




UNC Modification	At what stage is this document in the process?
<h1 data-bbox="132 322 657 416">UNC 0867:</h1> <h2 data-bbox="132 450 1158 591">Gas Demand Side Response (DSR) Aggregation Arrangements</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 638">04 Final Modification Report</div> </div>
<p data-bbox="132 680 507 719">Purpose of Modification:</p> <p data-bbox="132 736 1445 853">Enable additional daily metered Consumers to participate in gas DSR by introducing the role of an ‘aggregator’ to group Consumers’ DSR into a portfolio and offer it to National Gas Transmission (NGT).</p>	
<p data-bbox="132 898 308 936">Next Steps:</p> <p data-bbox="132 954 979 992">The Proposer recommends that this Modification should be:</p> <ul data-bbox="156 1010 1145 1093" style="list-style-type: none"> <li data-bbox="156 1010 1145 1048">• considered a material change and not subject to Self-Governance <li data-bbox="156 1055 580 1093">• assessed by a Workgroup <p data-bbox="132 1111 1417 1182">This Modification will be presented by the Proposer to the Panel on 18 January 2024. The Panel will consider the Proposer’s recommendation and determine the appropriate route.</p>	
<p data-bbox="132 1225 399 1263">Impacted Parties:</p> <p data-bbox="132 1281 991 1319">High: Industrial and Commercial Consumers, NGT, Shippers</p> <p data-bbox="132 1337 392 1375">Low: GDNs, IGTs</p>	
<p data-bbox="132 1413 389 1451">Impacted Codes:</p> <p data-bbox="132 1469 563 1507">UNC and potentially iGT Code</p>	

Contents		
1	Summary	3
2	Governance	4
3	Why Change?	4
4	Code Specific Matters	5
5	Solution	5
6	Impacts & Other Considerations	8
7	Relevant Objectives	10
8	Implementation	10
9	Legal Text	11
10	Recommendations	11
Timetable		
Modification timetable:		
Pre-Modification Discussed	04 January 2024	
Date Modification Raised	08 January 2024	
New Modification to be considered by Panel	18 January 2024	
First Workgroup Meeting	01 February 2024	
Workgroup Report to be presented to Panel	18 April 2024	
Draft Modification Report issued for consultation	19 April 2024	
Consultation Close-out for representations	13 May 2024	
Final Modification Report available for Panel	20 May 2024	
Modification Panel recommendation	20 June 2024	
FMR issued to Authority for decision	21 June 2024	


 Any questions?


Contact:
Joint Office of Gas Transporters

 enquiries@gasgovernance.co.uk


 0121 288 2107


Proposer:
Matt Newman

 matthew.newman2@nationalgas.com


 +44 (0)7548 773619

Transporter:
National Gas Transmission

 matthew.newman2@nationalgas.com

 +44 (0)7548 773619

Systems Provider:
Xoserve

 UKLink@xoserve.com

1 Summary

What

The Gas DSR arrangements that were originally introduced in 2016 sought to incentivise the voluntary reduction of gas consumption at a pre-emergency stage and have been subject to reform since 2022. These have been principally aimed at large Daily Metered (DM) industrial and commercial consumers. UNC Modification [0844](#) permitted NGT to directly contract with Class 1 consumers for DSR instead of only via their Shipper. UNC Modification [0845](#) broadened participation in the DSR tender to Class 2 consumers who became able to participate via their Shipper. Feedback from some industrial sectors suggests that further reform could increase participation levels for Class 1 and 2 Non-Domestic Consumers.

Why

Currently some Class 1 and 2 Non-Domestic sites are not able to participate due to the minimum DSR quantity being 100,000 kWh/day. In order to develop our thinking and ensure we understand the challenges and priorities of Consumers who could participate in DSR, NGT have engaged with Shippers, Consumers and trade associations. Feedback from these engagements suggested that if NGT were to introduce the concept of aggregation, a larger number of consumers would be able to participate which could in turn increase the DSR volumes that NGT can procure via the annual DSR Options tender and therefore grow the DSR market, increase the effectiveness of pre-emergency tools (specifically DSR) and improve GB energy security. As a result, DSR has the potential to be a more effective tool in helping to mitigate against the risk or severity of a Gas Deficit Emergency (GDE).

