Consultation

Gas Distribution Network Output Measures Rebasing Consultation

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We are consulting on our intention to approve the Rebased Network Outputs for Gas Distribution Network operators under Part E of Special Condition 4H of the Gas Transporter Licence. We would like views from people with an interest in Gas Distribution Network Output Measures, in particular from licensees and gas network customers. We also welcome responses from other stakeholders and the public.

This document outlines the scope and purpose of the consultation, the questions we would like you to consider, and explains how you can get involved. Once the consultation is closed, we will consider all responses. We want to be transparent in our consultations. We will publish the non-confidential responses we receive alongside a decision on next steps on our website at **Ofgem.gov.uk/consultations**. If you want your response – in whole or in part – to be considered confidential, please tell us in your response and explain why. Please clearly mark the parts of your response that you consider to be confidential, and if possible, put the confidential material in separate appendices to your response.

Contents

1. Introduction

Network Output Measures

Network Outputs

1.1. RIIO (Revenue = Incentives + Innovation + Outputs) introduced in October 2010 by Ofgem is an outputs-led price control framework. The RIIO price control for the gas distribution sector, RIIO-GD1, runs from 1 April 2013 until 31 March 2021. It is important that throughout the RIIO-1 period, the network companies understand what they are expected to deliver, and are held to account for delivery. One of the key areas in this respect are the Network Output Measures (NOMs), which help to quantify the impact of the companies' asset management work, and enable Ofgem and stakeholders to see what the network companies have done in respect of the work they have been funded to deliver.

1.2. We[1] have set out the arrangements related to NOMs in the licences for all gas and electricity networks. As part of these arrangements, licensees have been set Network Outputs, i.e. targets, that they are required to deliver by the end of the price control. Gas Distribution Network operators (GDNs[2]) are required to deliver the Network Outputs[3] in accordance with the specifications set out in the "Workbook"[4] by the end of RIIO-GD1. The Network Outputs reflect the impact of the asset intervention workload (usually replacement or refurbishment) that GDNs have been funded to deliver in RIIO-GD1, and represent a target level of risk reduction ("Risk Delta") to be delivered through interventions on 15 NOMs related asset categories.[5] The Network Outputs are based on each of the GDN's own methodologies for assessing the health and criticality of their network assets and the impact of their asset interventions on these parameters. These target Workbooks were published on Ofgem's website on 1 February 2013.[6]

1.3. When we published these Workbooks, the intention was that they would align with workload allowances set out in our RIIO-GD1 Final Proposals.[7] While this was substantially the case, through the course of this rebasing process we discovered that some elements did not fully align. It has therefore been necessary to correct the target misalignment before concluding our rebasing assessment. We consulted separately on this issue[8] and published modified Workbooks that fully align with the

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[1] The Gas and Electricity Markets Authority. Ofgem is the Office of the Authority. The terms "Ofgem" and "the Authority," "we" and "us" are used interchangeably in this letter.
[2] The terms "GDNs" and "Licensees" are used interchangeably. They refer to the onshore gas distribution network operators (Cadent Gas Limited, Northern Gas Networks Limited (NGN), Scotland Gas Networks Plc (owned by SGN), Southern Gas Networks Plc (owned by SGN) and Wales & West Utilities Limited (WWU)).
[3] Special Licence Condition 4H. Specification of Network Outputs
[4] The "Workbook" is comprised of asset volumes distributed, based on their health and criticality, onto 5x4 tables. For each asset category, the GDNs have stated their price control start position (2013) and their view of the price control end position (2021) for both with and without intervention scenarios.
[5] These are: Block Valves, Sleeves (Nitrogen & other), LTS Pipelines – Piggable, LTS Pipelines – Non Piggable, Distribution Mains (Iron), Distribution Mains (PE), Distribution Mains (Steel), Distribution Mains (other), Services, MOB Risers, NTS Offtakes, PRSs, District Governors, I&C Governors and Service Governors.
[6] RIIO-GD1 special conditions of the gas transporter licences held by the Gas Distribution Network (GDN) operators
[7] https://www.ofgem.gov.uk/publications-and-updates/riio-gd1-final-proposals-%E2%80%93-overview
[8] https://www.ofgem.gov.uk/publications-and-updates/consultation-alignment-gas-distribution-networks-gdns-workbooks-final-proposal-decisions

RIIO-GD1 Final Proposals on 19 December 2018.[9] We refer to these corrected Workbooks throughout the rest of this document as the "Original Targets".

Development of NOMs Methodology

1.4.   While the different methodologies (i.e. the old NOMs methodologies) that underpinned the GDNs' Original Targets were based on common principles and considered common factors, they did not allow for robust comparisons across different asset categories and across GDNs. For this reason, we directed the GDNs[10] to develop a common methodology that would enable such comparisons.

1.5.   On 14 September 2017, the Authority approved the GDNs' NOMs Methodology[11] (i.e. the new common NOMs methodology), which utilised a monetised risk approach[12] to help address the comparability issue.

NOMs Incentive Methodology and Rebasing

1.6.   On 6 December 2018, the Authority published the decision on the NOMs Incentive Methodology.[13] As part of RIIO-GD1 close-out, we will need to assess the GDNs' performances against their Network Output targets and calculate the value of any revenue adjustments that might be due under the NOMs Incentive Methodology. In order to allow us to carry out this assessment, we need to ensure that both the NOMs target data and the reported actual delivery data are derived on the same basis (i.e. according to the same methodology) and expressed in the same terms. GDNs' actual delivery at the end of RIIO-GD1 will be reported in accordance with the new common NOMs Methodology. GDNs are required by their licences to convert (rebase) their Original Targets to equivalent monetised risk targets to enable like-for-like comparison.[14] We refer to the monetised risk targets throughout the rest of this document as the "Rebased Targets".

Licence Requirements for Rebasing

1.7.   Special Condition 4H.13 sets out the requirements for the GDNs' Rebased Network Outputs, i.e. the Rebased Targets. The Rebased Targets must be:

1.   consistent with the NOMs Methodology;

2.   consistent with the Authority's assumption for asset integrity and replacement expenditure set out in Final Proposals;

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[9] https://www.ofgem.gov.uk/publications-and-updates/decision-alignment-gas-distribution-networks-gdns-workbooks-final-proposal-decisions
[10] Direction to GDNs under paragraph 4G.20 of SpC 4G dated 15 December 2015: https://www.ofgem.gov.uk/publications-and-updates/gas-network-output-measures-methodology-decision
[11] Ofgem's decision not to reject modified gas distribution Network Output Measures (NOMs) methodology: https://www.ofgem.gov.uk/publications-and-updates/notice-intention-not-reject-modified-gas-distribution-network-output-measures-noms-methodology
[12] Where risk values are represented in monetary terms as a 'common currency' to enable like-for-like comparison between assets and asset groups. Please refer to methodology linked above for details.
[13] https://www.ofgem.gov.uk/publications-and-updates/decision-network-output-measures-noms-incentive-methodology
[14] Special Licence Condition 4H. Part E: Rebasing

3.   equally as challenging as the Original Targets, and

4.   in the same format as the Workbook.[15]

1.8.   The GDNs submitted an initial set of Rebased Targets to Ofgem on 31 July 2017. Since then we have worked with them to finalise their rebasing methodologies and to agree a standard data format[16] that allows us to compare their Rebased Targets against the Original Targets. GDNs submitted their final Rebased Targets for Authority approval in September 2018.[17]

1.9.   Our proposed determination is to approve these Rebased Targets for each GDN. The reason for our proposed determination is that, following our assessment, we consider the GDNs' Rebased Targets meet the requirements of Special Condition 4H.13 of the licence. The effect of our proposed determination will be that the Authority will use the Rebased Targets instead of the Original Targets in assessing whether a GDN has materially over or under-delivered against its Network Outputs and whether adjustments should be made to the GDN's allowed revenues in RIIO-GD2 under the NOMs Incentive Mechanism.

