



# NGN RIIO-GD2 Business Plan

## Irregular Submissions Assurance Report

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we are  
the **network**

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# RIIO-T1/GD1/ED1 DATA ASSURANCE

## Irregular Submissions Assurance Report

<b>Company</b>	Northern Gas Networks Limited
<b>Sector</b>	Gas Distribution
<b>Networks</b>	
	North of England GDN
<b>Name of Irregular Submission</b>	RIIO GD2 Business Plan
<b>Required by<sup>1</sup></b>	RIIO 2 Business Plan Guidance
<b>Required information</b>	RIIO GD2 Business Plan and Data Tables
<b>Submission date</b>	9th December 2019

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<sup>1</sup> State licence condition or provide other explanation (e.g. in response to request from Ofgem...)

## Version History

Version No.	Changes	Purpose	Author	Release Date
1.0	For consultation		Ofgem	17/12/14
1.1	Changed report title to "Irregular Submissions Assurance Report"	Final Decision	Ofgem	03/02/15

# 1 Risk Assessment and Data Assurance Done for Irregular Submission

## Risk Assessment

A DAG Risk Assessment was completed for the RIIO GD2 Business Plan using the standard template and this is provided in Appendix 1, which produces the following risk assessment:-

Impact Metric	3
Probability Metric	3
Overall Risk Assessment	High

On the Impact metric, the Competiton and Customer criteria are not applicable for this type of submission. The assessment produces a 3 rating for impact for the Comparative Efficiency criteria assuming a realistic worst case scenario higher than the usual 10% error rate used for actual Cost & Output reporting due to the nature of the forecast data being provided.

As such, aligned to the requirements of Section 2.31 of the DAG Methodology document, the Impact Metric Score for this forecast data which will be used to set allowances is higher than the score for historical data input.

The Probability metric produces an overall 3 rating for the following reasons:-

- Multiple data sources will be used for forecast cost and workload data and clearly extrapolation of data will be required for forecast data.
- The reporting processes are highly manual in nature as due to the type of information required, automated reporting cannot be created.
- The reporting rules and guidance documentation are new for the RIIO-GD2 Business Plan and thus these will have been in place for less than 12 months.
- Whilst the controls will be new for the Business Plan, they are based on what we operate for all regulatory reporting and thus some will be identical to those operated for the individual Cost & Output Reporting Tables and the staff who are involved in the Business Plan process are substantially the same as those who produce the RRP reporting for the different business areas and thus are experienced at operating the required control framework.
- As RIIO-GD1 was an 8 year process, then clearly there has been no audit work undertaken in the last 5 years on the data to assess evidence of historical errors.

### **Data Assurance Activities**

The NGN Regulatory Reporting Policy outlines the control framework which should be operated over all regulatory submissions and provides guidance on:-

- Roles and Responsibilities
- Documented Procedures
- Compilation Processes
- Independent Checking Processes
- Retention of Records
- Formal Approval of the Submission

The same control framework was operated over the RIIO GD2 Business Plan Submission as appropriate.

In addition, the Business Plan process has been governed by a RIIO-GD2 Steering Group comprised of both Board members and appointed representatives. They have played a vital and detailed role in reviewing, challenging and shaping the plan and updating the wider NGN Board throughout this process.

In terms of specific DAG data assurance activities, the following was undertaken:-

#### **Planning**

As each Business Plan Submission will be unique, it is not considered appropriate to create a detailed method statement (documented procedure) to explain how the submission has been compiled and the data sets used, as this would add no value as this could not be used for future submissions as the data sets and models used in the compilation processes may be different each time.

Instead procedural documentation focused on the assumptions used to generate the forecast cost, income and workload data included in the Business Plan and where models were used to generate such forecasts, model documentation was also held.

For each key cost line, a presentation has been created to document the assumptions, data sources, reference points and to outline the review processes operated and thus the overall control framework operated has been documented.

These presentations have then been reviewed as part of the Review assurance work undertaken by the independent Internal Audit function – see below for further details.

## **Review**

There have been various levels of Review controls operated over the RIIO GD2 Business Plan and associated data tables.

### **Departmental Review**

All data and information provided by Data Providers has been subject to independent review by a second person in that business unit.

This review has been evidenced by completion of a Data Provider Reporting Declaration Form as required under NGN's Regulatory Reporting Policy to confirm that the data and information has been checked back to source records.

As such, under the DAG methodology, this provided a Second Person Review over the data and information.

### **GD2 Team Review**

All data and information submitted into NGN's GD2 Team for consolidation into the plan and data tables has been subject to a check by a specific member of the GD2 Team who undertook a sense check and review and challenge process over the data and information.

As such, under the DAG methodology, this provided Internal Expert Review over the data and information.

### **Internal Audit Team**

NGN's independent Internal Audit Team undertook a specific piece of work as part of the annual Internal Audit Plan, with the scope of work being as follows:-

- Review and assess the processes and controls implemented by business departments and the GD2 team for the compilation, review, checking and sign off of a sample of the forecast data contained within the RIIO GD2 Business Plan.
- Review and assess the processes and controls operated by senior management and the Board for the review and sign off of the Business Plan content as a whole.
- Review evidence to confirm that input from Stakeholder Engagement Groups have been incorporated into the Business Plan.
- Check that the Business Plan includes sufficient justification for any forecast data which differ significantly from the trend line created by historic data.

As such, under the DAG methodology, this assignment provided an Internal Submission Process audit to confirm that the required control framework had operated as intended and an Internal Data Audit through a sense check of the forecast data against historic trends.

The audit work identified a number of issues of inconsistent data between the Business Plan Data Tables and the actual Business Plan document and also some inaccurate data when checked back to source records. Details of all findings were reported back to management so that changes could be made into the final submission documents before issue. A formal audit report will be issued in December 2019 following full completion and documentation of the work.

### External Assurance

There have been various pieces of assurance work performed by external parties.

#### *Data Assurance Guidance ("DAG") Process Review – KPMG*

Prior to the start of the Business Plan process, we engaged KPMG to undertake an independent review of the DAG processes operated within NGN to provide a conclusion on the overall adequacy and effectiveness of the framework operated.

The review did not identify any areas of non-compliance with the DAG requirements and concluded that in terms of assurance activities undertaken, these were generally more detailed than required by the DAG. The review only identified minor improvement recommendations, which were addressed following the review.

As this work concluded that the DAG framework operated by NGN was robust then this same framework was used as the basis for the control environment established for the Business Plan process.

#### *Testing of the GD2 Financial Model – KPMG*

The objective of this assurance work was to test whether the Model has been constructed so as to materially achieve the purpose which it was designed to meet, including testing the logical integrity of the arithmetical operations in the Model formulae and calculations and to check whether assumptions and input data have in all material respects been consistently reflected in the model.

The results of this testing confirmed that the model had been constructed to achieve the purpose it was designed to meet. As such, under the DAG methodology, this assignment provided an External Data audit over the model data used in the Business Plan submission.

### *Analysis of Risk & Financeability – KPMG*

KPMG produced an analysis of specific risk exposure and financeability of NGN based on the draft business plan with the objective to help NGN meet Ofgem's requirements with regard to financeability analysis and scenario stress testing and as such this took account of Ofgem's guidance.