The concept of aggregation has been successfully deployed by National Grid ESO via their Demand Flexibility Service (DFS) where third parties have entered the market to enable a large number of small loads to be offered to the ESO in a more efficient manner. The organisations who have been able to facilitate the aggregation have been a mix of existing users within the industry and new technology / application companies who have been able to quickly react and deliver platforms that consumers can utilise.

How

The UNC and separately the Gas DSR Methodology statement will be modified to enable aggregators to enter the gas DSR market and for NGT to enter into contractual arrangements with them. To achieve this, the following changes are required:

- Introduce a new aggregator role and term within UNC and the DSR market (could be an existing party within the market or a new entrant) who can group DSR reduction quantities into a portfolio or Class 1 and 2 Non-Domestic Consumers and offer it to NGT in the form of a DSR Reduction Quantity;
- Introduce the ability for NGT to accept DSR Option Offers placed by aggregators in the annual DSR Options tender;
- Introduce the ability for NGT to instruct aggregators to reduce consumption by their contracted quantity in the event of DSR exercise triggers being met;
- Introduce the ability for NGT to issue payments (exercise and option) and penalty charges to aggregators via the CDSP;
- Introduction of standard conditions of contract between NGT and the aggregator whose option offer was accepted during the annual DSR tender process; and

- Amend the current arrangements whereby Direct Consumers and Shipper DSR option and exercise payments are funded via Energy Balancing Neutrality to include payments made to, and charges demanded from, aggregators.

2 Governance

Authority Direction

Authority Direction is proposed due to the introduction of a new role into the UNC of an 'aggregator' for the purposes of DSR.

In order to achieve this, NGT will need to enter into new contractual arrangements which will be referenced in the UNC but the specific provisions / terms and conditions shall sit outside of UNC governance. Therefore, this Modification will facilitate a new mechanism for NGT to procure DSR in addition to the Registered User and Consumer DSR contracting routes that are currently available.

The new role of the aggregator has the potential to materially change the way the market operates for DSR, impacts industry costs and may minimise the role of the Registered User within the DSR framework.

Requested Next Steps

This Modification should:

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

3 Why Change?

Driver and Benefits

Over the last 18 months, NGT have sought to increase resilience of the gas network through enhancements to our pre-emergency DSR tools. These enhancements have resulted in NGT being able to pre-contract for 0.6 mcm/d for the 2023/24 Winter Period. NGT recognise that the current pre-contracted volumes remain a low proportion of daily winter demands. However, this is still an immature market and we wish to explore further enhancements which have the potential to increase the overall effectiveness of DSR through increasing participation and therefore the volumes that are available for NGT to procure.

Feedback from some industrial and commercial Consumers and trade associations suggests that if NGT were to introduce the concept of aggregation into the DSR market it may enable participation from those consumers who cannot currently achieve the minimum offer quantity of 100,000 kWh/d. If a large number of consumers participate via an aggregator it has the potential to yield a material DSR reduction quantity which would be beneficial to NGT and GB as a whole as it could enhance GB security of supply by reducing the likelihood and or severity of a Gas Deficit Emergency (GDE).

Why is it a Code matter?

NGT consider this to be a UNC matter as we are seeking to introduce a new 'aggregator' role into the DSR market that NGT can enter into contractual arrangements with for the purposes of DSR. It is envisaged that the aggregator will be a party that NGT can make payments to via Energy Balancing Neutrality and if applicable in the event of contractual breaches issue charges to.

Consequences of Non-Implementation

If this change is not made, engagement with relevant stakeholders indicates that consumers that could potentially offer voluntary curtailment may be unable to do so because the consumption threshold is too high.

This would mean that one of the tools available to NGT to mitigate a material imbalance between national demand and supply (where a GBN / MN have been issued) that could progress to a GDE may not provide as much demand reduction as it potentially could. This Modification would serve to increase the likelihood of such additional demand curtailment being available if needed to reduce the likelihood and/or severity of a GDE.

