









UNC Modification	At what stage is this document in the process?
<h1 data-bbox="134 322 655 416">UNC 0856:</h1> <h2 data-bbox="134 450 1034 591">Introduction of Trials for System Management Services</h2>	<div data-bbox="1209 309 1469 629"> <div data-bbox="1209 309 1469 383">01 Modification</div> <div data-bbox="1209 394 1469 468">02 Workgroup Report</div> <div data-bbox="1209 479 1469 553">03 Draft Modification Report</div> <div data-bbox="1209 564 1469 629">04 Final Modification Report</div> </div>
<p data-bbox="134 685 507 719">Purpose of Modification:</p> <p data-bbox="134 741 1469 891">Create a framework to enable National Gas Transmission (NGT) to explore innovative solutions through the means of trials which can support the effective balancing of the whole gas system and enhance pre-emergency tools which are funded by the Energy Balancing Neutrality mechanism.</p> <p data-bbox="134 943 304 976">Next Steps:</p> <p data-bbox="134 999 979 1032">The Proposer recommends that this Modification should be:</p> <ul data-bbox="156 1055 1145 1133" style="list-style-type: none"> considered a material change and not subject to Self-Governance assessed by a Workgroup <p data-bbox="134 1200 1469 1279">This Modification will be presented by the Proposer to the Panel on 21 September 2023 The Panel will consider the Proposer's recommendation and determine the appropriate route.</p>	
<p data-bbox="134 1668 397 1702">Impacted Parties:</p> <p data-bbox="134 1722 1018 1756">High: NGT, Shippers, Consumers, Distribution Networks, IGTs</p> <p data-bbox="134 1778 197 1812">Low:</p> <p data-bbox="134 1834 213 1868">None:</p>	
<p data-bbox="134 1910 823 1944">Impacted Codes: UNC and potentially IGT UNC</p>	

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Timetable		 0121 288 2107
Modification timetable:		Proposer: Matt Newman National Gas Transmission
Pre-Modification Discussed	03 August 2023 & 07 September 2023	 enquiries@gasgovernance.co.uk
Date Modification Raised	08 September 2023	 matthew.newman2@nationalgas.com
New Modification to be considered by Panel	21 September 2023	 +44 (0)7548 773619
First Workgroup Meeting	05 October 2023	Transporter: Matt Newman National Gas Transmission
Workgroup Report to be presented to Panel	16 November 2023	 matthew.newman2@nationalgas.com
Draft Modification Report issued for consultation	16 November 2023	 +44 (0)7548 773619
Consultation Close-out for representations	07 December 2023	Systems Provider: Xoserve
Final Modification Report available for Panel	12 December 2023	 UKLink@xoserve.com
Modification Panel recommendation	14 December 2023	

1 Summary

What

NGT proposes to introduce a new term into the Uniform Network Code (UNC) which defines the use of a “Trial” to test innovative solutions which can support the effective and efficient balancing of the network and have potential to enhance the pre-emergency tools. The Trials will be delivered through provisions already set out in System Management Principles Statement (SMPS) and Procurement Guidelines. In addition to more effective and efficient balancing techniques, the development and use of such Trials may lead to enduring developments that can provide additional resilience and supplement Great Britain's (GB) energy security.

The use of a Trial would facilitate learning and data gathering which aids NGT's longer-term thinking for effective balancing and energy resilience mechanisms, whilst helping better understanding of risks and potentially identify mitigations. Additionally, the use of Trials may be more efficient when compared to developing a solution and having it implemented into the UNC which may not be fully understood and may require unwinding from the UNC if it does not work as originally intended.

NGT propose that the Trials should be funded through Energy Balancing Neutrality where the costs associated with balancing the network are socialised across the Shipper community. NGT consider that this is an appropriate approach because the Trials would be used to explore new approaches and techniques to enhance the existing balancing and pre-emergency arrangements.

Why

In March 2023, the Department for Energy Security and Net Zero (DESNZ) published their ‘Powering Up Britain - Energy Security Plan’¹ which confirms:

“The Government is working with NGT to increase the available volumes for industrial demand reduction for winter 2023-24 and investigate options for how domestic and smaller business gas consumers could participate more in future schemes”.

NGT has progressed several Demand Side Response (DSR) reforms in 2022/23 and this year and is currently developing further enhancements with the aim of increasing participation and the volume from the Daily Metered (DM) proportions of demand that can be accessed in the event of supply tightness.