What we are consulting on

1.10.   This consultation seeks views on the following questions:

1.   Do you agree with our rebasing assessment methodology? Where you disagree, please clearly set out your reasoning and specify other considerations/factors we should take into account. (**Section 3**)

2.   Do you agree with our view that the Rebased Targets satisfy the licence requirements? Where you disagree, please clearly set out your reasoning. (**Section 4**)

3.   Do you agree with our intention to approve the Rebased Targets for each Licensee? Where you disagree, please clearly set out your reasoning. (**Section 5**)

How to respond

1.11.   We want to hear from anyone interested in this consultation. Please send your response to the person or team named on this document's front page.

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[15] In the context of NOMs methodology development, we interpret 'the same format as the Workbook' as the representation of Rebased Targets in the same 5x4 Health/Criticality format as used to represent the Original Targets. For both the Original Targets and the Rebased Targets the 5x4 matrix allows us to observe the distributions of risk in the GDNs' asset bases under the relevant methodology.
[16] Each GDN submitted asset volumes as well as monetised risk as part of their Rebased Targets submission. This data was provided in an Excel template that utilised a 5x4 asset health/criticality matrix in the same format as the Original Targets.
[17] Cadent re-submitted its Rebased Targets in February 2019 to rectify minor errors in its previous version.

1.12. We've asked for your feedback in each of the questions throughout. Please respond to each one as fully as you can.

1.13. We will publish non-confidential responses on our website at www.ofgem.gov.uk/consultations.

Your response, data and confidentiality

1.14. You can ask us to keep your response, or parts of your response, confidential. We'll respect this, subject to obligations to disclose information, for example, under the Freedom of Information Act 2000, the Environmental Information Regulations 2004, statutory directions, court orders, government regulations or where you give us explicit permission to disclose. If you do want us to keep your response confidential, please clearly mark this on your response and explain why.

1.15. If you wish us to keep part of your response confidential, please clearly mark those parts of your response that you *do* wish to be kept confidential and those that you *do not* wish to be kept confidential. Please put the confidential material in a separate appendix to your response. If necessary, we'll get in touch with you to discuss which parts of the information in your response should be kept confidential, and which can be published. We might ask for reasons why.

1.16. If the information you give in your response contains personal data under the General Data Protection Regulation 2016/379 (GDPR) and domestic legislation on data protection, the Gas and Electricity Markets Authority will be the data controller for the purposes of GDPR. Ofgem uses the information in responses in performing its statutory functions and in accordance with section 105 of the Utilities Act 2000. Please refer to our Privacy Notice on consultations at **Appendix 4**.

1.17. If you wish to respond confidentially, we'll keep your response itself confidential, but we will publish the number (but not the names) of confidential responses we receive. We won't link responses to respondents if we publish a summary of responses, and we will evaluate each response on its own merits without undermining your right to confidentiality.

General feedback

1.18. We believe that consultation is at the heart of good policy development. We welcome any comments about how we've run this consultation. We'd also like to get your answers to these questions:

1. Do you have any comments about the overall process of this consultation?
2. Do you have any comments about its tone and content?
3. Was it easy to read and understand? Or could it have been better written?
4. Were its conclusions balanced?
5. Did it make reasoned recommendations for improvement?
6. Any further comments?

Please send any general feedback comments to stakeholders@ofgem.gov.uk

How to track the progress of the consultation

You can track the progress of a consultation from upcoming to decision status using the 'notify me' function on a consultation page when published on our website. Ofgem.gov.uk/consultations.

Once subscribed to the notifications for a particular consultation, you will receive an email to notify you when it has changed status. Our consultation stages are:

| Upcoming | ▶ | Open | ▶ | Closed (awaiting decision) | ▶ | Closed (with decision) |

2. GDNs' Rebasing Methodologies

Section summary

To undertake the rebasing exercise, the GDNs had to first develop a sectoral rebasing methodology that set out the guiding principles, overall process and potential options for completing the rebasing exercise. Each GDN then developed an individual rebasing methodology to supplement the sectoral methodology. We have reviewed the submitted methodologies and agree that they describe suitable approaches for deriving the GDNs' Rebased Targets.

The aim of this section is to present an overview of the sectoral methodology, the company-specific methodologies and their relationship to one another, and to set out our views on these methodologies.

Guiding Principles for Rebasing Methodologies

2.1.   GDNs' rebasing methodologies should be developed according to the rebasing requirements in Special Condition 4H.13 as listed in paragraph 1.7. In addition, building on the licence requirements, Ofgem and the GDNs agreed the following three additional principles to enable the rebasing exercise to work in practice and to enable us to conduct our assessments:

1.   The GDNs shall use best endeavours to ensure no data errors and to present an accurate reflection of the health and criticality of their assets;

2.   Rebased Targets shall apply same the principles as those applied in RIIO-GD1 Business Plan formulation; and

3.   Rebased Targets shall reflect a direct translation of the asset interventions proposed in the RIIO-GD1 Business Plans, e.g. intervention volumes and types, wherever it is appropriate to do so.

Sectoral Rebasing Methodology and Company-Specific Methodologies

2.2.   Using the above principles, the GDNs developed a Sectoral Rebasing Methodology, which set out the overall process for the GDNs to follow when carrying out the rebasing exercise. This included options for company-specific rebasing approaches, where appropriate.

2.3.   Each GDN then developed its own Company-Specific Rebasing Methodology, which detailed its approach to implementing the Sectoral Rebasing Methodology. This was necessary due to differences in the datasets used by the GDNs (for some GDNs this was the data from the start of RIIO-GD1 and for others it was data collected during the course of the price control). The relationship between the Sectoral and Company-Specific Rebasing Methodologies is illustrated in Figure 1.
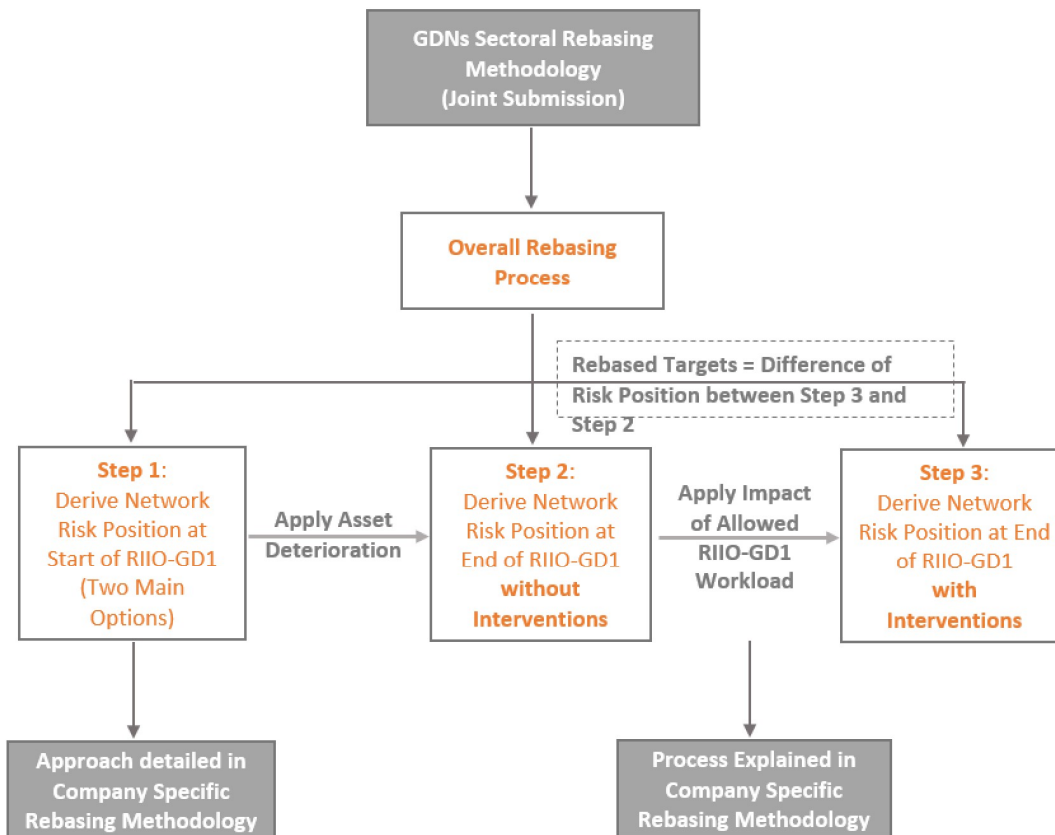
Figure 1: Relationship between GDNs Sectoral and Company-Specific Rebasing Methodologies

2.4.   The GDNs submitted the Sectoral Rebasing Methodology on 27 July 2017 and their Company-Specific Rebasing Methodologies on 31 July 2017.

