTD we concluded that approving modification proposal UNC728B would be consistent with our principal objective and statutory duties. As part of our consultation we asked respondents' views on our assessment of the modification options against our statutory duties (Question 5). The majority of respondents that offered comments on this question agreed with our assessment.

We have concluded that approving modification proposal UNC728B is consistent with our principal objective and statutory duties, for the reasons set out below.

<u>Gas market consumer welfare impacts</u>

The proposed UNC728 modifications seek to address the risk of certain users bypassing the NTS to avoid paying the transmission tariff. If this risk were to materialise, this would reduce the amount of capacity contributing to recovery of allowed revenue. This would increase

[31] The Authority's statutory duties are wider than matters which the Panel must take into consideration and are detailed mainly in the Gas Act 1986 as amended.

transmission tariffs for remaining users of the NTS. On the other hand, any discount designed to dis-incentivise bypass would give rise to a cross-subsidy and increase transmission tariffs for non-eligible users. For this reason, any short-haul discount must be well-targeted and only offer the discount necessary to dis-incentivise inefficient bypass.

In our MTD, we focused on the second order effects of the modifications.[32] As the second order effects are subject to a greater level of uncertainty, we asked CEPA to consider two bypass sensitivities: (i) a high bypass sensitivity and (ii) a low bypass sensitivity. The 'high bypass sensitivity', assumed that all routes choose to bypass where the modelling indicates that they may profitably do so. We found that this approach is likely to result in an over-estimate of the risk of bypass. The 'low bypass sensitivity' was based on our qualitative holistic assessment of the risk of bypass, in part based on confidential material submitted by stakeholders. For the low bypass sensitivity, we asked CEPA to focus on the status quo and UNC728B and UNC728D, given that UNC728/A/C modifications have a negative impact on the UNC objectives and, specifically, given that we concluded the 18km distance cap to be discriminatory. Under the low bypass sensitivity, we identified eight routes at risk of bypass under the status quo.[33] Under both UNC728B and UNC728D, our analysis suggested that two routes would remain at risk of bypass. The specific routes at risk of bypass are different for each of the options. This analysis was based on the best information available to us, including commercially sensitive evidence submitted to us by stakeholders.

In our MTD, we assessed the impacts of bypass on exit tariffs of non-eligible users under our 'low bypass sensitivity'. We found that the exit tariffs for non-eligible short-haul users were lower under both UNC728B and UNC728D compared to the status quo once the risk of bypass is considered. Under the low bypass sensitivity, CEPA found that UNC728B resulted in the lowest exit tariff after considering bypass.[34]

We assessed the potential impacts of bypass on consumer welfare, considering only the direct effect on the exit tariff.[35] Due to the impact on the exit tariff, the estimated consumer welfare

[32] First order effects analysis assumes that all existing users of the gas network remain on the system. The second order effects analysis assesses the potential for a short-haul discount to prevent bypass, ensure revenue recovery from a greater volume of capacity and avoid an associated increase in tariffs for those who remain connected to the NTS. The first order and second order effects results are presented in detail in CEPA's Analytical Support (22 January 2021).

[33] In addition to those eight routes, we have identified an additional number of 'lower risk' routes.

[34] Under the high bypass sensitivity, CEPA found that UNC728D resulted in the lowest exit tariff based on modelled estimates of avoided bypass. However, we consider these results to be based on an over-estimate of the risk of bypass. Figure 3 of our MTD (22 January 2021).

[35] See Figure 4 of our MTD (22 January 2021).

benefits of avoided bypass under UNC728B are greater than under UNC728D.[36] We did not receive any evidence as part of our MTD consultation that would change the conclusions of this assessment – the evidence provided confirmed that the routes that stakeholders consider to pose a risk of bypass were among those we identified as presenting a degree of bypass risk.

A respondent expressed concerns that historically short-haul discounts may not have been passed through to consumers. Where such a result would occur, it would contradict the logic of a discount designed to dis-incentivise NTS bypass. We note that UNC728/A/B/C/D define both the eligible routes and applicable discounts under each modification. This should allow consumers to know that the route they are using is eligible for a discount.

Impacts on carbon emissions

CEPA also modelled the impacts of the UNC728 modifications on carbon emissions. We observed slightly lower emissions under the UNC728 modifications than under the status quo.[37]

Some stakeholders expressed concern that the implementation of UNC728B would lead to users bypassing the NTS, diverting investment from hydrogen and decarbonisation projects as bypassing would become the priority. These stakeholders note that CEPA do not have access to confidential information regarding future investment. A number of stakeholders also noted that there are planned decarbonisation projects in the Teesside and Humber areas. Implementation of UNC728B would result in routes to exit points in the Teesside and Humber areas being eligible for a discount. UNC728B is also the only modification which will have a neutral impact on competition. We also expect that UNC728B will result in the lowest exit tariff for non-short haul users after considering bypass. We therefore expect UNC728B to minimise the cost to users and potential distortions to the market, including those making investment decisions related to decarbonisation.