The conclusions reached from this analysis were as follows:-

- Under the financial projections assumed in the NGN bid, NGN's financial ratios achieve levels consistent with a comfortable Baa1 rating in the base case, under both notional and actual financial structures, and also achieve this result in most plausible scenarios considered. In some, more extreme downside scenarios, the ratios fall to the level consistent with a downgrade by one notch.
- Under Ofgem's base case before outperformance (i.e. CoE of 4.8%), NGN's financial projection imply levels of financial metrics consistent with Baa1 rating under the notional structure and Baa2 rating under the actual structure. The metrics under the actual structure face significant pressure and indication a fall in metrics to Baa3 levels in some more extreme downside scenarios.

As such, under the DAG methodology, this assignment provided an External Data audit over the financeability analysis used in the Business Plan submission.

### *Assessment of Business Support Costs – KPMG*

As Business Plans must include clear explanations of cost drivers and demonstration that costs are efficient, we engaged KPMG to undertake an assessment of the business support costs included within our draft business plan, by appraising the costs through comparator and benchmark analysis using an extensive repository of benchmarks from recognised and credible sources (and that have been previously used within the regulatory arena).

This approach means that NGN could be confident that KPMG could provide a high-quality independent review of the business support costs using appropriate 'tried and tested' methodologies.

The review concluded that NGN scored in the upper or second quartile in 21 of 31 KPIs used by KPMG in the review, which represent nearly £8m in costs. KPMG identified four cost areas where NGN is performing in the third or bottom quartile and where average annual GD2 costs are over £500k. Broadly speaking, these areas tend to represent functions where NGN is actively investing in order to capture operational savings in other areas of the business and/or where, as a smaller GDN, NGN is unable to capture the economies of scale of larger utilities. As such, under the DAG methodology, this assignment provided an External Data audit over the business support costs data used in the Business Plan submission.

*Review of RIIO-GD2 Business Plan Assurance - E&Y*

On completion of the governance and assurance process, prior to finalising our RIIO-GD2 business plan for submission, we appointed Ernst & Young to perform further and final checks to confirm to the Board that NGN's actions have been consistent with its governance and assurance framework and assurance activities, and to assess if NGN's board assurance objectives are supported by the evidence NGN has compiled during the development of its RIIO-GD2 Business Plan.

This work concluded that all of the assurance activities have been conducted or are in the process of being conducted by either internal teams or external parties.

In relation to the Board Assurance Objectives, E&Y concluded as follows:-

- NGN has provided evidence that its Business Plan has been informed by customer engagement and by feedback from its CEG about the quality of that customer engagement and how this has been incorporated into its plan.
- NGN has presented evidence of its relatively strong past performance (compared to its peers), and its commitment for delivering outcomes included in its Business Plan, in accordance with the elements included in Ofgem's definition of 'deliverable'.
- NGN has presented evidence that the outcomes, performance commitments and ODIs reflect feedback it has received from customers, and is consistent with its definition of ambitious.
- NGN has provided evidence that its approach to developing its expenditure forecasts is consistent with its definition of a robust and efficient process.
- NGN has provided evidence that the projected performance of the business over the RIIO-GD2 period on both a notional and actual capital structure basis is financeable, based upon NGN's proposed financial parameters and using the financeability tests that NGN considers appropriate.

As such, under the DAG methodology, this assignment provided an External Submission Process audit over the adequacy of the control processes designed.

### **Sign Off**

The RIIO-GD2 Business Plan has been reviewed by both the NGN Internal GD2 Steering Group and the formal Board appointed RIIO-GD2 Steering Group.

The full NGN Board then provided formal approval of the plan and associated data in a meeting held on 21<sup>st</sup> November 2019, including approval of the Board Assurance Statement included in the plan.

### **Supporting documentation**

i.	Appendix 1 – RIIO GD2 Business Plan – DAG Risk Assessment
ii.	Appendix 2 – NGN Regulatory Reporting Policy
iii.	Appendix 3 – KPMG DAG Process Review – Nov 2018
iv.	Appendix 4 – KPMG Testing of GD2 Financial Model
v.	All other assurance reports are attached as Appendices to the actual Business Plan submission A2 – E&Y Review of RIIO-GD2 Business Plan Assurance A22 – KPMG Assessment of Business Support Costs A27 – KPMG Analysis of Risk & Financeability Report
vi.	Appendix 5 - Board Minutes for formal approval of plan and assurance statement
vii.	
viii.	

## **2 Errors Identified in Previous Related Submission**

Not applicable.

The last related submission was submitted in 2011 for the GD1 Business Plan, but the data and information required was not the same and thus prior assurance work is both historic and not applicable to the GD2 submission.

### **Supporting documentation**

ix.	N/A
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# Appendix 1

RIIO GD2 Business Plan  
DAG Assessment

Risk Assessment Scoring - Irregular Submissions

Assessment under DAG version 1.1

Instructions for completing this sheet

- Cell / Range
- Instruction
- 1
- No structural changes should be made to this sheet without Ofgem's consent (e.g. inserting or deleting rows/columns, overwriting non input cells)
- 2 A12
- Enter company group name
- 3 C14
- Select sector from dropdown. Submissions list will be auto populated. N.B. ensure that irregular submissions expected to be submitted are entered on the relevant sectors submission sheet. These will then be auto populated on this sheet.
- 4 Columns E to O
- Enter impact metric and probability metric component scores for each submission. The impact metric, probability metric, and total risk metric will be calculated.
- 5
- Licenses may filter out rows not required (e.g. licence conditions where data is collected on a RIGs table) by deselecting "Blanks" in the auto filter in column B.

Northern Gas Networks			Impact Metric										Probability Metric						Total	Risk	Comments
Submission for DAG Year:			Gas Distribution					Inherent Probability Metric					Control Metric								
Sector:			a	b	c	d	i1	i2	i3	i4	C1	C2	C3								
No.	License Condition	Summary	Impact Metric	Customers	Competition	Financial	Comparative efficiency	Complexity	Completeness	Manual Intervention	Reporting Rules	Control Activities	Experience of Personnel	Volume of Historical Errors	Probability Metric	Impact-probability score calculated from total risk					
1	Business Plan	RIO GD2 Business Plan	3	1	1	2	3	4	3	4	4	1	1	0	3	H					
		RIO GD2 Business Plan																			

Impact Metric Scores

1  
2  
3  
4

Probability Metric Scores

Inherent

2  
3  
4

Control Score

2  
1  
0

Total Risk

Low  
Medium  
High  
Critical

L  
M  
H  
C

No.	License Condition	Condition title/ table number	Required Information	Required
1	Business Plan	RIO GD2 Business Plan	RIO GD2 Business Plan	Y
2				



# Appendix 2

## Regulatory Reporting Policy

## Policy

### Regulatory Reporting Policy

1. Purpose
2. Introduction
3. Regulatory Submissions
4. Roles and Responsibilities
5. Procedures for Compiling Regulatory Reports
6. Data Validation/Checking Procedures
7. Retention of Data
8. Sign Off
9. Audit

**POLICY – REGULATORY REPORTING POLICY**

## REGULATORY REPORTING POLICY - VERSION CONTROL

[illegible]

<b>Administrator:</b> Regulation	<b>Document Owner:</b> Regulation Director
<b>Document Ref:</b> PREG015 <b>Issue No:</b> 5	<b>Issue Date:</b> 25/2/19      Page 2 of 17

## **POLICY – REGULATORY REPORTING POLICY**

### **1. Purpose**

The purpose of this document is to communicate Northern Gas Networks' ("NGN") policy and outline minimum standards for the compilation and submission of all Regulatory Reporting issued by NGN.