NGT has continued engagement with DESNZ and Ofgem to explore how domestic and smaller industrial and commercial gas consumers could participate in the DSR market. NGT considers the use of a Trial to explore potential sources of Non-Daily Metered (NDM) demand reduction to be an appropriate route before any enduring solution is developed due to the potential risks of offering NDM consumers to reduce their gas demand in return for a payment (for example in relation to impacts on vulnerable consumers). The learnings from a Trial will then be reviewed and could be taken forward to further develop industry thinking for how an enduring product could work and be implemented.

NGT recognise that further enhancements to pre-emergency tools would be welcome which have the potential to improve our Winter resilience.

By increasing the level of flexibility within the UNC around the use of trials and their funding arrangements NGT believes this may lead to the more rapid development of initiatives which benefit consumers and the industry as a whole.

¹ [Powering Up Britain: Energy Security Plan \(publishing.service.gov.uk\)](https://publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1154441/Powering-Up-Britain-Energy-Security-Plan.pdf)

For the avoidance of doubt, the use of Trials is not limited to NDM DSR. However, we consider its use for NDM DSR to be appropriate.

How

UNC:

To deliver the proposed solution, NGT proposes to make the following changes:

NGT propose to introduce a new term into UNC TPD Section D and utilise existing provisions within the SMPS² to enact Trials. In the event of NGT wishing to conduct a Trial, there would be a requirement to publish a specification document outlining the proposal setting out the details of the Trial.

The specification document would be subject to consultation and Ofgem would be required to provide approval or rejection with the following updates within [10 business days] from the close of the consultation.

NGT would only be able to proceed with the Trial in the form consulted upon following approval from Ofgem.

SMPS:

Section D of the SMPS provides an overview of the specific services for system management which are documented in the table below. NGT considers that existing tools, services and provisions set out within the System Management Services (SMS), as set out as Specific Services in the SMPS, provide an appropriate mechanism for using Trials to explore innovative solutions and gain data from real life market scenarios.

Specific Services for System Management include	Description
Energy Tools	NGT may use the ICE Endex operated On-the-day Commodity Market (OCM), or any other market mechanism or contract to buy and sell gas for the purposes of system management.
Capacity Tools	NGT may use the Gemini / Gemini exit system, or any other market, mechanism or contract to buy and sell system NTS Entry or Exit Capacity for the purposes of system management.
Storage Services	NGT may procure any storage service from storage facility users, or any other market, mechanism or contract relating to physical or commercially based storage products for the purposes of system management.
Demand and Supply Management Services	NGT may incentivise Users or end consumers to enter into contracts to affect desired gas flow offtake or delivery into the system.

² <https://www.nationalgas.com/document/140971/download>

Other Commercial and Contractual Services	NGT may develop further services or enter into contracts that will enable it to better manage its operational and commercial risks.
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2 Governance

Authority Direction

NGT believes that this Modification requires Authority Direction for the following reasons:

- The introduction of Trials within the regulatory framework constitutes a material change to the arrangements in which we are operating and would be expected to result in additional costs to the Shipper community due to the proposal that Trials will be funded via the Energy Balancing Neutrality mechanism.

Requested Next Steps

This Modification should:

- be considered a material change and not subject to Self-Governance.
- be assessed by a Workgroup.

In order to deliver a NDM Trial for Winter 2023/24 thus, meeting the expectations set out in the Powering Up Britain – Energy Security Plan in regards to investigating options for how domestic and smaller gas consumers are able to participate in future DSR schemes and engage adequately with the industry, NGT request that additional workgroups are facilitated by the Joint Office October week commencing 16/10/23 and potentially a contingency workgroup during the week commencing 06/11/23 where the workgroup report can be finalised. These are requested for the industry to provide feedback and help develop the solution, whilst being able to complete and return the Workgroup Report back to the UNC Panel on 16/11/23.

3 Why Change?

Driver for change

The Gas Demand Side Response (DSR) arrangements were introduced into the UNC in 2016 by [Modification 0504](#) 'Demand Side Response Methodology Implementation'. They provide a mechanism for large consumers of gas to offer to reduce their demand in return for a payment which they define during times of system stress when a GBN is in operation.

Subsequent UNC reforms [Modification 0822](#) (Urgent) (Reform of Gas Demand Side Response Arrangements) and [Modification 0833](#) (Urgent) Enabling Demand Side Response (DSR) Market Offers to be made by Non-Trading System Transactions have been implemented which aim to further increase participation and the financial incentives for large Daily Metered Consumers to participate. In August 2023 two further UNC [Modifications 0844](#) (Enabling Direct Contractual Arrangements with Consumers for Demand Side Response) and [0845](#) (Enhancements to Demand Side Response (DSR) Arrangements including a D-5 Product) were approved by Ofgem which aim to further increase participation and the volume which NGT can procure in advance of the Winter from large Daily Metered Consumers.