2.5.   **Appendix 1** provides a high-level summary of the method each GDN applied to rebasing. Further details are available in the accompanying rebasing methodology documents published alongside this consultation.

Our View on the GDNs' Rebasing Methodologies

2.6.   We reviewed the GDNs' Sectoral Rebasing Methodology and agreed with their overall rebasing process. We then examined each Company-Specific Rebasing Methodology and supporting evidence. We are satisfied that each GDN's approach to deriving the start of RIIO-GD1 risk position is appropriate and utilised the most complete and robust data available to it. We are also satisfied that each GDN's approach presented will properly represent the network risk position at end of RIIO-GD1 with/without interventions by using the NOMs Methodology. Therefore, we are of the view that GDNs' methodologies describe suitable approaches for deriving their Rebased Targets.

2.7.   In the next section, we discuss how the Rebased Targets derived from the GDNs' rebasing methodologies are assessed against the licence requirements.

3. Our Rebasing Assessment Methodology

Section summary

The purpose of our rebasing assessment is to assess whether the Rebased Targets are: (1) consistent with the NOMs Methodology, (2) consistent with the Authority's assumption for asset integrity and replacement expenditure set out in Final Proposals, (3) as equally challenging as the Original Targets, and (4) in the same format as the Workbook, i.e. the Original Targets. To determine this, we have developed an assessment methodology which includes both quantitative analysis and qualitative review.

This section discusses our rebasing assessment methodology and seek views on it.

Question 1: Do you agree with our rebasing assessment methodology? Where you disagree, please clearly set out your reasoning and specify other considerations/factors we should take into account.

Rebased Network Outputs Requirements

3.1. Special Condition 4H.13 sets out the four requirements for the GDNs' Rebased Network Outputs, i.e. the Rebased Targets, as listed in paragraph 1.7. Our assessment considers if the submitted Rebased Targets meet each of these requirements.

3.2. The relationship between the Original Targets and Rebased Targets is illustrated in Figure 2. The Original Targets were volume-based outputs under the old NOMs methodologies (as explained in paragraph 1.4), while the Rebased Targets use a monetised risk approach under the NOMs Methodology (i.e. the new common NOMs methodology explained in paragraph 1.5). However, despite the format difference, fundamentally the two sets of NOMs targets are based on consistent asset integrity assumptions and represent the same allowed workload the GDNs were funded to deliver in RIIO-GD1.
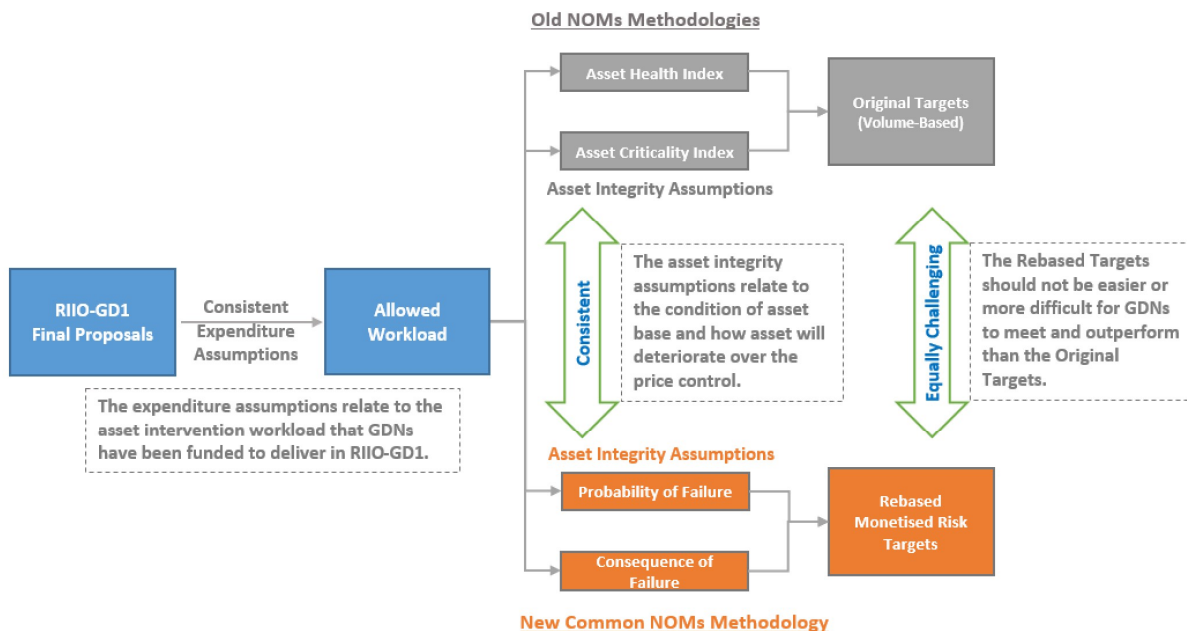
Figure 2: Relationship between Original Targets and Rebased Targets

Rebasing Assessment Approach

3.3.   Our assessment first considered requirements (1) and (4) as listed in paragraph 1.7. The GDNs' Rebased Targets are derived using the monetised risk approach in the NOMs Methodology; as such, we consider this satisfies the requirement for them to be consistent with the NOMs Methodology. As regards the requirement for the Rebased Targets to be in the same format as the Workbook, the GDNs' Rebased Targets were submitted in a standard rebasing data template, which is the same format as the original Workbook. We are therefore satisfied that these two requirements have been met.

3.4.   As for the other two remaining requirements, no single test can by itself confirm that the Rebased Targets are 'consistent with the Authority's assumption for asset integrity and replacement expenditure set out in Final Proposals', and are 'as equally challenging as the Original Targets'. We have therefore adopted a two-stage assessment to considers if the submitted Rebased Targets meet each of these two requirements. First, we carried out quantitative analysis to form an initial view on the Rebased Targets. For cases where the Rebased Targets appeared not to fully meet the requirements, we then proceeded to the second stage qualitative review to allow us to understand whether, in practice, the Rebased Targets were equally challenging and reflective of the FP assumptions.

3.5.   An overview of our rebasing assessment approach is illustrated in Figure 3.
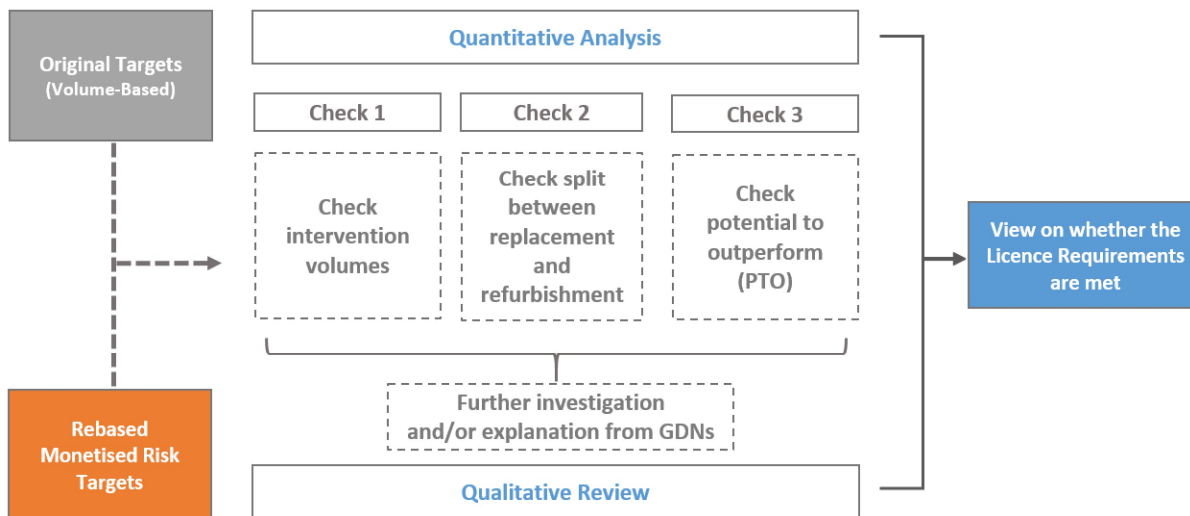
Figure 3: Overview of Rebasing Assessment Approach