Implementation date

Articles 29 and 32 TAR NC require advance publication of the reserve prices applicable to standard capacity products until at least the end of the gas year, at least 30 days before the annual yearly capacity auction. These publication requirements apply in respect of prices

[36] We note, however, that under the high bypass sensitivity, UNC728D has the highest estimated consumer welfare impact of the change to the exit tariff. However, we consider these results to be based on an over-estimate of the risk of bypass.

[37] This was a combination of two factors as a result of the UNC728 options: (i) CEPA observed that in early modelled years, some additional gas-fired power generation replaces high carbon emissions fuels, particularly coal-fired generation; and (ii) CEPA observed a small shift from non-short-haul eligible to short-haul eligible gas-fired power generation. In the aggregate, short-haul eligible gas-fired power generation tend to be larger and more efficient plants relative to the former. This tends to reduce carbon emissions. See Figure 5 of our MTD (22 January 2021).

applicable at interconnector points. In our MTD we said that the implementation date for UNC728B will need to allow the 30-day advance publication of the new tariffs reflecting the impact of UNC728B on reserve prices. As the next annual yearly capacity auctions are in July 2021 for capacity from October 2021, we said that UNC728B should be implemented on 1 October 2021.

As part of our MTD consultation, we asked respondents' views on our proposed implementation date (Question 7). A majority of those who commented on our minded to implementation date agreed with us. Only one respondent disagreed, saying that "unnecessarily delaying implementation for the remainder of the gas year is damaging to UK industry and inefficient for all GB consumers". Some stakeholders did not comment on the specific date but said that any UNC728 proposal should be implemented from the earliest opportunity.

Due to the TAR NC requirements mentioned above, the earliest opportunity for the implementation of UNC728B is at the start of the next Gas Year. Therefore, we have decided that UNC728B shall be implemented from **1 October 2021**.

Enabling revisions to legal text - Consent to Modify C059

Since the UNC728 modifications were raised, a number of UNC modification proposals have been implemented meaning that the legal text for UNC728/A/B/C/D contains outdated references to UNC provisions.

To facilitate the timely implementation of UNC728B, we consider it appropriate to give our consent to Consent to Modify C059. This Consent to Modify, published alongside this notice, amends the outdated references contained in the legal text of UNC728B to enable seamless insertion into the relevant UNC sections. For the avoidance of doubt, we state that the Consent to Modify C059 does not make any changes to the substance of the modification.

As stated in past decisions, we remain of the view that the UNC modification process is the most appropriate route to make subsequent revisions to legal text where possible, and we expect the Joint Office and the UNC Panel to work with proposers to facilitate this for future modifications where possible.[38]

Decision notice

In accordance with Standard Special Condition A11 of the Gas Transporters licence, the Authority hereby directs that modification proposal UNC728B: '*Introduction of Conditional*

[38] See Authority Decision on UNC722, UNC723, UNC724 and Consent to Modify C058 (12th May 2020), https://www.ofgem.gov.uk/publications-and-updates/authority-decision-unc722-unc723-unc724-and-consent-modify-c058

Discount for Avoiding Inefficient Bypass of the NTS with 28km distance cap' be made, in accordance with the implementation date directed above.

Eleanor Warburton

Deputy Director, Energy System Management & Security

Signed on behalf of the Authority and authorised for that purpose

Appendix: Ofgem impact assessment

UNC728/A/B/C/D Introduction of a Conditional Discount for Avoiding Inefficient Bypass of the NTS – Impact Assessment

Division:	Energy Systems Management and Security	**Type of measure:**	Gas Transmission Charging
Team:	Gas Markets and Systems	**Type of IA:**	Qualified under Section 5A UA 2000
Associated documents:	CEPA analytical report	**Contact for enquiries:**	Gas.TransmissionResponse@ofgem.gov.uk

Summary: We have been asked to make a decision on proposals[39] to change the UNC relating to the GB gas transmission charging arrangements. The proposals have been through an industry workgroup process and consultation. As a result of the impact that the changes may have, we have decided to publish an Impact Assessment.

What is the problem under consideration? Why is Ofgem intervention necessary?

We have been sent proposals that seek to introduce a discount to the gas transmission charging framework to dis-incentivise inefficient bypass of the NTS by directly connected NTS users located at close proximity to Entry Points. On 1 October 2020, new charging arrangements were implemented resulting from our decision to approve modification UNC678A – 'Amendments to Gas Transmission Charging Regime (Postage Stamp)' which was published on 28 May 2020. There are no discounts aimed at dis-incentivising inefficient bypass under the current charging methodology which entered into force on 1 October 2020. The proposals were sent to us for decision on 3 July 2020.

[39] The proposals consist of the original UNC728 Modification Proposal and four Alternatives (UNC728/A/B/C/D). In this document we refer to them all collectively as "proposals".

What are the policy objectives and intended effects including the effect on Ofgem's Strategic Outcomes?