4 Code Specific Matters

Reference Documents

[Gas DSR Methodology v7.0](#)

[Final Modification Report 0822](#)

[Final Modification Report 0833](#)

[Final Modification Report 0844](#)

[Final Modification Report 0845](#)

The most recent DSR Options Tender Report which includes price and volume data can be found on the NGT website [here](#)

Further information on gas DSR can also be found on the NGT website [here](#)

Knowledge/Skills

An understanding of the DSR rules and previous reforms / modification and emergency arrangements would be helpful.

5 Solution

The UNC (and DSR Methodology Statement) will be modified to enable NGT to enter into contractual arrangements with aggregators based on the following rules.

The DSR contractual arrangements between NGT and the aggregators will sit outside of the UNC (in the same way they do for Consumer DSR).

Role of the User (Shipper)

The Registered User would need to be informed by the Consumer (potentially via the supplier) of any DSR exercise in sufficient time to make appropriate Output Nominations / Renominations and potentially adjust its gas procurement and Input Nominations.

Conditions of NGT/Aggregator Contract

NGT envisages consulting on draft terms (standard conditions of contract) that would govern DSR arrangements between NGT and aggregators to ensure no undue preference with aggregators, Consumers and Users concurrently with this Modification.

Products and execution mechanism

All existing DSR products are proposed to be made available through the means of aggregation. Therefore, this would include Within Day, D-1 and D-5 Products.

The existing exercise of Shipper DSR via a locational trade on the OCM will not be suitable for exercise directly with aggregators if the aggregator is not a shipper. NGT consider it to be unlikely that the Aggregators will be subscribers to the OCM or Registered Users due to the level of interest from Shippers in the 2023 DSR Tender and direct feedback during engagements. Therefore, NGT propose that exercising DSR with aggregators is to be completed via an instruction and would not be delivered as an energy trade.

Funding & Payment

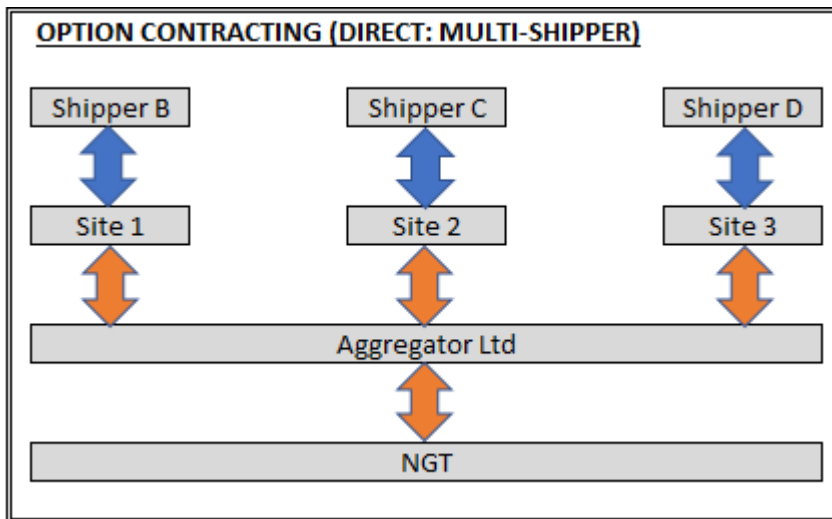
The costs of DSR options via the proposed NGT/Aggregator arrangements will be included in the aggregate DSR costs which are subject to the materiality threshold beyond which Ofgem consent would be required as explained in the DSR Methodology statement. As DSR is a tool used to maintain an operational balance, NGT considers that it should remain cash-neutral to DSR option and exercise costs, hence such costs should be funded via Balancing Neutrality (i.e. socialised across all Users). The new arrangements need to be structured such that NGT, via the CDSP, may make DSR option and exercise payments directly to Aggregators and to be passed onto to Consumers.