Quantitative Analysis

3.6. We developed three indicative quantitative checks that allowed us to form an initial view on the Rebased Targets compared with the Original Targets. It would not be unexpected to see GDNs failing some of the quantitative checks, and so this does not necessarily mean that the equally challenging requirement has not been met. This is because the two sets of targets are based on two very different methodologies.

3.7. We cannot directly assess the monetised risk in the Rebased Targets against the volume outputs in the Original Targets. In order to carry out meaningful like for like comparison between the two sets of targets, it was necessary to consider the asset volumes that underpin the monetised risk (Rebased) Targets and compare these volumes with the Original Target volumes.

3.8. The three quantitative checks we developed are explained below. These were carried out at both individual asset category level and at total network level for each GDN.

- Check 1: The volume of intervention

  This check examined whether the volume of interventions in each NOMs asset category in the Rebased Targets is the same as the Original Targets. Check 1 is considered to be passed where the volumes of interventions are approximately equal.

- Check 2: The intervention split between replacement and refurbishment

   This check compared the proportion of replacement to refurbishment interventions between the Original Targets and the Rebased Targets. Check 2 is considered to be passed where the proportion is equal[18] for each NOMs asset category.

- Check 3: The potential to outperform (PTO)

   Neither Check 1 nor Check 2 considers the health and criticality distribution of the asset base and the relative risk or health/criticality of the assets being intervened on. For Check 3, we calculated a numerical PTO score for each individual asset category. The PTO score indicates the extent to which a GDN could potentially outperform (deliver more risk benefit) by intervening on either higher criticality or worse health assets. As we need to consider both the health and criticality dimensions, we broke this into: Check 3(a), which considers the Rebased Targets from an asset criticality perspective, and Check 3(b), which considers the Rebased Targets from an asset health perspective. We compared the PTO score for the Rebased Targets against the PTO score for the Original Targets. Check 3 is considered to be passed if the Original Target has an equal[19] or higher PTO score than the Rebased Targets.

Qualitative Review

3.9. As explained above, where indicative quantitative checks suggested that the equally challenging and reflective of the FP assumptions requirements had not been met we then moved on to the qualitative phase of our assessment. This involved questions to and discussion with the GDNs on the reasons for any failed tests. As the GDNs are almost three quarters of the way through implementing their original investment plans which were based on the old NOMs methodologies this helped us to understand whether, in practice, moving to the new common NOMs methodology and submitted Rebased Targets gave them greater opportunity to outperform against their targets.

Summary

3.10. We consider our rebasing assessment methodology robustly analyses whether the submitted Rebased Targets meet the licence requirements. A more detailed explanation of our quantitative analysis can be found at **Appendix 2.**

3.11. In the next section, we present the results of our rebasing assessment and set out the rationale for our initial conclusions.

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[18] We allowed 5% difference tolerance for the comparison results in Check 2.
[19] We allowed 5% difference tolerance for the comparison results in Check 3.

4. Our Rebasing Assessment Results

Section summary

This section presents our rebasing assessment results and sets out the rationale for our initial conclusions.

Question 2: Do you agree with our view that the Rebased Targets satisfy the licence requirements? Where you disagree, please clearly set out your reasoning.

GDNs' Rebased Targets

4.1.   The GDNs submitted their Rebased Targets for Authority approval in September 2018.

4.2.   Table 1 below summarises the submitted network level rebased monetised risk position at the end of RIIO-GD1 for each GDN. Full details of the Rebased Targets are available in each GDN's submitted rebasing data published alongside this consultation.

GD Licensees	Monetised Risk (R£m, 2014/15 Price Base) 31 March 2021		
	With Interventions (a)	Without Interventions (b)	Risk Delta* (b − a)
Cadent East of England (EoE)	106.8	141.0	34.2
Cadent London (Lon)	102.3	132.4	30.1
Cadent North West (NW)	78.3	108.0	29.6
Cadent West Midlands (WM)	64.0	84.5	20.4
Northern Gas Networks (NGN)	142.4	207.6	65.1
Scotland Gas Networks (Sc)	94.9	457.1	362.2**
Southern Gas Networks (So)	232.6	309.5	76.9
Wales & West Utilities (WWU)	157.0	207.1	50.1

*Risk Delta is the Rebased Target for each GD licensee.
**The significantly higher Risk Delta for Scotland Gas Networks (Sc) is because of the specific 'Northern Transmission System' project on capacity upgrade which would deliver £306.9m risk reduction.

Table 1: GD Licensees Rebased Targets of Monetised Risk at Network Level

4.3.   As explained in paragraph 3.3 above, we are satisfied that all GDNs' Rebased Targets meet the requirements to be consistent with the NOMs Methodology and to be in the same format as the Workbook. Therefore, the following assessment results demonstrate whether the Rebased Targets meet the other two licence requirements, i.e. 'consistent with the Authority's assumption for asset integrity and replacement expenditure set out in Final Proposals', and 'as equally challenging as the Original Targets'.

Quantitative Analysis Results

4.4.   The quantitative checks' results for each licensee's Rebased Targets at the network level are summarised with RAG (Red-Amber-Green) ratings in Table 2 below.

GD Licensees	Check 1 Intervention Volume	Check 2 Split in Replace & Refurb	Check 3a PTO in Asset Criticality	Check 3b PTO in Asset Health
Cadent EoE	Green	Green	Green	Red
Cadent Lon	Green	Green	Green	Red
Cadent NW	Green	Green	Green	Amber
Cadent WM	Green	Green	Green	Amber
NGN	Green	Green	Green	Red
SGN Sc	Green	Green	Green	Amber
SGN So	Green	Green	Green	Amber
WWU	Green	Green	Amber	Green

Red denotes: quantitative check failure
Amber denotes: marginal quantitative check failure
Green denotes: quantitative check pass

Table 2: RAG Ratings of Quantitative Checks Results

4.5.   All GDNs have passed Checks 1 and 2. The Check 3(a) and 3(b) failures are mainly driven by the distribution mains categories. Our qualitative review therefore focused on these categories.

Qualitative Review Results

4.6.   Having considered the explanations provided by the GDNs, we are satisfied that the Check 3(a) and 3(b) failures are primarily due to the HSE (Health and Safety Executive) programme explained below and as a result we consider the Rebased Targets are equally as challenging as the Original Targets.

1.   HSE programme

The GDNs are legally mandated to deliver the HSE gas iron mains replacement (Repex) programme. The overriding consideration of the Repex programme is improving safety, whereas the NOMs Methodology considers additional environmental and system factors. This leads to some differences in prioritisation of assets between the HSE's Iron Mains Risk Reduction Programme (IMRRP) and the NOMs Methodology. We are satisfied that GDNs cannot take advantage of greater potential to outperform under Rebased Targets and still be compliant with HSE requirements. Therefore, in our view, the Rebased Targets are in practice equally as challenging for the relevant asset categories as the Original Targets.