To date, all DSR reforms and Modifications have been focused on increasing participation from the Daily Metered community and NGT is presently focused on growing this market. However, NGT recognises that NDM consumers could also play a key role in delivering gas demand reduction in the event of forecast system stress and thus further enhance DSR as a pre-emergency tool.

In March 2023, DESNZ published the Government's 'Powering Up Britain – Energy Security Plan' which stated an intention to work with NGT to continue developing DSR markets and "investigate options for how domestic and smaller business gas consumers could participate more in future schemes". NGT therefore now wishes to explore with the industry how these sections of the market could participate and reduce their demand as part of a commercial, pre-emergency tool.

NGT has engaged with some industry stakeholders to seek views on the prospect of an NDM reduction scheme. These discussions yielded consistent feedback that a central financial stimulus would be key to encouraging engagement from NDM consumers and that a direct contracting or balancing service arrangement would be the most favourable medium to use in order to facilitate an NDM reduction from a provider who has NDM consumers within their portfolio.

In order to explore and develop thinking further on how a NDM DSR product could work, NGT would like to conduct a Trial, enabled by a framework change within the UNC. The principle features of the Trial would be the ability to gather data, better understand risks and contribute towards longer term thinking on whether the findings from the Trial would be suitable for an enduring industry reform.

Benefits

By introducing the concept of a "Trial" into UNC and utilising existing SMPS provisions it would create additional flexibility for NGT to innovate and trial solutions before developing full-scale products which can take a significant amount of time and may not be utilised as much as originally planned. If they were tested through a limited Trial it presents an opportunity to test key principles of enhancements, or new Balancing or Pre-Emergency tools and gather data which may either support or disprove a hypothesis. Furthermore, if successful, Trials will then directly feed into the development and enhancement of NGT's existing suite of Balancing and Pre-Emergency tools which could benefit NGT, Shippers, wider market participants and the whole country because they would help mitigate the risk of a Gas Deficit Emergency. Such trials would provide information for the industry to understand and assess any such proposals and the operation of these proposals.

If this Modification is approved, NGT would look to use the new provisions to Trial an NDM DSR product during Winter 2023/24 which would provide valuable information and an opportunity to gather data on the level of interest, utilisation and the price point required to encourage consumers to reduce consumption. As stated earlier in this Modification, NGT is looking to explore options to encourage participation from domestic and smaller commercial and industrial consumers, we recognise that requesting a demand reduction from this section of the market carries unique risks which need to be carefully considered and navigated, especially when considering the interaction with domestic and vulnerable consumers. This is another important factor for wishing to explore this topic via a limited Trial which would allow NGT to better understand these potential risks and to identify potential mitigating factors before considering an enduring product or solution. As stated above the trial would also provide the same considerations for the industry as a whole.

Impacted parties

If this Modification is implemented, NGT foresees that the impacted parties include:

- NGT – through the new process and contractual arrangement
- NDM Consumers (Domestic and Non-Domestic) – through their interaction with the Trial

- Shippers – through a contractual relationship and Energy Balancing Neutrality costs
- Suppliers – Through a contractual relationship with the Shipper and NDM Consumers
- Gas Distribution Networks and Independent Gas Transporters – If the consumers who are participating in the Trial are in their network, it could potentially impact their demand forecasting accuracy.

Why is this a Code matter

The current UNC text / SMPS are very prescriptive of the tools and processes NGT can undertake. By introducing the term “Trial” it would permit a greater level of flexibility which NGT believe would result in innovation and more effective products being developed and deployed into the market.

NGT is proposing to amend UNC TPD Section D to permit the use of Trials subject to the publication of and public consultation on a specification document which Ofgem would be required to approve/reject / approve with amendments within [10 business days] from the consultation closure.

What are the effects if this change is not made?

If this Modification is not implemented, it will prevent increased levels of flexibility from being introduced within the current regime. This may prevent future reforms from being delivered as effectively as possible because there would not be an opportunity to Trial the key principles in a realistic scenario prior to being implemented. Additionally, this may inhibit NGT from acting as efficiently as possible because there may be a requirement to implement UNC changes which subsequently require reforms to take into account real-life learnings or developments which could have been obtained via the use of a Trial.