### **2. Introduction**

The overall responsibility for ensuring communication of and compliance with GT Licence and Uniform Network Code (UNC) obligations rests with the Regulation Director. This includes all requirements relating to Regulatory Reporting.

The submission of complete and accurate Regulatory Reports is a key risk for NGN as Ofgem is increasingly using financial penalties running to several million pounds for companies that misreport data.

As such, this Policy outlines the minimum requirements which must be embedded into all Regulatory Reporting processes in NGN.

All staff involved in the provision of data for reports, the collation of data into reports and the checking, review and approval of such reporting are required to follow these minimum requirements.

It is each Report Owner's responsibility to ensure that complete and accurate reports are prepared for onward submission to Ofgem and embed whatever additional procedures, over and above these minimum requirements, they consider necessary to achieve this objective.

### **3. Regulatory Submissions**

The GT licence and UNC set out the reporting obligations on NGN. Ofgem also has significant powers to require NGN to provide data in response to ad-hoc information requests.

For each Regulatory Submission, a **Report Owner** should be assigned who is responsible for:

- overseeing or directly compiling the regulatory report
- communication with the Regulation department or Ofgem directly on issues regarding the compilation and submission of the regulatory report
- appointing a nominated deputy who would manage issues on the compilation and submission of the report in the Report Owner's absence
- assigning roles and responsibilities (see Section 4)
- maintenance of up to date documented procedures (see Section 5)
- data validation/checking procedures (see Section 6)
- Sign-off for the final version of regulatory submission (see section 8)

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## **POLICY – REGULATORY REPORTING POLICY**

The Report Approval Presentation template provided in Appendix 4 provide a Best Practice Checklist on Page 3 for Report Owners to use to ensure that all responsibilities have been appropriately discharged.

It is important that the Regulation Director is informed as far in advance of any difficulties in compiling regulatory reports so that if necessary a delay to the submission deadline can be arranged, otherwise **there is zero tolerance for late submission of reports as this will result in NGN being non compliant** which may lead to substantial fines and other penalties.

A Report Owner must only submit a report directly to Ofgem/Joint Office with the prior approval of the Regulation Director. Where the Report Owner submits the report directly to Ofgem/Joint Office etc they must copy in the relevant member of the Regulation team into this correspondence so that compliance can be confirmed.

### **4. Roles and Responsibilities**

The following outlines the possible roles and responsibilities in the Regulatory Reporting process:-

#### Report Owner

All regulatory reports will have a designated owner.

It is the Report Owner's overall responsibility to ensure that complete and accurate reporting is produced for the Regulator and that adequate processes and controls are in place and operated to achieve this objective.

The specific responsibilities of the Report Owner are outlined in Section 3.

The Report Owner should also liaise with their designated deputy if the Report Owner is going to be absent from work during the submission period. Sufficient information on the data and the process followed should be disseminated to enable the Deputy to answer any questions which may be posed during an audit process, from review by the NGN Regulation team or for follow up questions from the regulator.

#### Data Provider

A Regulatory Report may have a number of component parts and thus data has to be obtained from a number of Data Providers.

A Data Provider is responsible for ensuring that the correct data is produced which is aligned to Ofgem/UNC requirements and that this is independently checked and a Data Provider Reporting Declaration completed and provided with the data to the Report Compiler or Report Owner as appropriate.

Each Data Provider should ensure that they have a documented process which aligns to the requirements of this Policy and explains how the data is created and transformed.

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## **POLICY – REGULATORY REPORTING POLICY**

### Report Compiler

The Report Compiler is responsible for ensuring that all the required data is obtained from the Data Providers, together with fully completed Reporting Declaration forms to confirm that each data set has been checked, and for transferring this data into the relevant regulatory reporting template.

The Report Compiler may also be a Data Provider themselves in compiling data from source systems. The Report Owner may also be the Report Compiler but in such cases, independent checks must be in place to ensure that no errors are made in the completion of the regulatory reporting template.

### Detailed Checker

The Detailed Checker must ensure that every data element which is input into the reporting template is checked back to source system records as per the requirements outlined in Section 6 of this Policy.

Where data has been submitted from Data Providers, then the Detailed Checker must review the information on what checks have previously been performed and assess the robustness against the requirements of this policy.

The Detailed Checker must also ensure that all relevant templates, supporting data and reporting declarations are appropriately maintained.

Evidence of the Detailed Checks performed should be retained.

### Report Approver

The Report Approver is responsible for appointing the Report Owner and for providing the overall Sign Off to the draft report before submission – see Section 8 for further details of requirements. Report Approvers will be members of the NGN Senior Management Team.

For very complex reports such as the RRP (A40) Cost Reporting return, further roles and responsibilities are defined at an individual Table level. The full procedure in this regard is contained within a separate Policy, namely Regulatory Reporting Pack – Project Management and Submission, which has also been posted on the NGN Intranet.

Whilst the above outlines all possible roles in the Regulatory Reporting process, it may be that in practice a person may perform more than one role.

As a minimum there **must** be **two** people involved in the reporting process and there **must** be **independence** between the Report Compiler/Data Providers and the Detailed Checker.

The diagrams below provide examples of how roles and responsibilities could be assigned with the different colours representing different staff members. It is the Report Owners responsibility to decide who will perform each role.

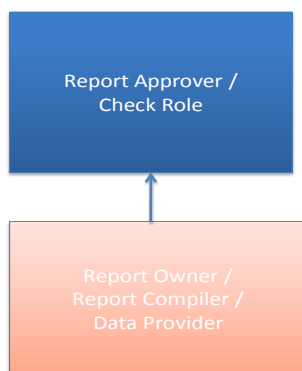
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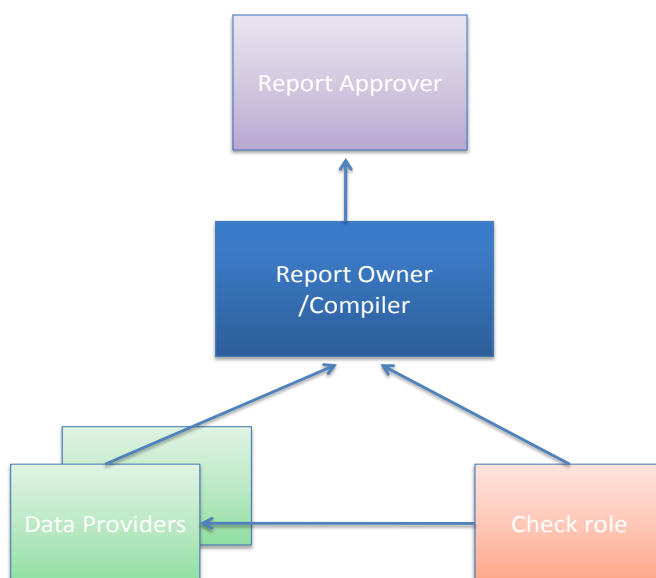
## POLICY – REGULATORY REPORTING POLICY