Scope of the Aggregator Role

1. A party who can group and offer a DSR Reduction Quantity from Daily Metered (class 1 and 2) non-domestic consumers to NGT on behalf of more than one eligible consumer.
2. The party fulfilling the role of an aggregator does not need to be a Registered User.
3. There is no maximum number of aggregators that NGT can enter into contractual arrangements with.
4. Aggregators must be able to offer a DSR Reduced Quantity of 100,000 kWh/d or greater per portfolio of demand they offer in the annual tender (Invitation to Offer).
5. A Consumer may be included in one aggregation arrangement only.
6. An aggregator may not submit more than one DSR Option Offer in respect of the same Consumer.
7. Aggregators shall be responsible for distributing Option and Exercise payments to consumers within their portfolio.
8. Aggregators shall be accountable for non-compliance and therefore any charges that are applied after the Winter Period.
9. All communications from NGT will be directly to the aggregator. The aggregator shall be required to pass any relevant communications onto Consumers. Consumers are also expected to pass on relevant communications to their Users and Supplier (if required).

Aggregation Model

10. A party acts as an aggregator for eligible consumers within multiple Users portfolios.
11. All communications from NGT will go to the aggregator and the aggregator shall communicate to Consumers within their portfolio.
 - a. Due to the existing communication streams between Consumers and Users, Consumers shall make any necessary communications to them associated to being exercised.
 - b. New contractual relationships shall need to be established between NGT and aggregators and aggregators and Consumers (as highlighted in the schematic below).
12. The below schematic provides an overview communication streams. Blue arrows represent existing contractual relationships and orange represent new contractual relationships. The Consumers that the aggregator contracts with do not have to have the same Registered User.



Consumer Eligibility

13. All Class 1 and 2 Consumers (DM Non-Domestic Consumers) are eligible to participate in the annual Invitation to Offer via an aggregator and there is no minimum or maximum number of Consumers who can be grouped by an aggregator.

Procurement Process

14. The aggregator may participate in the annual DSR Options tender, in addition to Shipper Users.

Assessment of Offers

15. DSR Option Offers from aggregators will be assessed on the same basis as those from Shipper Users and Consumers as are set out in the UNC.

Notification

16. NGT shall notify an aggregator of acceptance or rejection of their DSR Option Offer within the same timescales as those which apply for Shipper Users and Consumers.

17. NGT shall notify the relevant GDN of any exercised aggregator offers.

18. The Consumer shall notify the Registered User of any DSR exercise.

Exercise of Offers

19. The triggers used to exercise DSR with aggregators holding DSR Option Offers shall follow the same rules as those which apply for Consumer and Shipper DSR.

Funding Arrangements, Invoicing and Cashout

20. An aggregator’s option fee shall be decided by the aggregator, informed by its negotiations with the consumers that would deliver the demand reduction.

21. Option and Exercise fees payable to aggregators shall be funded by Balancing Neutrality.

22. The existing payment mechanism introduced as part of UNC0844 shall be utilised which permits the CDSP to invoice non-UNC parties. These arrangements are already documented in the UNC.

23. If an aggregator has failed to deliver the demand reduction when called, it shall be liable to return a proportion of the Option fee to Balancing Neutrality on the same basis as applies to Users and Consumer DSR. Where such a liability is incurred and an associated charge remains unpaid by the aggregator, the relevant sum shall be mutualised among all Users in accordance with the existing CDSP process for

managing balancing neutrality bad debt. Should such payment later be recovered, Users would receive the appropriate balancing neutrality credits.

24. Any credit requirements that may apply for Consumer DSR shall be applied equivalently to aggregators.

Reporting

25. Additional reporting data items shall be included:

- a. Confirmation of whether the offer comes from an Aggregator,
 - i. If yes, the number of consumers who make up the portfolio of demand
 - ii. Confirmation of the sector the consumers are in eg Steel, Ceramics etc.

NGT-Aggregator DSR Contract

26. NGT proposes to develop and consult upon the NGT-Aggregator DSR Contract concurrently with the UNC Modification. The contract will contain standard terms and conditions for the aggregator and NGT in respect of DSR Options.

6 Impacts & Other Considerations

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

N/A

Consumer Impacts

This Modification Proposal will provide eligible consumers with an additional route to voluntarily reduce their gas consumption in return for payment via DSR Option and Exercise payments. Greater levels of participation and therefore increased levels of demand that NGT can procure through DSR results in improved resilience and a reduced likelihood of a supply imbalance resulting in a GDE which would be detrimental to the industry and society as a whole.