4 Code Specific Matters

Reference Documents

System Management Principles Statement (SMPS) - [A4 simple report 1-col no divider Nov 2019 \(nationalgas.com\)](#)

Knowledge/Skills

None

5 Solution

The UNC will be modified to enable NGT to run a Trial for a SMS product for the purposes of gathering data, contributing to longer-term thinking and helping to better understand risks and have the trial funded by the Energy Balancing Neutrality mechanism.

If NGT wishes to run a Trial, NGT will have to document and explain the following:

Trial Scope:

- NGT shall be required to publish a Specification Document describing the Trial along with its aims, objectives and success criteria.
- Specify the eligibility requirements for being able to participate in the Trial for the Service Provider
- Document Payment Terms

- Contractual arrangements for the Service Provider
- Estimated cost of the Trial / maximum spend or exposure for the Shipper community.
- Expected duration which cannot be longer than 12 months

Specification Document Consultation:

- NGT shall be required to send the Specification Document to Ofgem prior to a public consultation which NGT will then initiate, the public consultation will run for [28 business days]
- Following the closure of the consultation period, Ofgem have [10 business days] to Approve / Reject / Approve with Amendments the Specification Document which is specific to the Trial.

Payment:

- Amounts (determined as provided in the SMS Trial Specification) payable to or by a Service Provider in connection with the Trial are additional Monthly Adjustment Neutrality Costs or Adjustments
- The payments from Neutrality to fund the Trial do not impact the setting of the daily System Average Price (SAP) or the System Marginal Prices (SMP)

Reporting requirements:

- Within [2] months after the end of the Trial, NGT have an obligation to publish a report documenting the results, net cost to the industry and an assessment against the success criteria that were published within the Specification Document
- NGT must also confirm if they intend to raise a Modification to implement the Trial concept on an enduring basis.

6 Impacts & Other Considerations

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

None.

Consumer Impacts

This Modification will allow NGT to further develop and innovate the System Management and Pre-Emergency tools at its disposal. Therefore, it is likely to improve the overall effectiveness of these tools and further reduce the likelihood of a GDE which would entail significant cost and disruption to the industry and consumers, potentially requiring firm load shedding and isolation of domestic consumers.

NDM DSR Trial specifically:

If this Modification is implemented and a NDM DSR Trial is conducted it will introduce new incentives for NDM consumers to reduce their consumption for a limited period of time. In return for voluntarily reducing their

consumption, they will receive payment associated with the reduction. As a result of the reduction, consumers can also expect to receive lower gas bills for the period(s) where they have reduced their consumption when compared to others who have not participated in the Trial. Further details would be set out in an NDM DSR specification document if this Modification is approved.

The learnings from a Trial will be considered and may feed into the potential development of an enduring, full-scale product and suite of pre-emergency DSR tools which would enable NGT to incentivise NDM consumers to reduce their consumption in times of a supply deficit.

What is the current consumer experience and what would the new consumer experience be?

Currently, there are no provisions within the governance framework which permit NGT to run trials for System Management and Pre-Emergency tool development. Therefore, consumers have no experience of interacting with a gas product of this kind. However, if this Modification is implemented and Trials are permitted, it may lead to increased effectiveness and future development of the system management tools and techniques NGT can utilise. This in turn may lead to greater levels of confidence from Consumers that NGT continue to review and enhance the products, or tools which are available.

NDM DSR Trial specifically:

Currently, there is no central product either enduring or on a trial basis which is aimed at NDM consumers which incentivises them to reduce their gas consumption in return for payment. The existing DSR arrangements are aimed at large industrial and commercial consumers and operate under an 'option and exercise' regime. Smaller consumers have been able to interact with National Grid ESO's (ESO) Demand Flexibility Service (DFS) which encourages consumers to reduce or alter their electricity consumption over a short period of time in return for payment. Therefore, they are more familiar with a demand reduction product or trial than ever before.

Impact of the change on Consumer Benefit Areas:	
Area	Identified impact
<p>Improved safety and reliability</p> <p>By permitting NGT to run a Trial to explore new innovative features or solutions for balancing the network and development of pre-emergency tools such as NDM DSR, it has potential to improve the safety and reliability of the network and improve resilience. Due to the nature of a Trial which is limited in scope, size and duration, it provides an opportunity to test and understand solutions in a more controlled environment which is likely to contribute towards the safety and reliability of the network.</p>	<p>Positive</p>