### Example 1 – Simple Report – 2 Persons



*Whilst there are only 2 staff in this example, the compilation and checking roles remain independent from each other.*

### Example 2 – Complex Report – 4 Persons

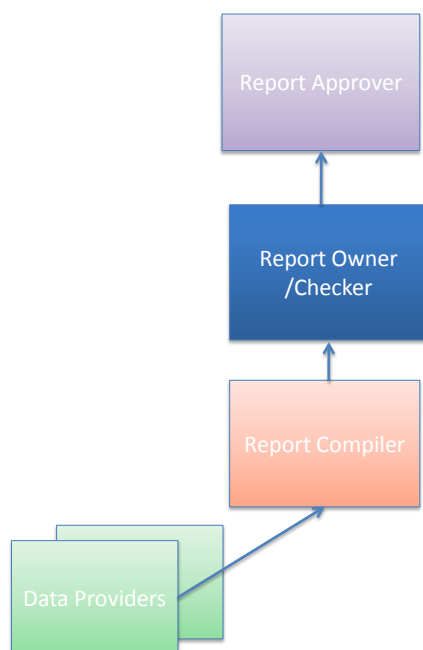


*In the above example the Report Owner is also the Report Compiler but other roles remain segregated.*

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## **POLICY – REGULATORY REPORTING POLICY**

### Example 3 – Complex Report – 4 Persons



*In this example the Report Owner also performs the checks but again this is segregated from the Compiler role.*

## **5. Procedures for Compiling Regulatory Reports**

For each regulatory report the report owner must ensure there is a clearly documented procedure and self-audit process in place these procedures must be reviewed regularly and updated if required.

The procedures should be sufficiently detailed to enable other staff who do not usually prepare such reporting, to compile the regulatory report and take all appropriate actions to ensure the completeness and accuracy of the report.

The procedure **must** document:

- the requirements for the individual report including timescales for delivery.
- the roles and responsibilities for the data collation, the detailed checking process, any review process, the final sign off of the return and also a nominated deputy Report Owner.
- all the report's composite parts and identify individuals responsible for submission of data elements which are not created by the report compiler.
- a step-by-step process for compiling each regulatory submission from collation of source data, extraction and manipulation of source data and production of to the final report.

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## **POLICY – REGULATORY REPORTING POLICY**

- all key assumptions used to compile regulatory reports including any interpretation of Ofgem guidance, assumptions made in the absence of clear guidance from Ofgem and any other assumptions that lead to the transformation of source data.
- data validation and checking procedures (see section 6)
- data storage (see Section 7)
- report/table approval and sign off procedures (see Section 8)

A documented procedures template/guidance is outlined in Appendix 1.

The documented procedure and any updates must be made available by the report owner to all staff involved in compiling the report. An up to date copy of the procedure must be sent to the Regulation department at least once a year.

In addition, any Ofgem guidance related to the individual Regulatory Report should also be sent to each data provider to ensure that the provider understands the data requirements.

Any assumptions that need to be made in the absence of clear guidance should be discussed and agreed with the Regulation Team and/or Ofgem in advance of the report submission.

### Ofgem Template Errors

If Ofgem template errors are noted, these should be raised as appropriate with Ofgem.

Each Ofgem response shall be retained on file and verified against the populated template before consolidation or forwarding to Ofgem. All such amendments shall be appropriately recorded in the Change Log (as in the case for the RRP), or whatever form Ofgem require such amendments to be recorded.

## **6. Data Validation/Checking Procedures**

In order to ensure accuracy and integrity of regulatory reports there must be sufficient validation and data checking procedures in place, this must be detailed in the procedure.

A **detailed** check should be performed by a person **independent** of the report compiler.

Specifically:

- it should be ensured that the data being reported is aligned to the requirements contained in the Licence, UNC or Ofgem Guidance e.g. the correct data is actually being reported which aligns to any Ofgem definitions.
- where source data is extracted directly from core systems e.g. GDNS BW Reports, and then input into the reporting template, a check should ensure that every figure in the regulatory submission matches the relevant number in the source data file.

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## **POLICY – REGULATORY REPORTING POLICY**

- where the source data is manipulated for the purposes of regulatory reporting, independent checks should ensure that this is in accordance with documented procedure e.g. the correct job types have been aggregated, and ultimately checks should ensure that all reported numbers can be traced back to the original source system data.
- where a spreadsheet is used in the manipulation or aggregation of data for the reporting submission, the following further checks should be performed:-
  - data input to the spreadsheet is correct to the source data. Where multiple data transactions have been downloaded and copied into the spreadsheet, a reconciliation should be performed to ensure the same number of transactions has been imported as the raw source system data;
  - formulae used in the spreadsheet are correct and are consistent throughout the spreadsheet as appropriate and applied against all relevant rows/columns;
  - the composition of any pivot tables used in the calculations should be checked for accuracy or data manually filtered and matched against the pivot results;
  - spreadsheet calculations have been correctly transferred into the reporting template.
- it should be ensured that all source data and calculation spreadsheets have been retained as required – See Section 7.

Evidence should be retained of the detailed check performed to enable another official to identify what validation has been undertaken.

It may also be appropriate to perform a further high level review of the report, for example to ensure that a number of individual data elements reconcile to overall system totals etc. Again evidence of any such review processes performed should be retained.

Where data is provided to the report compiler from another staff member, it is the data provider's responsibility to perform the detailed checks outlined above and a Data Provider Reporting Declaration should be submitted – See Appendix 2 – to the report compiler with the requested data.

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## **POLICY – REGULATORY REPORTING POLICY**

### **7. Retention of Data**

All source data **must** be retained as documentary evidence, either for future audits or for validation in the event of follow up questions or investigation from Ofgem.

As a minimum, the following should be retained:-

- Raw system report (**unchanged**)
- Any spreadsheet where the system data has been transformed
- Draft reporting template
- Evidence of Checking
- Completed Reporting Declaration Forms
- Completed Sign Off Form & Approval Presentation

If standard data files are used which are also used for other purposes e.g. monthly management accounts, then it is not necessary to save a separate copy of such a data file but the documented procedures should provide a cross referenced to where such data files are stored.

However, if such a data file is not static and could be changed, then a copy of the data file which was used in the compilation process should be separately saved as otherwise any subsequent checking would not be able to check data elements back as these may have been amended in the intervening period.

Each report owner must identify the most appropriate method of retrieving and recording data this can be a shared drive on the network or a hard copy stored in filing. This information must be retained for a recommended five years. This acts both as an “audit trail” and as a library of information for future reference.

**Under no circumstances should data be retained in individual C drives.**

### **8. Sign Off/Approval**

For the reports identified as requiring sign off the Report Owner must complete the form in Appendix 3 and have this signed off by the Report Approver before it is submitted to the Regulation Team or before submission to Ofgem where this is to be done directly.

In completing the Sign Off form, the report owner and approver are declaring that all data in the return has been checked in detail and that for where data has been provided by other officials, they have received all the relevant supporting Data Provider Reporting Declarations.

In order to assist in the Sign Off/Approval process, an Approval Presentation should be completed (See Appendix 4) and used in the Sign Off meetings held between the Report/Table Approver and the Report/Table Owner.