We are required to consider the merits of any proposed changes, and where appropriate, direct that the modification be made. Before making any decision to direct a modification about gas transmission charging, we must satisfy ourselves that:

- the modification better facilitates the relevant UNC objectives as compared with both the status quo and also any alternative modifications put before us; and
- the modification is consistent with our statutory duties under primary legislation and EU law with specific reference to TAR NC.

What are the policy options that have been considered, including any alternatives to regulation? Please justify the preferred option (further details in Evidence Base)

We have considered UNC728 and the full range of alternative modification proposals put forward to us (five modifications in total). The modifications share a number of features but differ in respect of several characteristics which are set out in our MTD.

Preferred option - Monetised Impacts (£m)

Business Impact Target Qualifying Provision	N/A
Business Impact Target (EANDCB)	N/A
Net Benefit to GB Consumer	**Central scenario (Consumer Transformation):** Option UNC0728B: Central case (2020 FES Consumer Transformation, First order impact[40]): £-27.3million (CT, NPV, 2022-31, £18/19). Central case (2020 FES Consumer Transformation, second order impact - high/low bypass sensitivity[41]): £12 million (High bypass sensitivity), £118 million (Low bypass sensitivity) (CT, NPV, 2022-31, £18/19). **Sensitivity (Steady Progression):** Option UNC0728B: Sensitivity (2020 FES Steady Progression, First order impact):£18.6 million (SP, NPV, 2022-31, £18/19), excluding the potential impact of the option on likelihood of bypass.
Explain how the Net Benefit was monetised Costs and benefits have been modelled for the gas year 2022/23, 2026/27 and 2030/31 (gas years from 1 October). These have been interpolated between the three modelled years for the period 2022-2031. We use 2018/19 prices and we apply the standard social time preference rate (STPR) discount rate of 3.5%. These benefits are limited to the gas market and do not include the effects that changes in tariffs and in the wholesale gas price may have on electricity consumers. CEPA has estimated potential electricity market impacts in its technical report.	

Preferred option - Hard to Monetise Impacts

Describe any hard to monetise impacts, including mid-term strategic and long-term sustainability factors following Ofgem IA guidance

Impacts that bypass may have on the gas wholesale market price or the electricity market price have not been monetised. CEPA estimated the consumer welfare impact of the change to the more direct exit tariff effect.

CEPA's modelling assumes that domestic and I&C gas demand is inflexible (which is appropriate given the small variations in price being considered) and so the impact of an increase in gas demand on carbon emissions in all sectors other than the power sector are not modelled. We would expect the impact to be small given the small magnitude of the change to the wholesale gas price and the low price elasticity of gas demand (between -0.10 and -0.28 for the UK domestic gas consumption)[42]. For example, the first order effect[43] of UNC728B would lead to an increase in the wholesale gas price of 0.216% (CT, 2030-31)[44] which, given the elasticities quoted above, would decrease gas demand by approximately 0.02% - 0.06%.

Tariff reform may impact on the revenues of gas producers, gas storage, interconnectors, I&C consumers, and gas-fired power generators. In most cases, we would only expect impacts of the magnitude that we have identified to impact on the investment or closure decisions of these market participants at the margin.

[40] First order effects analysis assumes that all existing users of the gas network remain on the system, for details see paragraphs 3.40 - 3.46 of our MTD (22 January 2021).

[41] Second order effects analysis assesses the potential for a short-haul discount to prevent bypass, ensure revenue recovery from a greater volume of capacity and avoid an associated increase in tariffs for those connected to the NTS. For detail on second order effects and, high and low bypass sensitivity see para 3.40 – 3.46 of our MTD (22 January 2021).

[42] Gas price elasticities: the impact of gas prices on domestic consumption – a discussion of available evidence, available: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/532539/Annex_D_Gas_price_elasticities.pdf

[43] First order effects analysis assumes that all existing users of the gas network remain on the system, for details see paragraphs 3.40 - 3.46 of our MTD (22 January 2021).

[44] CEPA Analytical Support (22 January 2021)

Key Assumptions/sensitivities/risks

A number of assumptions have been made within the modelling that are set out in full in CEPA's analytical report.

The benefits for consumers are likely to be sensitive to supply and demand fundamentals which are observed in practice. Given that different options may have quite different impacts depending on the effect that they have on the marginal unit of gas or electricity supply, where the marginal unit differs from that modelled, the consumer welfare impacts may change from those estimated.

The changes in the electricity wholesale price may impact on the revenues of electricity generators. If they seek to recover any lost revenues from the capacity market, some of the benefits may be counterbalanced by higher capacity market costs. Given the small impact of the options on the electricity price, CEPA expect any impacts on the capacity market to be limited.

Will the policy be reviewed? Yes	**If applicable, set review date: As required by TAR NC and ad-hoc in response to changes in the gas market**

Is this proposal in scope of the Public Sector Equality Duty?	**Yes**