<p>Lower bills than would otherwise be the case</p> <p>If this Modification is implemented, it may lead to further enhancements to existing products being trialled which could lead to a more economical and efficient network. Therefore, this has the potential to bring down costs associated with managing it via the tools which are documented in the SMPS and as a result of this, costs for consumers may also be reduced.</p> <p>NDM Trial specifically:</p> <p>If this Modification is implemented and a suitable Specification Document is approved by Ofgem, NGT plan to run a Trial regarding NDM DSR. During this Trial, consumers would be incentivised to reduce their consumption over specified periods of time. Due to consumers reducing their consumption more than they would have normally, they would naturally receive lower gas bills.</p>	Positive
<p>Reduced environmental damage</p> <p>None</p>	None
<p>Improved quality of service</p> <p>Currently, there are no provisions which permit NGT to run Trials. If implemented, there would be greater opportunities to run take onboard feedback for future products or enhancements which could in the first instance be utilised via a Trial.</p> <p>A specific example which has already been documented in this Modification is the NDM DSR Trial. If this Trial is approved (subject to the Modification being implemented), it will provide some NDM consumers the opportunity to participate in the development of a solution which benefits GB and their own security of supply.</p>	Positive
<p>Benefits for society as a whole</p> <p>Implementing a commercial framework which permits the use of Trials to develop and enhance tools available to NGT for the effective management of the NTS would not only benefit NGT but the wider society as a whole. It will result in a more efficient, effective, and safe network which has the potential to reduce costs for consumers.</p> <p>Additionally, NGT plans on conducting a Trial for NDM DSR to gather data and better understand risks. The learnings from the Trial will contribute towards longer-term thinking which is likely to feed into an enduring NDM DSR product which will enhance our security of supply by helping to mitigate the changes of a GDE. If a GDE occurred, it would likely have a severe economic and societal impact on the country.</p>	Positive

Cross-Code Impacts

There may be a requirement to produce a “mirror Modification” within the iGT UNC.

EU Code Impacts

None

Central Systems Impacts

None.

It is not expected that there will be any central system impacts in order for NGT to run Trials. If there were to be a system change this would be captured within the specification document which is unique to each Trial proposal and would be subject to consultation and an Ofgem decision. However, due to the time-limited nature of Trials, we do not anticipate there to be system change requirements for such Trials.

7 Relevant Objectives

Impact of the Modification on the Transporters' Relevant Objectives:

Relevant Objective	Identified impact
a) Efficient and economic operation of the pipe-line system.	Positive
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.	Positive
c) Efficient discharge of the licensee's obligations.	None
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.	None
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.	None
f) Promotion of efficiency in the implementation and administration of the Code.	Positive
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.	None

Relevant Objective a) “Efficient and economic operation of the pipe-line system” is furthered by this Modification which is designed to provide additional flexibility, and permit for innovation and testing of potential enhancements to system management approaches via the use of Trials. Trials would allow NGT to explore potential enhancements to existing tools and develop new ones by gathering data, and better understanding risks which will be vital when considering the suitability and development of future tools.

Relevant Objective 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” is also furthered by this Modification due to the nature of the Modification which is designed to Trial enhancements to existing or

key concepts for new System Management Services which include Pre-Emergency tools. Therefore, the Modification has the potential to contribute towards a coordinated, efficient and economic operation of a pipeline system.

As mentioned earlier in this Modification, NGT intends to utilise a Trial for the purposes of exploring some key concepts behind an NDM DSR product. The learnings from this Trial may have a direct contribution towards GB's security of supply due to a potential mitigating action in preventing a GDE from being declared. If such an event occurred, in addition to firm load shedding on the NTS, Gas Distribution Networks may be given instructions to implement the shedding of firm loads within their networks resulting in disruption and inefficiency at the LDZ level too.

Relevant Objective f) "Promotion of efficiency in the implementation and administration of the Code" is furthered by this Modification because it may prevent full-scale solutions being implemented into the UNC which later have to be reformed or withdrawn due to first-year operational learnings. Therefore, improving the overall efficiency of the development and reform processes NGT can utilise.

8 Implementation

Implementation is sought by late December 2023 / early January 2024 to allow time for NGT time to produce a Specification Document for an NDM DSR Trial to be run in March – April 2024.

Therefore, the following implementation dates are suggested:

If a decision is received by 21 December 2023, the implementation date should be 22 December 2023

If a decision is received by 27 December 2023, the implementation date should be 28 December 2023.

If a decision is received after 28 December, implementation should be on the next business day thereafter.

9 Legal Text

Text Commentary

The legal text and associated commentary shall be provided prior to the beginning of the consultation period and will consist of a new section within UNC TPD Section D to permit the use of Trials for System Management Services.

10 Recommendations

Proposer's Recommendation to Panel

Panel is asked to:

- Agree that Authority Direction should apply.

Refer this proposal to a Workgroup for assessment.