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

Feedback from some Consumers and trade associations has suggested that the current DSR arrangements which require consumers to be able to deliver a minimum of 100,000 kWh/d worth of reduction is preventing some consumers, who are actively engaged and willing to participate in DSR, from doing so. Some sectors have suggested that if NGT introduce aggregation, it will allow them to participate as a group to achieve the daily minimum offer quantity rather than individually and further enhanced our pre-emergency tools. If this Modification Proposal is not implemented, it may result in a group of consumers who wish to offer NGT a DSR quantity are unable to do so. Therefore, this Modification seeks to remove one of the barriers to entry and enable an increased quantity of DSR from eligible consumers.

Impact of the change on Consumer Benefit Areas:	
Area	Identified impact
<p>Improved safety and reliability</p> <p>Existing DSR arrangements have secured a relatively low volume of demand which NGT can call upon in the event of a forecast supply shortfall.</p> <p>This low volume of demand that can be reduced voluntarily could mean that the situation escalates towards a GDE, and the associated increased risks to network safety and reliability which result from falling pressures.</p> <p>This Modification is designed to further encourage voluntary DSR take-up (increasing the DSR volume) such that this pre-emergency tool would be available to NGT in preventing such an escalation and mitigate such risks materialising, which could potentially impact all consumer groups</p>	Positive
<p>Lower bills than would otherwise be the case</p> <p>The impacts on consumer bills from a GDE are unquantifiable in advance but likely to be significant as wholesale gas prices rise in response to the insufficient supply situation that would trigger such an event. The payment to enable voluntary DSR that this Modification would enable would provide a mitigation against such an impact.</p>	Positive
<p>Reduced environmental damage</p> <p>We do not envisage any quantifiable impact on the environment as a result of this Modification. There is potential for additional consumers to offer DSR that may deliver it via fuel-switching to a more polluting source than natural gas but this is unknown at this stage.</p>	Unknown / negligible
<p>Improved quality of service</p> <p>Declaration of a GDE resulting in compulsory firm load shedding would result in a significant impact on quality of service that for those parties that may be unable to continue their gas offtake. This Modification helps to mitigate such a scenario arising.</p>	Positive
<p>Benefits for society as a whole</p> <p>The potential impact on heating capability, gas fired electricity generation, interruption to industrial production and knock-on impacts into wider supply chains that a GDE is capable of causing could result in a major economic and societal impact for the country. Putting in place additional means of striking DSR arrangements is expected to secure additional volumes of DSR which is available at times of system stress would provide additional mitigation against such risks arising.</p>	Positive

Cross-Code Impacts

An equivalent Modification may be required to the iGT Code.

Central Systems Impacts

A means of invoicing aggregators will be required. NGT consider it may be appropriate to utilise existing arrangements introduced by UNC0844 where the CDSP were able to invoice the Consumer directly from the Balancing Neutrality bank account.

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.	None
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 Proposal, which is designed to increase the number of consumers who can participate in DSR and consequently, increase the available volume that NGT can procure during an annual tender event. Therefore, help to mitigate the risks associated to supply shortages escalating into a GDE. If a GDE was to occur, compulsory firm load shedding is likely to be utilised by the NEC which would result in disruption and inefficiency in the operation and use of the Network due to some parties who were planning on using gas, would be prevented from doing so.

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 the Modification Proposal because it can help mitigate the risks of a GDE occurring. If a GDE did occur, it would likely result in compulsory firm load shedding of NTS and LDZ embedded Consumers. Therefore, resulting in disruption and inefficiency across gas networks in GB.

8 Implementation

Implementation is sought by July 2024 ideally to allow time for the changes to be live for the 2024 annual Invitation to Offer (tender) event. This will be subject to an assessment of systems and process impacts.

Consequential changes to NGT's Gas DSR Methodology statement will also be required and consultation on these changes is proposed to be being conducted following approval of this Modification.

9 Legal Text

Legal text will be provided following workgroup discussions and further development of the solution.

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.