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## **POLICY – REGULATORY REPORTING POLICY**

This presentation provides assurance that all required documentation is in place and had been fully completed and contains information to provide assurance to the Report/Table Approver over the completeness and accuracy of the reported data and also to confirm that all required Data Assurance activities have been performed in compliance with this Regulatory Reporting Policy.

The exact content of the presentation may differ dependent upon the nature of the Report/Table but this should contain the following as a minimum:-

- Documentation Checklist;
- Best Practice Checklist;
- Roles & Responsibilities – to prove that appropriate segregation exists between data compilation and checking;
- Highlights, Changes Made & Proposals – outline of what worked well, any key changes made or suggestions for future improvement of process based on lessons learned;
- Issues, Challenges & Concerns – outline any key challenged faced with the compilation of the data, in particular outline where assumptions or estimations have been used in the absence of complete or accurate data being held in the required Ofgem format to enable the Report/Table Approver to understand the ‘confidence level’ over the accuracy of the data;
- Table Overview & Data Validation – outline how the data has been checked to ensure accuracy – required to outline the Data Assurance activities in place over the Report/Table to comply with Ofgem DAG requirements;
- Regulatory Year Performance – undertake a comparison of current and prior year data to identify any unusual anomalies for investigation and explanation. Need to explain key drivers for movements in data to include in commentary (where required for RRP)
- Forecast Year(s) Performance – consider impact of current year performance on forecast year data/performance and explain in commentary (where required for RRP).

### **9. Audit**

Compliance with regulatory obligations may be subject to regular audit by Ofgem, third parties, Internal Audit or by the Regulation Department. Where an audit is being undertaken the report owner must confirm resolution of all issues raised by the audit.

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## **POLICY – REGULATORY REPORTING POLICY**

### **APPENDIX 1 – DOCUMENTED PROCEDURE TEMPLATE/GUIDANCE**

#### **Reporting Requirements**

Outline the relevant Gas Transport Licence or UNC section and document the requirements in relation to provision of data to ensure it is clear what data is to be provided.

Cross reference to any Ofgem Reporting Guidance documents published.

Outline any assumptions made in the absence of clear guidance from the Regulator.

Indicate the timelines for submission of data to the Regulator and also any internal deadlines which are set for receipt of data, checking of data and thus having a draft submission available before the external reporting deadline.

It is recommended that an internal deadline is set which is at least one week prior to the external submission date in order to allow time for potential audit.

#### **Roles & Responsibilities**

Clearly indicate which members of staff are performing which roles in the reporting process. This may either be by named individual or job titles providing that such titles would enable identification of individuals.

This section should also detail the designated Deputy Report Owner.

#### **Data Sources**

Outline each individual data element within the return, providing a definition of what data is to be supplied and any variance against the Ofgem/UNC reporting definitions if applicable.

For example, the reporting template may require data on Planned Non Contractual Interruptions. The documented procedures should outline the exact nature of the data element to record that this includes Customer/Shipper initiated Service Alterations, Customer or Local Authority initiated Mains Diversions and GDN Mains Replacement work.

As another example, the Cost Reporting requires data on Pensions split into defined reporting categories. The documented procedure should outline all the NGN Pension schemes and which fit into which Ofgem reporting category etc.

For each data element indicate the source of the data by naming the actual source system used to extract the data or by naming other sources e.g. from the Leakage Model output etc.

Where data is being provided by persons other than the report compiler, indicate the name or title of the staff member designated as each data element Data Provider.

Where data is being provided by a third party e.g. data from Xoserve, then the name of the Xoserve file containing the data should be outlined together with a description of how this data is received and who holds this data internally in NGN.

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## **POLICY – REGULATORY REPORTING POLICY**

### **Compilation Process**

This section should outline in detail all the steps involved in the compilation process from extraction of system data to population of the reporting template.

**This section should provide sufficient detail to enable another member of staff who is not usually involved in the reporting process to recreate the data and the reporting required from scratch. The procedures should also be sufficiently detailed to allow the Detailed Checker to follow the same processes in order to check the data.**

**Too often procedures are created which are too general and assume a level of knowledge of the data or reporting requirements. This has then created problems in the absence of key staff, as the procedures cannot be understood and the new data compiler has to guess how data is created producing errors.**

For the data extraction process the procedure should document the report name which is run to extract the data e.g. Actual Abandonment Summary SAP GDNS report from GDNS MIS function. It should also outline any report parameters which need to be input to ensure the correct data is extracted from the system.

If this report data is then being directly transferred into the reporting template, the procedure should outline which cells or section in the template should be populated with what data.

If any transformation of the report data is required to summarise the data or to split this into the Ofgem/UNC reporting categories, the documented procedure must provide full instructions as to how this is undertaken.

If a spreadsheet model is used to aggregate or summarise data, then the procedure should explain where the report data should be input into this spreadsheet (specific worksheets and cells as appropriate) and outline any further actions which need to be undertaken, e.g. updating pivot tables or dragging down formulae over the whole data set.

If further data needs to be added to create the Ofgem/UNC required data, then again the procedure should explain how this is extracted and how this is merged with other data.

### **Checking Process**

This section should provide a detailed description of the checks to be performed over reporting data.

It is good practice to create a Checklist which lists each data element in one column, indicates where the data should be checked back to in the second column and then provides further columns for initials and date.

This can be used by the Detailed Checker to ensure that all the individual data elements are checked back to the correct source and then by populating the checklist with name/initials and date of check, this provides the evidence of the checks being undertaken as required in the Regulatory Reporting Policy. **A 100% detailed check must be undertaken to ensure the validity of all data.**

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## **POLICY – REGULATORY REPORTING POLICY**

### **Retention of Records**

This section should outline what data files require to be retained and should indicate the location on the server of where these should be stored.

The procedure should also outline any naming conventions used to distinguish between different versions of the regulatory reporting template or of source data files.

### **Sign Off/Approval**

The documented procedures should cover the actions which are taken at the Sign Off stage to ensure that the Report Approver can gain assurance over the completeness and accuracy of the report.

The procedures should reference the Report/Table Approval Presentation which is required to be completed and provide the template for this in the Appendices to the procedure document.

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**POLICY – REGULATORY REPORTING POLICY****APPENDIX 2 – DATA PROVIDER REPORTING DECLARATION FORM****DATA PROVIDER REPORTING DECLARATION – [DATA ELEMENT NAME] – [DATE]**

Data Being Submitted	[Enter what data is being requested from the data provider] Please enter the data required into ALL cells coloured yellow
Return Date	The Data <b>MUST</b> be supplied back no later than <b>[Date]</b>
Return To	<a href="#">[Report Complier's e-mail address and contact telephone number]</a>
Data Period	[Enter required date period for data being requested]
Data Sources & Systems	E.g. Standard report from GDNS, Name of Report
Source Data Retained	E.g. YES – Held in hard copy and on shared server
	Path & File reference Name:
Documented Process	<p>If you have not used the P&amp;P, please state why not and provide, with your return, a written documented process of how the required data was obtained and compiled for submission.</p> <p style="text-align: center;"><b><u>DECLARATION</u></b></p> <p>This source data has been retained and is available for independent checking if required.</p>
	To the best of my knowledge, there are no issues in relation to systems or data extraction processes which would affect the reliability of the data being supplied and P&Ps have been followed.
<b><u>DATA PROVIDER</u></b>	
NAME (Please Print)	
Signed	
Position	
Date	
	I can confirm that all of the data which is being supplied has been confirmed as being checked back to source data by independent persons and has been confirmed as accurate.
	Date of Check:
	<b>Please summarise what checking was performed on the data:</b>
<b><u>DATA CHECKER(S)</u></b>	
NAME(S) (Please Print)	
Signed	
Position	
Date	
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**POLICY – REGULATORY REPORTING POLICY****APPENDIX 3 – SIGN OFF FORM****Sign Off to Confirm Data Review and Accuracy**