2.   Other reasons

Apart from the main justification for failures in Check 3(a) and 3(b) above, we have also considered some supplementary explanations as valid qualitative reasons to meet the equally challenging requirement, such as the aggregation effect of sub-assets and an obsolescence effect, which are discussed in detail in **Appendix 3**.

3. Cadent Multi-Occupancy Building (MOB) Riser data

In April 2018, Ofgem launched an investigation[20] into Cadent's record-keeping for MOB risers. This investigation is ongoing and, as such, we are unable to comment on the current status or findings.

Cadent updated their Workbooks to provide the best currently available view of their total asset data for MOB risers. We are therefore satisfied at this point that the changes do not lessen the requirements on Cadent in respect of MOB risers. However, we reserve the right to revisit any decision arising from this consultation depending on the outcome of the MOB risers investigation.

Additionally, in the end of period assessment of RIIO-GD1 we will consider the results of the ongoing record-keeping investigation into Cadent's MOB risers.

4. Downstream Demand Scenario

All GDNs use 1-in-20 peak flow[21] demand scenario under the NOMs Methodology. To ensure the comparability between the Rebased Targets and actual delivery, we expect GDNs to use the same demand scenario and associated modelling approach in the end of period assessment of RIIO-GD1.

The modelling detail of demand scenario GDNs used for their Rebased Targets is presented in Table A-1 in Appendix 3.

4.7. **Appendix 3** provides a more detailed explanation of our assessment results.

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[20] We launched an investigation into Cadent's record keeping on 11 April 2018. Further details can be found at https://www.ofgem.gov.uk/publications-and-updates/ofgem-launches-investigation-cadent-s-record-keeping
[21] Which is defined as "Maximum demand for gas that will occur, on average, in not more than 1 winter in 20 years. This is defined as an average in any period of six minutes, expressed as an hourly rate." in 'Definitions for the gas industry' by The Institution of Gas Engineers and Managers: https://www.igem.org.uk/media/239042/igem-g-4%20edition%202.pdf

5. Conclusions and Our Proposed Next Steps

Section summary

Based on the evidence submitted and the results of our rebasing assessment, we intend to approve the GDNs' Rebased Targets.

Question 3: Do you agree with our intention to approve the Rebased Targets for each GDN? Where you disagree please clearly set out your reasoning.

Our View

5.1.   As discussed in Section 4, we consider that the GDNs' Rebased Targets have demonstrated overall positive outcomes in our quantitative analysis. Where there was a degree of uncertainty for certain individual asset categories, these have been justified to our satisfaction in the subsequent qualitative review.

5.2.   Therefore, we are of the view that overall the Rebased Targets the GDNs proposed are:

1.   consistent with the NOMs Methodology;

2.   consistent with the Authority's assumption for asset integrity and replacement expenditure set out in Final Proposals;

3.   equally as challenging as the Original Targets, and

4.   in the same format as the Workbook, i.e. the Original Targets.

Next Steps

5.3.   We welcome views on the information presented, in particular in response to the specific questions asked in sections 3, 4 and 5. Unless marked confidential, all responses will be published on our website.

5.4.   Following consideration of the representations received during the consultation period, we will make our final decision on the use GDNs' Rebased Targets for use in the NOMs Incentive Mechanism.

5.5.   Our intention is to proceed with the implementing the Rebased Targets as set out paragraph 4H.15 of Special Condition 4H of the gas transporter licence.

Appendices

Index

Appendix 1 – GDNs' Rebasing Methodologies

Sectoral Methodology

To undertake the rebasing exercise, the GDNs had to first develop a sectoral rebasing methodology that set out the guiding principles, overall process and potential options for completing the rebasing exercise. Each GDN then developed an individual rebasing methodology to supplement the sectoral methodology.

Guiding Principles

Please refer to paragraph 2.1 in the main text for the detail of rebasing guiding principles that were agreed between Ofgem and GDNs during the course of the rebasing methodology development.

Overall Rebasing Process

The overall rebasing process explained in the common methodology is illustrated in **Figure A-1** below.
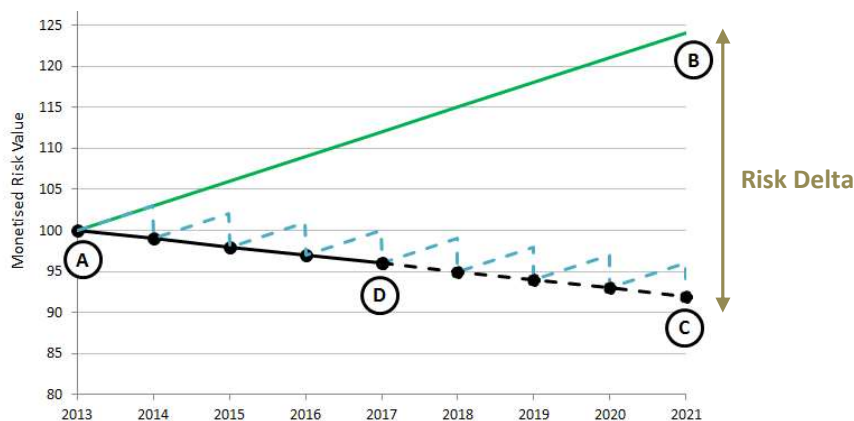
Figure A-1: GDNs' Illustrative Overall Rebasing Process[22]

Where:

Step 1_Starting Position of 2013 (Point A): Derive the monetised risk position at start of RIIO-GD1

Step 2_End Position of 2021 without Interventions (Point B): Derive the monetised risk position without interventions at end of RIIO-GD1

Step 3_End Position of 2021 with Interventions (Point C): Derive the monetised risk position with interventions at end of RIIO-GD1

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[22] Re-produced based on Figure 1 in Section 4 of GDNs Sectoral Rebasing Methodology.

Point D denotes the actual monetised risk position as of 31 March 2017.

Potential Options

In Step 1, there are two broad options presented to derive the monetised risk position at start of RIIO-GD1:

- Method 1: Restating 2013's Asset Base & Condition/Performance

  Describe the asset base and the condition/performance of assets as it was in 2013 and use the NOMs Methodology to calculate the rebased position. There are three sub-methods that aim to reconstruct the 2013 position.

  The first sub-method (Method 1.1) is designed for asset categories where the 2013 asset base and condition/performance is known.

  The second sub-method (Method 1.2) is for instances where the 2013 condition/performance before intervention is known but the asset base is not.

  The third sub-method (Method 1.3) is for instances where the both the 2013 asset base and condition/performance are unknown.

- Method 2: Extrapolation

  Apply the MR methodology to latest available asset base (i.e. 2017) and uses its deterioration as a proxy to extrapolate to the 2013 position by accounting for interventions since start of RIIO-GD1.

In our view, Method 1 is the more appropriate approach where the company has a robust 2013 dataset as this aligns most closely with how the Original Targets were set. However, if a company does not have a sufficiently robust 2013 dataset then applying Method 2 utilising its most accurate dataset is preferable. The method that each GDN uses in Step 1 is determined based on the best data they had available to them to derive robust monetised risk targets. The rebasing methodology states that each GDN will identify the more suitable one of the two methods, depending on the asset data they retain.

In Step 2, regardless of which approach is adopted in Step 1, the monetised risk position without interventions in 2021 is the 2013 position deteriorated by the monetised risk models which have been designed to analyse the impact of asset deterioration on monetised risk.

In Step 3, the monetised risk position with interventions in 2021 is derived by applying the Final Proposal workloads to the 2013 position in monetised risk models to calculate the level of monetised risk with interventions at end of RIIO-GD1.

In the following paragraphs, we provide a high-level summary of each GDN's rebasing approach as outlined within their separate methodology documents. For further details, please refer to each rebasing methodology document accompanying this consultation document.

Company-Specific Methodologies

Cadent Rebasing Methodology

Cadent opted for Method 1 to reconstruct its 2013 position. Cadent identified LTS pipelines, Distributed Mains and Services as categories where the first sub-method (Method 1.1) is applicable. For Offtakes and Governors, the second sub-method (Method 1.2) is applicable. The third sub-method (Method 1.3) is used for MOB risers.

