



Making a positive difference  
for energy consumers

To National Grid Gas Transmission  
and other interested parties

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## **Decision to not reject the modified gas transmission Network Output Measures (NOMs) methodology**

### **Background**

Network Output Measures (NOMs) relate to a licensee's existing non-load related assets and associated investments. National Grid Gas Transmission (NGGT), the gas transmission licensee, is required by Special Condition 7D of its gas transporter licence to have and maintain a NOMs methodology that enables it to:

1. monitor assets performance in relation to the development, operation and maintenance of its transmission network,
2. assess historical and forecast network expenditure on the pipeline system<sup>1</sup>,
3. conduct comparative analysis of performance over time and across asset types and geographic regions,
4. communicate relevant information, regarding the pipeline system, to its stakeholders.

The NOMs methodology must be designed, as outlined in special condition 7D part C, to enable to the evaluation of the following measures:

- a. Network Asset Condition
- b. Network Risk
- c. Network Performance
- d. Network Capability, and
- e. Network Replacement Outputs.

NGGT published a modified NOMs Methodology<sup>2</sup> (the 'Methodology') for consultation on its 'National Grid Talking Networks' website on 03 April 2018<sup>3</sup>. The consultation ran for 46 days and

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<sup>1</sup> The gas pipe-line system operated by the licensee (acting as a gas transporter). In the context of NOMs, the pipe-line system refers to the assets managed by NGGT for the purpose of transporting gas.

<sup>2</sup> The pre-existing NOMs Methodology was developed prior to the start of RIIO-1. It was utilised to generate the volume based Network Replacement Output targets that NGGT are currently working towards.

<sup>3</sup> [National Grid Talking Networks](#)

closed on 18 May 2018 with three responses received from Citizens Advice, Centrica, and Npower<sup>4</sup>.

NGGT did not make further amendments to its modified NOMs Methodology that were directly related to consultation responses it received. On 22 May 2018 it submitted the modified Methodology with only minor editorial changes for the Authority's approval. In addition, NGGT submitted an explanation, as required under paragraph 7D.11(d) of SpC 7D, of how the proposed modified Methodology would better facilitate the achievement of the NOMs Methodology objectives. The modified Methodology, NGGT's explanation of how it facilitates achievement of the NOMs Methodology objectives and NGGT's summary of representations received have been published on Ofgem's website alongside this letter.

### **Our decision**

In our view the submitted NOMs Methodology significantly increases transparency around NGGT's asset management activities.

While we acknowledge the ongoing need to review and further develop the NOMs Methodology, we are satisfied that the proposed Methodology better facilitates the achievement of the NOMs Methodology Objectives. We have therefore decided not to issue a direction to NGGT to not implement the modifications. Consequently, the modified NOMs Methodology (version no. v2.0) comes into effect from 19 June 2018 and NGGT is required to implement it from this date.

It is important that the Methodology is robustly validated and NGGT's existing asset volume targets are appropriately translated to monetised targets, in order that the NOMs Methodology as submitted is used to effectively implement the NOMs Incentive Mechanism and to objectively and transparently inform NGGT's investment planning. Once implemented, the NOMs Methodology will allow us to interrogate NGGT's investments and future plans and to assess whether they are justified.

An overview of our expectations for future related work are provided in Appendix 1.

If you have any questions in respect of this decision please contact Thomas McLaren (contact details above).

Yours faithfully,

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Min Zhu,  
Deputy Director, Systems & Networks

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<sup>4</sup> A summary of the representations received through consultation contained in Appendix 2.

## Appendix 1: Further NOMs related work

Following the decision not to reject the NOMs Methodology we expect NGGT to proceed with the intended work schedule to validate the methodology, rebase Network Replacement Output targets, engage with the closing of RIIO-1 and submitting RIIO-2 development as outlined below. We expect NGGT to continue to engage with us in order to agree full requirements and timeframes for each of these workstreams.

### Calibration, Testing and Validation (CTV) of Methodology

Having worked with NGGT throughout its development process we are satisfied that the Methodology works from a logical perspective and better facilitates the NOMs objectives. However, until it has been thoroughly calibrated, tested, and validated<sup>5</sup>, we cannot be entirely sure to what extent its modelled outputs can be relied upon.

Within the NOM's methodology, NGGT references the desire to complete additional sensitivity analysis and validation work to ensure data models and associated calculations are optimised. We expect NGGT to complete this work and to submit a report containing the expanded validation work discussed in the NOMs Methodology documents. Specifically, we expect NGGT to adequately test that the Methodology will give reliable results for realistic supply and demand scenarios as well as scenarios where supply and demand are variable over time.

There is a possibility that CTV may lead to requirements for further modification of the NOMs Methodology. However, due to extent of the work and expert scrutiny that has gone into the development process to date, currently we would not expect any required modifications to be significant.

### Rebasing

NGGT's NOMs targets (Network Replacement Outputs) are set out in Table 1 of Special Condition 7E of its Gas Transporter Licence. These targets were set in accordance with the NOMs Methodology that was in effect at the start of RIIO-GT1. The targets are defined as required volume of assets in four replacement priority (RP) categories ranging from RP1 (asset is new or as good as new) to RP4 (asset is in need of replacement). As NGGT's performance will be assessed using the new NOMs Methodology, it is necessary to convert the existing targets to equivalent monetised ones.