<b>Regulatory Report Title</b>	E.g. D9 – Environmental Performance
<b>Data Being Submitted</b>	E.g. - Pipeline asset data
<b>Data Period</b>	E.g. 1/4/11 – 31/3/12, data as at 31/3/12
<b>Data Sources &amp; Systems</b>	E.g. standard report from SAP GDNS
<b>Location Where Source Data is Retained</b>	E.g. Held on shared drive, location and file reference name
<b>Checking Declaration</b>  <p>I can confirm that the data being supplied has been checked back to source data on [insert date] and is accurate. This source data has been retained and is available for independent checking if required.</p> <p>I can confirm that the procedures, assumptions and interpretations used to compile this submission have been documented and a copy of this sent to NGN's Regulation Manager on [insert date].</p>	
<b>Report Owner</b>  <p>Signed:</p> <p>Position:</p> <p>Date:</p>	
<b>Report Approval Declaration</b>  <p>I can confirm that the process followed to compile and check the return is compliant with the control requirements outlined in the NGN Regulatory Reporting Policy and a such all mandatory data assurance activities have been performed.</p>	
<b>Report Approver</b>  <p>Signed:</p> <p>Position:</p> <p>Date:</p>	
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## **POLICY – REGULATORY REPORTING POLICY**

### **APPENDIX 4 – REPORT APPROVAL PRESENTATION**

See Powerpoint template on Regulation MyNGN site

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# Appendix 3

## NGN Data Assurance Guidance

# Final Report Data Assurance Guidance Process

**Northern Gas Networks Ltd**

November 2018

# Contents

## The contacts in connection with this report are:

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### Status of report

Draft Report issued: 19 October 2018  
Final Report issued: 1 November 2018

### Distribution

**to (for action)**  
Sarah Carroll, Head of Internal Audit

### cc (for information)

Mike Ashworth, Legal & Corporate Governance Director  
Stephen Parker, Regulation Director

This report is provided pursuant to the terms of our Internal Audit engagement letter, 16<sup>th</sup> November 2016. The report is intended solely for internal purposes by the management and board of Northern Gas Networks Ltd and should not be used by or distributed to others, under the Freedom of Information Act 2000 or otherwise, without our prior written consent.

# Executive summary

# Executive summary

## Scope and approach

In 2015 Ofgem introduced the Data Assurance License Condition, whereby each entity must submit an annual Data Assurance Report (DAR) to confirm they are compliant with the Data Assurance Guidance (DAG) as devised by Ofgem. The objective of the internal audit was to assess the adequacy of the design of the NGN DAG processes, including an assessment as to whether these processes are being adhered to in practice, i.e. to what extent they are operating effectively (see Appendix 1 for Terms of Reference extract). We completed a desktop review of key documentation, performed walkthroughs of the processes in scope with management to further understand the operation of controls in place, and conducted sample testing where appropriate.

## Conclusion

Based on the procedures performed we did not identify any instances of non-compliance with the DAG. Specifically, in relation to each of the six scope objectives:

- **Assessed the extent to which processes and controls are documented** - the overarching NGN Regulatory Reporting policy document sets out the framework, with the granular processes devolved to the directors who ultimately approve the final submissions. Desktop review of the overarching policy document, and a sample of 10 individual submission documents, confirmed key controls were documented to a sufficient level of detail consistent with the DAG requirements.
- **Confirmed the risk assessment has been completed for all submissions in scope per the DAG** - the list of submissions in scope is maintained by Internal Audit, with reference to the appendix provided by Ofgem and the current Regulatory Instructions and Guidance (RIGs). A sample of five submissions per the RIG were vouched to correct inclusion in the Internal Audit tracker. For a sample of 10, we vouched to evidence the risk assessment had been completed, with no exceptions noted.
- **Confirmed the risk assessment methodology applied is in line with the DAG** - the probability and impact risk assessments used by NGN are aligned to the methodology set out in the DAG. The probability risk assessments are completed by the table owners in the business and reviewed for reasonableness by the Head of Internal Audit. The impact risk assessment is owned by the Regulation Director and includes appropriate narrative to explain any variances in NGNs risk scoring methodology, as required by the DAG.
- **Evaluate whether the assurance activities determined by management are proportionate to the risk assessment** - the NGN Regulatory Reporting policy and procedure documents mandate the minimum assurance activities which are compulsory for all submissions in scope, regardless of the risk assessment. Therefore, as a minimum, NGN assurance activities are compliant with the DAG, and in some instances are more detailed than required. Management have made the decision to heavily involve Internal Audit in the process. This includes review of probability risk assessments, preparation of the baseline impact risk assessment, and compilation of the NetDAR.
- **Assessed the extent to which controls are evidenced** - for all submissions, per NGN policy, the signed control sheets and director approval must be retained on file and produced on demand for inspection by Internal Audit. For a sample of 10 submissions, we vouched to evidence of key controls with no issues noted. We also inspected a sample of five NGN internal audit files and confirmed the audits over the DAG process were demonstrable in the period.
- **Confirmed appropriate checks and controls exist over the manual report compilation process** - the manual compilation of the NetDAR is reviewed for completeness and data entry accuracy by an independent member of the NGN Internal Audit team. The report is then reviewed by the Business Integrity Steering Group, prior to final approval and submission by the Regulation Director. We confirmed the checks had been completed for the most recent report, and did not identify any errors during the course of our procedures.

We have identified four minor observations for management's consideration, which may further enhance the efficiency and effectiveness of current arrangements. These have been detailed in the main body of this report.

# Observations and Recommendations

# Observations and recommendations

1. Assess the extent to which processes and controls are documented			
Finding	Recommendations	Management Response	Responsible Owner & Action Date
<p><b>1.1 Procedure documentation</b></p> <p>The NGN Regulatory Reporting Policy documents the overarching control framework applicable to all submissions in scope for the DAG process. The documentation of procedural level activities (e.g. how to run a report) is devolved to the director responsible for the relevant Ofgem submission.</p> <p>We selected a sample of 10 submissions and vouched to evidence of procedural documentation, with one (10%) exception.</p> <p>Although each of the 14 Guaranteed Standards of Performance (GSOP) have their own documented procedure, there is no overarching document for the process of compiling and checking the GSOP table. We were informed that management is aware, and that a new process document is in draft to reflect the amendments to the process identified as part of the prior year audit.</p> <p>In the absence of procedure documents, there is a risk the compilation process is not as efficient as possible, in the event of staff churn.</p>	<p><b>1.1</b> Management should document all ancillary activities related to the DAG process.</p>	<p>The lack of a DAG Procedure Document for Table 8.3 of the Cost &amp; Output Submission related to GSOP is a known issue to management and this risk was accepted and reflected in the DAG risk assessment completed for the 2018/19 NetDAR report.</p> <p>Due to issues identified from a wider audit of the end to end GSOP processes, it was necessary to change the prior process used for the compilation, checking and approval of Table 8.3.</p> <p>As such, it was agreed that a revised procedure document would be created after the submission of the Table for the 2017/18 Cost &amp; Output Reporting process to reflect the changes made.</p> <p>This will be used for the 6 monthly GSOP return as required by Ofgem.</p>	<p>I Cooper 31/12/18</p>