Further information for assumptions associated to each asset category can be found within Cadent's rebasing methodology. In addition, Cadent provides further narrative on assumptions associated with and without investments positions within its rebasing methodology.

NGN Rebasing Methodology

NGN implemented Method 2, using its 2017 asset base and deterioration rate to extrapolate back to the 2013 position. NGN applied this method due to unavailability of robust 2013 datasets to input into the NOMs models. Therefore, NGN determined it to be more accurate to use its known 2017 position and 'back-cast' to the 2013 position using the extrapolation option.

NGN outlines its systematic process to regress to the 2013 position within its rebasing methodology. In addition, NGN provides detail on its intervention representations and assumptions applied for rebasing.

SGN Rebasing Methodology

SGN built upon Method 1 to reconstruct its 2013 position. Within its methodology document, SGN details the known data for each asset category and how this is to be used to determine the 2013 position. In addition, SGN explains replacement and refurbishment interventions, identifying some challenges faced and the assumptions applied.

WWU Rebasing Methodology

As with Cadent and SGN, WWU identified Method 1 as the most suitable approach to reconstruct its 2013 position. WWU details that the second sub-method (Method 1.2) is used to determine LTS Pipelines, Distributed Mains, Services, Offtakes and Governors. The third sub-method (Method 1.3) applied for MOB risers. As with the other GDNs, WWU provides detail on its approach to interventions within its rebasing methodology.

Appendix 2 – Our Quantitative Analysis

Standardised Rebasing Data Submission

In order to allow us to carry out the quantitative analysis in a consistent and transparent manner across the sector, we agreed with GDNs a standard rebasing data template which is to be populated with the Rebased Targets (and supplementary data) in both the volume and monetary format as the 5x4 matrix of asset health/criticality indices (HI/CI) used in the original Workbook.

The standard 5x4 matrix of HI/CI is illustrated in **Figure A-2** below, where the asset risk increases along both the asset health index (from HI1 to HI5) and criticality index (from C4 to C1).

5 x 4 Matrix		HI Banding				
		1	**2**	**3**	**4**	**5**
CI Banding	**4**			Risk Increases		
	3					
	2					
	1					

Figure A-2: The 5x4 Matrix for Original Targets and Rebased Targets

Quantitative Analysis

No single test can by itself confirm that the Rebased Targets satisfy the licence requirements. We have therefore adopted a two-stage assessment. First, we carried out quantitative analysis to form an initial view on the Rebased Targets; Second, for cases where the Rebased Targets appeared not to fully meet all the requirements, we conducted a qualitative review to allow us to understand whether, in practice, the Rebased Targets can fail certain parts of the quantitative analysis but still be considered as satisfying the rebasing requirements.

Initially we considered using the statistical test applied in Electricity Distribution (ED) NOMs rebasing assessment[23] to check whether the risk points delivered by the Rebased Targets are equally as challenging as the Original Targets. However, due to the inherent difference of the Original Targets between GD (volume-based) sector and ED (monetisation-based) sector, we found that this statistical test cannot give consistent and reliable results across GD licensees to allow us to derive meaningful findings. We therefore decided to omit this statistical test and developed the potential to outperform (PTO) check as an appropriate alternative.

The following paragraphs provide more detailed explanations of each of the checks in our quantitative analysis.

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[23] ED NOMs Rebasing Requirements and Assessment Methodology:
https://www.ofgem.gov.uk/publications-and-updates/network-asset-secondary-deliverables-rebasing-requirements-and-assessment-methodology

Check 1: Intervention volumes

This check examined whether the volume of interventions in each NOMs Asset Category in the Rebased Targets is the same as the Original Targets. Check 1 is considered to be passed where the volumes of interventions are equal.

Check 2: The intervention split between replacement and refurbishment

This check compared the proportion of replacement to refurbishment interventions between the Original Targets and the Rebased Targets. Check 2 is considered to be passed where the proportion is equal for each NOMs Asset Category.

Check 3: The potential to outperform (PTO)

Neither Check 1 nor Check 2 considers the health and criticality distribution of the asset base and the relative risk or health/criticality of the assets being intervened on. For Check 3 we calculated a numerical PTO score for individual asset categories. The PTO score indicates the extent to which a GDN could potentially outperform (deliver more risk benefit) by intervening on either higher criticality or worse health assets. We then compared the PTO score for the Rebased Targets against the PTO score for the Original Targets. Check 3 is considered to be passed if the Original Target has equal or higher PTO score than the Rebased Targets.

As we need to consider both the HI and CI dimensions in the matrix, this was divided into: Check 3(a), which compares three PTO metrics from an asset criticality perspective (i.e. the given criticality band or range: C1, C1&C2, C1&C2&C3); and, Check 3(b), which compares three PTO metrics from an asset health perspective (i.e. the given asset health band or range: HI5, HI5&HI4, HI5&HI4&HI3).

The mathematical formula used for PTO in asset criticality dimension in Check 3(a) is shown in **Figure A-3**. The formula is the same to calculate the PTO in asset health dimension in Check 3(b) where criticality variables are replaced with corresponding asset health variables.

This PTO check examines two areas in the Original Targets and Rebased Targets respectively:

First, it checks whether there are higher criticality or worse health assets that could have been intervened on but were not in the targets.

Second, it checks whether all interventions that were carried out were on the higher criticality or worse health assets in the targets.

$$PTO = \sqrt{\underbrace{\left|\frac{Vol_{C\#} + Imp_{C\#}}{Vol_{C\#}}\right|}_{\text{Part 1}} \times \underbrace{\left|\frac{Imp_{Tot} - Imp_{C\#}}{Imp_{Tot}}\right|}_{\text{Part 2}} \times \underbrace{Vol_{C\#}}_{\text{Part 3}}}$$

Where:

$Vol_{C\#}$ (positive value) denotes the asset number without intervention in the relevant criticality band(s) analysed.

$Imp_{c\#}$ (negative value) denotes the change of asset number with intervention in the relevant criticality band(s) analysed.

Imp_{Tot} (negative value) denotes the change of asset number with intervention in the relevant criticality band(s) analysed.

Part 1 indicates whether there are higher criticality assets that could have been intervened on but were not in the targets.

Part 2 indicates whether all interventions that were carried out were on the higher criticality assets in the targets.

Part 3 scaled to give results that can compare Original Targets against Rebased Targets.

Figure A-3: PTO Formula for Asset Criticality in Check 3

We note that Check 3 is designed to provide indicative PTO metrics, and the PTO check itself will not be able to explain the failures caused by NOMs methodological changes and asset characteristics etc. Therefore, we do not expect all GDNs to pass Check 3 at a network level as well as each at an individual asset category level.

We thereafter required the qualitative information supplied by the GDNs to explain why some cases that are highlighted by the quantitative checks as not being equally challenging are justifiable.

Appendix 3 – Our Rebasing Assessment Results

General Considerations

For each GDN, we are relatively satisfied from our rebasing assessment that at the network level the Rebased Targets are as equally challenging as the Original Targets. Where specific elements of the rebasing assessment were highlighted as not as equally challenging, we are comfortable with the narrative the GDNs provided as further evidence.

Distribution Mains

Our quantitative checks were first applied at the asset category level to give us a greater sight and understanding of potential impacts that may aggregate to the network level. Based on the initial quantitative checks results, we noticed that the common failure at network level in Check 3 is mainly driven by the asset category of distribution mains. Therefore, our further qualitative review has been focused on this asset category and the primary consideration, i.e. HSE's IMRRP, which is explained below:

GDNs are legally mandated to deliver the HSE (Health and Safety Executive) IMRRP. The overriding consideration of the HSE's IMRRP is improving safety, whereas the NOMs Methodology considers additional environmental and system factors. This leads to some differences in prioritisation of assets between both methodologies. We are satisfied that GDNs cannot take advantage of greater potential to outperform under the Rebased Targets and still be compliant with HSE legal requirements.