We expect NGGT to proceed with the rebasing of their Network Replacement Output (NRO) targets<sup>6</sup> using their validated NOMs methodology. When completing the rebasing exercise we expect NGGT to adhere to the following general principles:

1. Rebased targets shall be as equally challenging as the original ones for NGGT to meet and outperform,
2. Same principles shall be applied as those used in RIIO-T1 Business Plan, and
3. Direct translation of original investment plan shall be made wherever appropriate

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<sup>5</sup> For clarification purposes, the methodology outputs are expected to be validated against NGGT's expectations. In instances where expectations are not met, the inputs, data or models, should be recalibrated, tested and then validated against NGGT's expectations.

<sup>6</sup> Special Condition 7E, Part A: Table 1

We expect NGGT to propose and agree the methodology for rebasing with us ahead of submission of the final rebased targets in January 2019. We also expect agreement on the appropriate inputs to the model (such as included failure modes, and supply and demand scenarios). We currently expect to consult on our intention to approve or reject the rebased targets in early 2019.

#### Further development

To ensure that the work completed and the decisions made are fully auditable, we expect NGGT to maintain a good record keeping. This is fundamental to the implementation of the NOMs incentive mechanism for RIIO-1 and for development of future regulatory arrangements.

We expect NGGT to continue to review and modify its NOMs methodology in accordance with its licence requirements (Special Condition 7D.8). In particular we expect it to keep under development the areas it has highlighted within the NOMs Methodology where it intends to improve, such as for supply and demand scenarios to better reflect likely developments.

As stated in our RIIO2 Framework Consultation<sup>7</sup>, we expect network companies' investment plans, as well as our regulatory arrangements, to be driven more explicitly by the balance between cost of asset intervention and the developed output measures that reflect long-term consumer value. We intend to hold further discussions with NGGT on how best to utilise the NOMs Methodology ahead of its RIIO-GT2 business plan submission.

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<sup>7</sup> Please see on Ofgem website:

[https://www.ofgem.gov.uk/system/files/docs/2018/03/riio2\\_march\\_consultation\\_document\\_final\\_v1.pdf](https://www.ofgem.gov.uk/system/files/docs/2018/03/riio2_march_consultation_document_final_v1.pdf)

## Appendix 2: Summary of Consultation Responses

NGGT's consultation ran for 46 days, 03 April 2018 to 18 May 2018, and received three representations; Citizens Advice, Centrica and Npower. The tabled discussion, below, was provided by National Grid Gas Transmission (NGGT) with the submission of their proposed NOMs modification.

Organisation	Summary of representation received	NGGT's discussion on the representation received through consultation
Citizens Advice (CitA)	-	No change to our methodology has been made following the response from CitA.
	CitA are broadly supportive, suggesting reporting investment intentions are clear and the general approach of relying on financial proxies for risk valuation to have clear advantages.	-
	The view of CitA is that the methodology delivers improved transparency of reporting investment benefits allowing interested stakeholders to review the extent value is optimised by asset investment.	-
	With regulator intention to move away from RPI indexation for RIIO-GT2, CitA encourages NGGT to reconsider use of CPI or CPIH indexation within the methodology and to consider the impacts this might pose from a consumer perspective.	We will review our approach for inflating the social value of safety risk in line with CPI or CPIH with our wider RIIO-GT2 plan. Clearly a consistent approach will need to be taken for all price base adjustments. We do not believe this would have a material impact on Monetised Risk but we will confirm this by further model sensitivity testing.
	CitA queried what considerations NGGT have made for including risks associated with future stranded assets in the methodology.	All assets in our asset register are in scope for the NOMs Methodology. We continue to maintain assets whilst they have any residual risk to customers. The decision to fully decommission assets (and remove them from ongoing maintenance) is taken outside of the NOMs Methodology.

Centrica	-	No change to our methodology has been made following the response from Centrica
	Centrica's view is that providing a focus on RIIO-GT2 needs and the requirement to ensure the methodology is wholly fit-for-purpose for developing the business plan and undertaking asset investment during RIIO-GT2.	We state in the document that the methodology has been tested against a single supply/demand scenario, but for ongoing reporting and RIIO-GT2 planning, appropriate supply/demand scenarios will be chosen that do not disadvantage customers. The approach taken to model these supply/demand scenarios will be identical, using different data inputs and producing alternative Monetised Risk outputs (and hence potentially different investment plans), The NOMs Methodology has been developed specifically to provide this flexibility to model and test alternative scenarios. We will explore this further during model sensitivity testing and through development of our RIIO-GT2 investment plans.
	Centrica recommended the methodology is tested against a greater range of credible supply and demand scenarios, reflecting the great variability.	
	Centrica recommended supply and demand scenarios and consequential failure rates are not held constant during a price control period, to avoid risk driven by exogenous factors (providing a distorted view of network risk).	
	Centrica recommended the NOMs Incentive should be 'switched off' for RIIO-GT1. Little opportunity to respond to targets and may create a material risk of inappropriate gains or losses.	The comment regarding switching off NOMs incentives for RIIO-GT1 should be addressed directly with Ofgem.

Npower	-	No change to our methodology has been made following the response from Npower.
	Npower understood how risk monetisation would be used to identify most cost beneficial interventions.	-
	Npower agreed that using measurement of Monetised Risk to show what value gleaned from investment, but Npower could not understand how information would be used to demonstrate the optimal outcome delivered and requested that suitable targets should be agreed with Ofgem.	The NOMs Methodology is fundamentally about how we convert current “engineering” NOMs outputs into a transparent Monetised Risk measure which facilitates risk trading between asset groups and enables optimisation of investment plans. The Monetised Risk approach delivers a structured method for financially valuing the benefits delivered by investments, both in rms of direct costs to NGGT and indirect costs to wider society. Our approach for optimising RIIO-GT2 Asset Health investments will be communicated further outside of this NOMs Methodology consultation.