# Observations and recommendations

1. Assess the extent to which processes and controls are documented			
Finding	Recommendations	Management Response	Responsible Owner & Action Date
<p><b>1.2 Documentation</b></p> <p>The Head of Internal Audit maintains a spreadsheet log of every DAG audit completed for each submission, to help ensure all submissions are independently reviewed by Internal Audit on a cyclical basis.</p> <p>We noted instances where submissions were excluded from the audit tracker, and submissions which had never been audited.</p> <p>Although we were able to discuss the reason in each instance (e.g. derogation, automated) with the Head of Internal Audit and, therefore, confirm the approach was valid, the rationale should be fully documented as a matter of good housekeeping.</p> <p>There is a risk that tacit knowledge is lost in the event of staff churn, resulting in a loss of efficiency in the DAG process.</p>	<p><b>1.2</b> Management should document rationale for the DAG audit approach.</p>	<p>The rationale for exclusion of certain submissions from the DAG Audit Tracker log is fully documented within other DAG documents e.g. the NetDAR report or DAG Risk Assessment Tracker or the DAG Risk Assessment templates.</p> <p>As such, we do not consider that there is a risk to NGN but for completeness we will add the relevant comments made in the above detailed documentation onto the DAG Audit Tracker Log.</p>	<p>S Carroll 31/12/18</p>

# Observations and recommendations

## 2. Evaluate whether the assurance activities determined by management are proportionate to the risk assessment, with reference to the suggested controls in the Ofgem guidance;

Finding	Recommendations	Management Response	Responsible Owner & Action Date
<p><b>2.1 Proportionate assurance activities</b></p> <p>Management have made the decision to mandate a minimum level of assurance activities, regardless of the risk assessment result. This approach extends beyond the requirements of the DAG.</p> <p>As such, there is no explicit or implicit reference back to the risk assessment when individual submission checks are performed, i.e. to validate whether the level of review is commensurate with risk rating.</p> <p>There is a risk the level of assurance activities are overly onerous, proportionate to risk, and therefore have an adverse impact on efficiency.</p>	<p><b>2.1</b> Management should periodically reconsider the extent of assurance activities for low risk submissions.</p>	<p>NGN have mandated the minimum assurance activities within the Regulatory Reporting Policy as these are simply good practice controls which should be in place for all reporting to ensure the completeness and accuracy of the data.</p> <p>These controls requirements extend beyond the scope of DAG risks and consider the wider risks of internal business decisions being taken on inaccurate reporting.</p> <p>As such, these controls are considered appropriate to manage all risk and thus management do not intend to change its Policy in this regard.</p>	<p>No action to be taken</p>

# Observations and recommendations

3. Confirm appropriate checks and controls exist over the manual report compilation process			
Finding	Recommendations	Management Response	Responsible Owner & Action Date
<p><b>3.1 Governance</b></p> <p>The Network Data Assurance Report (NetDAR) is drafted by the Head of Internal Audit, and distributed to the Business Integrity Steering Group (BISG) for review, in advance of their February meeting. The Steering Group is chaired by the Regulation Director, who ultimately approves the final NetDAR.</p> <p>The meeting minutes from the BISG meeting in February 2018, when the NetDAR is approved, are very brief. Similarly, there is no audit evidence of the reviews performed by the Regulation Director, albeit we acknowledge approval is implicitly evidenced through submitting the NetDAR.</p> <p>Nonetheless, there is a risk the reviews are not demonstrably precise.</p>	<p><b>3.1</b> Key reviews should be documented, including challenges or queries, to demonstrate the precision of review.</p>	<p>We do not see a risk here.</p> <p>The draft NetDAR report is issued to the Regulation Director for comment and then formally issued to all members of the BISG (including the Regulation Director) with instructions that this should be reviewed to raise any questions at the next BISG meeting. The relevant communications are evidenced by emails retained on file.</p> <p>The review and approval of the draft NetDAR is evidenced within the BISG minutes. The fact that these were brief for the review of the 2018/19 NetDAR is because no queries were raised by any members.</p> <p>We do not intend to ask the Regulation Director to provide a written confirmation of his approval, as this is already evidenced from the BISG minutes and the fact that he actually issues the final NetDAR report to Ofgem confirming such approval.</p> <p>As such, there is more than adequate evidence of review on record.</p>	<p>No action to be taken</p>

# Appendices

# Appendix 1 – Terms of Reference (extract)

## 1. Introduction

KPMG has been requested to undertake this review as part of the 2018 Internal Audit Plan and has prepared these terms pursuant to our Internal Audit framework agreement.

## 2. Background

Northern Gas Networks Ltd (“NGN”) is required, along with its peers, to submit a suite of reports to Ofgem in order for them to discharge their regulatory duties. If the reporting is inaccurate or incomplete, the entity may be subject to significant fines and investigation.

In 2015 Ofgem introduced the Data Assurance License Condition, whereby each entity must submit an annual Data Assurance Report (DAR) to confirm they are compliant with the Data Assurance Guidance (DAG) as devised by Ofgem. Whilst there is no regulatory requirement for NGN’s data assurance activities to be audited by an independent third party, management would welcome external scrutiny over this key risk area. In particular, insights over data assurance will be used to enhance the Price Control reporting to Ofgem which is due in 2019.

## 3. Internal Audit objectives

This internal audit review will assess the adequacy of the design of the DAG processes, including an assessment as to whether these processes are being adhered to in practice, i.e. to what extent they are operating effectively.

Specifically, we will:

- Assess the extent to which processes and controls are documented;
- Confirm the risk assessment has been completed for all submissions in scope per the DAG;
- Confirm the risk assessment methodology applied is in line with the DAG;
- Evaluate whether the assurance activities determined by management are proportionate to the risk assessment, with reference to the suggested controls in the Ofgem guidance;

- Assess the extent to which controls are evidenced; and
- Confirm appropriate checks and controls exist over the manual report compilation process.

## 4. Our approach

We will use KPMG’s internal audit methodology, which will include, but is not limited to:

- desktop review of key documentation, e.g. policy and procedures, risk assessments, DAR draft report
- walk-throughs of the processes in scope with relevant management to understand the operation of controls in place
- sample testing where appropriate, and to the extent evidence is available, e.g. inspect risk assessments, vouch a sample of source assessment data to inclusion in the DAR.

## 5. Deliverable

We will prepare a report of findings with good practice advice on improvements as required.

We will agree our written output with management before issuing a final version to the addressees in Section 7.

Our report will be delivered in accordance with the timeline overleaf.


# Appendix 2 – Documentation inspected

We have inspected the following documents in concluding our audit procedures:

- Data Assurance Guidance (DAG)
- Regulatory reporting policy document (PREG015)
- Impact assessment
- Probability assessment
- Probability risk assessment tracker 2018-19
- Network Data Assurance Reporting (NetDAR)
- Appendix 6 (Risk assessment results)
- DAG reporting checks
- Appendix 7 (DAG audit report)
- Business Integrity Steering Group (minutes)
- Ofgem feedback
- DAG audit summary
- Procedure documents for sample of ten tables
- Data declaration, 'checking' evidence, and approver sign off for a sample of ten tables
- NGN internal audit workpapers in relation to six DAG tables audited for the period.