Therefore, in our view, the Rebased Targets are in practice equally challenging for the asset category of distribution mains despite failing Check 3.

Block Valves and Sleeves

The NOMs Methodology treats Block Valves and Sleeves in a different way to the previous methodologies. Previously both these asset categories were considered as standalone asset classes whereas now they are considered as sub-components of LTS pipeline systems. These assets interact with LTS pipelines as follows:

1. Block Valves: these enable a GDN to isolate a section of pipeline in the event of an asset failure. Such failures are very rare so the majority of times, Block Valves act as a section of pipe, containing gas at high pressure. A failure of a Block Valve could have safety, environmental and/or system consequences, similar to a section of LTS pipeline. As such, these are modelled as sections of pipe.

2. Sleeves: these protect pipeline sections at high risk of corrosion, ground movement or of third party damage. Failure of a Sleeve could have safety, environmental and/or system consequences, associated with the pipeline it is protecting. Therefore Sleeves are modelled as sleeved sections of pipeline.

For interventions on Block Valves and Sleeves, the risk benefit on the LTS pipelines cannot currently be easily isolated from the overall LTS pipeline system risk. Under the NOMs Methodology, interventions on these two asset categories yield zero or negligible risk benefits. We expect GDNs to review whether this is an appropriate

outcome for these assets when they next review the NOMs Methodology and revise the Methodology as necessary. This future review should also consider the monetisation of interventions on these assets independently from the LTS pipeline.

Downstream Demand Scenario

All GDNs use 1-in-20 peak flow demand scenario under the NOMs Methodology. To ensure the comparability between the Rebased Targets and actual delivery, we expect GDNs to use the same demand scenario and associated modelling approach in the end of period assessment of RIIO-GD1.

The modelling detail of demand scenario GDNs used for their Rebased Targets is presented in Table A-1 below.

NOMs Model	Customers Supplied Source	Demand Scenario	Allocation Methodology (to determine the number of Customers Lost in the event of a supply failure)
LTS Pipelines	Network Analysis Software for above 7 bar pipes. (Graphical FALCON)	1-in-20 Peak Flow (Direct customers Served)	The standard modelling assumption based on flow is that 1 scm = 1 customer. Flow is obtained from the Network Analysis Tool for >7bar, Graphical FALCON. The output from Falcon is then apportioned to customer types using fixed % assumptions as per RRP tables.
Mains	Meter Point Reference (number of Meter points by postcode area)	This is a spatial query and as such flow is irrelevant.	Each main is assigned to a postcode and this information is combined with the MPR to obtain number of properties
Services	Meter Point Reference (number of Meter points by postcode area)	This is a spatial query and as such flow is irrelevant.	Each service is assigned to a postcode and this information is combined with the MPR to obtain number of properties
Risers	Risers Survey Data	This is a spatial query and as such flow is irrelevant.	Number of Connection as defined in the Risers Survey Data.
Offtakes	Network Analysis Software for above 7 bar pipes. (Graphical FALCON)	1-in-20 peak flows (Direct customers Served)	LTS pipelines are manually mapped to installation demands in the >7bar Network Analysis Tool, Graphical FALCON.
Governors	Network Analysis Software for below 7 bar network. Synergi (NGN, WWU, SGN) GBNA Network Analysis Tool (Cadent)	1-in-20 peak flows (Direct customers Served)	Each service is allocated to a Governor using the location data and pressure zone of influence obtained from the <7bar Network Analysis Tool.

Table A-1: GDNs' Downstream Demand Scenario Modelling Detail

Assessment Results for Each GDN

In the remainder of this Appendix we present per licensee the results of our rebasing assessment and our interpretation of them. The narrative is at a network level, occasionally drilling down to the asset category level where required.

Cadent: EoE, Lon, NW and WM

Cadent owns four licensees: East of England (EoE), London (Lon), North West (NW) and West Midlands (WM). From reviewing the results of our quantitative checks for each of the four licensees, the results are similar in most cases as shown in the RAG rating tables below.

Cadent EoE	Check 1 Intervention Volume	Check 2 Split in Replace & Refurb	Check 3a PTO in Asset Criticality	Check 3b PTO in Asset Health
Block Valves				
Sleeves (Nitrogen & other)				
LTS Pipelines - Piggable				
LTS Pipelines – Non Piggable				
Distribution Mains (Iron)				
Distribution Mains (PE)				
Distribution Mains (Steel)				(red)
Distribution Mains (other)				
Services				
MOB Risers				
NTS Offtakes				
PRSs				(amber)
District Governors				
I&C Governors				
Service Governors				
Network Level				(red)

Table A-2: RAG Ratings of Quantitative Checks Results for EoE

Cadent Lon	Check 1 Intervention Volume	Check 2 Split in Replace & Refurb	Check 3a PTO in Asset Criticality	Check 3b PTO in Asset Health
Block Valves				
Sleeves (Nitrogen & other)				
LTS Pipelines - Piggable				
LTS Pipelines – Non Piggable				
Distribution Mains (Iron)				(red)
Distribution Mains (PE)				
Distribution Mains (Steel)				(amber)
Distribution Mains (other)				
Services				
MOB Risers			(amber)	(amber)
NTS Offtakes				
PRSs				
District Governors				
I&C Governors				
Service Governors				
Network Level				(red)

Table A-3: RAG Ratings of Quantitative Checks Results for Lon

Cadent NW	Check 1 Intervention Volume	Check 2 Split in Replace & Refurb	Check 3a PTO in Asset Criticality	Check 3b PTO in Asset Health
Block Valves				
Sleeves (Nitrogen & other)				
LTS Pipelines - Piggable				
LTS Pipelines – Non Piggable				
Distribution Mains (Iron)				
Distribution Mains (PE)				
Distribution Mains (Steel)				
Distribution Mains (other)				
Services				
MOB Risers				
NTS Offtakes				
PRSs				amber
District Governors				
I&C Governors				
Service Governors				
Network Level				amber

Table A-4: RAG Ratings of Quantitative Checks Results for NW

Cadent WM	Check 1 Intervention Volume	Check 2 Split in Replace & Refurb	Check 3a PTO in Asset Criticality	Check 3b PTO in Asset Health
Block Valves				
Sleeves (Nitrogen & other)				
LTS Pipelines - Piggable				
LTS Pipelines – Non Piggable				
Distribution Mains (Iron)				
Distribution Mains (PE)				
Distribution Mains (Steel)				amber
Distribution Mains (other)				
Services				
MOB Risers				
NTS Offtakes				
PRSs				
District Governors				
I&C Governors				
Service Governors				
Network Level				amber

Table A-5: RAG Ratings of Quantitative Checks Results for WM

It can be seen that all four of Cadent's licensees demonstrate positive quantitative checks. The red rating for Check 3 at the network level driven by the failure of Distribution Mains has been justified in the subsequent qualitative review as explained in the general considerations discusses above and presented in **paragraph 4.5** in the main document.

There are amber rating results in Check 3 for the asset category of MOB Risers in Lon and PRSs in EoE and NW. As per the subsequent qualitative review, the former case is mainly caused by a significant change in the MOB Risers asset population in the Rebased Targets, since Cadent's most recent survey data has replaced the assumed asset data in the Original Targets; the latter case is because of the aggregation effect of sub-assets as well as the obsolescence effect[24] for PRSs.

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[24] In the old NOMs methodologies the intervention on obsolescence would move an asset away from HI5 (worst health condition), while in the new monetised risk approach it depends on the assets failure rate and thus delivers potentially less risk reduction benefit.

We are therefore of the view that the Rebased Targets developed by Cadent have satisfied our assessment criteria.

Northern Gas Networks (NGN)

The RAG ratings of the results from our quantitative checks of NGN's Rebased Targets are shown in Table A-6 below.

NGN	Check 1 Intervention Volume	Check 2 Split in Replace & Refurb	Check 3a PTO in Asset Criticality	Check 3b PTO in Asset Health
Block Valves				
Sleeves (Nitrogen & other)				
LTS Pipelines - Piggable				
LTS Pipelines – Non Piggable				
Distribution Mains (Iron)			(amber)	(red)
Distribution Mains (PE)				
Distribution Mains (Steel)				
Distribution Mains (other)				
Services				
MOB Risers				
NTS Offtakes				
PRSs				(amber)
District Governors				
I&C Governors				
Service Governors				
Network Level				(red)

Table A-6: RAG Ratings of Quantitative Checks Results for NGN

It can be seen that NGN's quantitative checks demonstrate an overall positive outcome.[25] The red rating for Check 3 at the network level driven by the failure of Distribution Mains has been justified in the qualitative review as explained in the general considerations discussed above and presented in **paragraph 4.5** in the main document.

There is an amber rating result for the asset category PRSs. Similar to Cadent, this is because of the aggregation effect of sub-assets as well as the obsolescence effect for PRSs.

Therefore, we are of the view that the Rebased Targets NGN developed have satisfied our assessment criteria.

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[25] There are marginal differences in the intervention volume of the asset categories of Block Valves, LTS pipelines-non-piggable and Services due to NGN's rebasing errors. We have agreed with NGN that these marginal differences will be rectified by adding extra monetised risk (R£38,057, accounts for approximately 0.06% of total monetised risk reduction) into the overall Risk Delta at the network level.

SGN: Scotland Gas Networks (Sc) and Southern Gas Networks (So)

SGN owns two licensees, Scotland Gas Networks (Sc) and Southern Gas Networks (So). As shown in the RAG rating tables below, the results of our quantitative checks for both licensees are similar.

SGN Sc	Check 1 Intervention Volume	Check 2 Split in Replace & Refurb	Check 3a PTO in Asset Criticality	Check 3b PTO in Asset Health
Block Valves	🟩	🟩	🟩	🟩
Sleeves (Nitrogen & other)	🟩	🟩	🟩	🟩
LTS Pipelines - Piggable	🟩	🟩	🟩	🟩
LTS Pipelines – Non Piggable	🟩	🟩	🟩	🟩
Distribution Mains (Iron)	🟩	🟩	🟨	🟥
Distribution Mains (PE)	🟩	🟩	🟩	🟩
Distribution Mains (Steel)	🟩	🟩	🟩	🟩
Distribution Mains (other)	🟩	🟩	🟩	🟩
Services	🟩	🟩	🟩	🟩
MOB Risers	🟩	🟩	🟩	🟩
NTS Offtakes	🟩	🟩	🟩	🟩
PRSs	🟩	🟩	🟩	🟩
District Governors	🟩	🟩	🟩	🟩
I&C Governors	🟩	🟩	🟩	🟩
Service Governors	🟩	🟩	🟩	🟩
Network Level	🟩	🟩	🟩	🟨

Table A-7: RAG Ratings of Quantitative Checks Results for Sc

SGN So	Check 1 Intervention Volume	Check 2 Split in Replace & Refurb	Check 3a PTO in Asset Criticality	Check 3b PTO in Asset Health
Block Valves	🟩	🟩	🟩	🟩
Sleeves (Nitrogen & other)	🟩	🟩	🟩	🟩
LTS Pipelines - Piggable	🟩	🟩	🟩	🟩
LTS Pipelines – Non Piggable	🟩	🟩	🟩	🟩
Distribution Mains (Iron)	🟩	🟩	🟥	🟥
Distribution Mains (PE)	🟩	🟩	🟩	🟩
Distribution Mains (Steel)	🟩	🟩	🟩	🟩
Distribution Mains (other)	🟩	🟩	🟩	🟩
Services	🟩	🟩	🟩	🟩
MOB Risers	🟩	🟩	🟩	🟩
NTS Offtakes	🟩	🟩	🟩	🟩
PRSs	🟩	🟩	🟩	🟩
District Governors	🟩	🟩	🟩	🟩
I&C Governors	🟩	🟩	🟩	🟩
Service Governors	🟩	🟩	🟩	🟩
Network Level	🟩	🟩	🟩	🟨

Table A-8: RAG Ratings of Quantitative Checks Results for So

It can be seen that SGN's two licensees' quantitative checks demonstrate an overall positive outcome. The amber rating for Check 3 at the network level driven by the failure of Distribution Mains has been justified in the qualitative review as explained in the general considerations discussed above and presented in **paragraph 4.5** in the main document.

Therefore, we are of the view that the Rebased Targets SGN developed have satisfied our assessment criteria.

Wales and West Utilities (WWU)

The RAG ratings of the results of our quantitative checks of WWU's Rebased Targets are shown in Table A-9 below.

WWU	Check 1 Intervention Volume	Check 2 Split in Replace & Refurb	Check 3a PTO in Asset Criticality	Check 3b PTO in Asset Health
Block Valves				
Sleeves (Nitrogen & other)				
LTS Pipelines - Piggable				
LTS Pipelines – Non Piggable				
Distribution Mains (Iron)			🟥	
Distribution Mains (PE)				
Distribution Mains (Steel)			🟨	
Distribution Mains (other)				
Services				
MOB Risers				
NTS Offtakes				
PRSs				
District Governors				
I&C Governors				
Service Governors				
Network Level			🟨	

Table A-9: RAG Ratings of Quantitative Checks Results for WWU

It can be seen that WWU's quantitative checks demonstrate an overall positive outcome. The amber rating for Check 3 at the network level driven by the failure of Distribution Mains has been justified in the qualitative review as explained in the general considerations discussed above and presented in **paragraph 4.5** in the main text.

Therefore, we are of the view that the Rebased Targets WWU developed have satisfied our assessment criteria.

Appendix 4 – Privacy notice on consultations

Personal data
The following explains your rights and gives you the information you are entitled to under the General Data Protection Regulation (GDPR).

Note that this section only refers to your personal data (your name address and anything that could be used to identify you personally) not the content of your response to the consultation.

1. The identity of the controller and contact details of our Data Protection Officer
The Gas and Electricity Markets Authority is the controller, (for ease of reference, "Ofgem"). The Data Protection Officer can be contacted at dpo@ofgem.gov.uk

2. Why we are collecting your personal data
Your personal data is being collected as an essential part of the consultation process, so that we can contact you regarding your response and for statistical purposes. We may also use it to contact you about related matters.

3. Our legal basis for processing your personal data
As a public authority, the GDPR makes provision for Ofgem to process personal data as necessary for the effective performance of a task carried out in the public interest. i.e. a consultation.

4. For how long we will keep your personal data, or criteria used to determine the retention period.
Your personal data will be held for *(be as clear as possible but allow room for changes to programmes or policy. It is acceptable to give a relative time e.g. 'six months after the project is closed')*

5. Your rights
The data we are collecting is your personal data, and you have considerable say over what happens to it. You have the right to:

- know how we use your personal data
- access your personal data
- have personal data corrected if it is inaccurate or incomplete
- ask us to delete personal data when we no longer need it
- ask us to restrict how we process your data
- get your data from us and re-use it across other services
- object to certain ways we use your data
- be safeguarded against risks where decisions based on your data are taken entirely automatically
- tell us if we can share your information with 3rd parties
- tell us your preferred frequency, content and format of our communications with you
- to lodge a complaint with the independent Information Commissioner (ICO) if you think we are not handling your data fairly or in accordance with the law. You can contact the ICO at https://ico.org.uk/, or telephone 0303 123 1113.

6. Your personal data will not be sent overseas (Note that this cannot be claimed if using Survey Monkey for the consultation as their servers are in the US. In that case use "the Data you provide directly will be stored by Survey Monkey on their servers in the United States. We have taken all necessary precautions to ensure that your rights in term of data protection will not be compromised by this".

7. Your personal data will not be used for any automated decision making.

8. Your personal data will be stored in a secure government IT system. (If using a third party system such as Survey Monkey to gather the data, you will need to state clearly at which point the data will be moved from there to our internal systems.)

9. More information For more information on how Ofgem processes your data, click on the link to our "Ofgem privacy promise".