## Appendix 3 – Interviewees

Name	Role as it relates to the DAG process
Sarah Carroll	Head of Internal Audit
Stephen Parker	Regulation Director
David Pearson	A40 Cost Reporting Project Manager, Finance
Jonathan Trapps	Table owner
Andy Middleton	Table compiler
Mike Charlton	Table owner
Daniel Howitt	Table checker
Ian Cooper	Table compiler
Scott Wood	Table owner



This report is provided pursuant to the terms of our Internal Audit engagement letter, 16<sup>th</sup> November 2016. The report is intended solely for internal purposes by the management and board of Northern Gas Networks Ltd and should not be used by or distributed to others, under the Freedom of Information Act 2000 or otherwise, without our prior written consent.



# Appendix 4

## NGN GD2 Model Test Report



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**Private & confidential**

Directors  
Northern Gas Networks Limited  
1100 Century Way  
Thorpe Park Business Park  
Colton, Leeds LS15 8TU

Our ref lz/wk

8 July 2019

Dear Directors

**Testing procedures on the GD2 financial model (the “Model”): report of findings**

**1 Introduction**

This report contains our findings relating to version 7.4 of the Model contained in file “NGN FM Ver 7.4.xlsm” of date 28 June 2019 and time 09:32 am prepared by you.

The purpose of the Model is to generate projected profit and loss accounts, cash flow statements and financial ratios (both notional and actual) for the years to March 2026 to support your GD2 business plan submission on the basis of assumptions and input data contained in the Model provided by you..

**2 Responsibilities**

The directors of Northern Gas Networks Limited are responsible for the preparation and contents of the Model, its inputs and assumptions and any other project documentation supplied to us. We are responsible for carrying out the procedures described below, which we have agreed with you, and reporting to you in respect of these specific procedures.

**3 Scope of Work**

In accordance with the terms of our engagement letter dated 24 June 2019, we have undertaken certain testing procedures set out below on the Model which has been prepared in connection with your preparation of the GD2 business plan submission to Ofgem (“GD2” or the “Project”).

The objective of our procedures on the Model is to test whether the Model has been constructed so as to materially achieve the purpose which it was designed to meet,

insofar as its logical integrity under the base case assumptions and input data is concerned.

Our work comprised, as agreed with you, the following procedures:

- testing the logical integrity of the arithmetical operations in the Model formulae and calculations under the assumptions and input data for the base case. Specifically, for each unique formula, we inspected the formulaic code for instances of apparent arithmetical inaccuracies or deviation from the intended logic (as implied by the Model structure and construction or as explicitly stated in the cell label or management's documented understanding of the Model);

Our work was limited to the above procedures, as agreed with you. It was agreed that our work did not include, for the avoidance of doubt, any testing or checks of the following, and accordingly we do not report on:

- the accounting and tax assumptions in the Model;
- whether the financial statements are presented or contain disclosures in a format that is consistent with the requirements of existing UK accounting and financial reporting standards or of existing UK tax legislation;
- matters that require commercial, technical or legal interpretation in the Model supplied to us;
- the commercial merits, technical feasibility or compliance with applicable legislation of the Project;
- the factual accuracy, validity, reasonableness or completeness of the input data and assumptions in the Model supplied to us;
- whether there are logic errors or matters which do not correspond to our experience of generally agreed best practice but that do not directly impact the ability of the Model to meet its purposes;
- the appropriateness of visual elements (such as graphs) included within the Model;
- the accuracy of linkages to data sources outside the Model;
- the accuracy and correctness of the software or operating system within which the Model operates; and
- historical information.

Because the above procedures do not amount to an audit performed in accordance with any standards applicable to auditing, a review performed in accordance with any standards applicable to reviews or an assurance engagement in accordance with any other assurance standards, we do not express any assurance on the Model.

#### 4 Report of findings

On the basis solely of the procedures performed, we report that the Model has been constructed so as to materially achieve the purpose which it was designed to meet, insofar as its logical integrity under the base case assumptions and input data is concerned.

We include as:

- Appendix 1 - a list of assumptions-related comments raised during our work, together with responses received, which may help the users' understanding of the Model. This is not a complete list of the assumptions in the Model as production of such a list is beyond the scope of our work.

We also include the following:

- Appendix 2 - a copy of the key outputs from the Model for identification purposes.

The procedures set out above, this report and other comments provided in the appendices are given solely in respect of the version of the Model specified in this report, and are not, and will not be, valid for any other prior or subsequent version of the Model.

#### 5 Restriction on distribution

This report is addressed to and is for the benefit and information of Northern Gas Networks Limited only and should not be copied, referred to or disclosed, in whole or in part, without our prior written consent, except as specifically permitted in our engagement letter. The scope of our work is set out above and has been agreed by Northern Gas Networks Limited and to the fullest extent permitted by law, we will not accept responsibility or liability to any other party (including Northern Gas Networks Limited's legal and other professional advisers) in respect of our work or the report.

Yours faithfully

KPMG LLP

KPMG LLP

Appendix 1 – Assumptions-related comments

Appendix 2 – Key Model outputs



## **Appendix 1 – Assumptions-related Comments**

Appendix 1 – Assumptions-related Comments							
Worksheet	Address	NGNFM Ver 7.4.xlsm (all sheets)	Label	Comment	Client Response	Fin	Applies to
Tax	\$R\$88	=R84/R94	Contributions to losses from clawback	Adjustments to tax losses from "tax allowance adjustments: gearing/interest costs" are not divided by the 'Grossing-up' factor for tax on tax charge after losses in row 96.	That's right. This was a consequence of amending the formula in Tax trigger Row17 as per Ofgem's methodology ("grossing-up" factor is not used to calculate the benefit from an excessive interest following overgearing in Tax trigger, hence it does not need to be divided by in Tax sheet).	48	Entire row
Input	\$AE\$228	=AE227	Forecast Dividends	'Forecast Dividends' are assumed to be equal to 'Notional Dividends' from RIIO-3 onward.	Financeability and scenario stress-testing is currently focused on GD-2 period. Dividend optimisation functionality also extends up to the end of GD-2. Therefore, starting from GD-3 dividends are assumed to be equal to notional values.	3	Entire row
RoRe	\$R\$7	=Input!T166	Tax rate (t+2)	<p>2 year lag in tax rate is applied to the following RoRE items:</p> <ul style="list-style-type: none"> <li>- Broad Measure of Customer Satisfaction (BMt)</li> <li>- Environmental Emissions Incentive (EEIt)</li> <li>- Shrinkage Roller Incentive (SHRRt in SHRt)</li> <li>- NTS Exit Capacity Incentive (Elt in Ext)</li> <li>- Discretionary Reward Scheme (DRSt)</li> </ul> <p>This means current year tax rates (without lag) have been applied to the following RoRE items:</p> <ul style="list-style-type: none"> <li>- IQI</li> <li>- Tax Trigger Tax</li> <li>- Guaranteed Standards Payments</li> <li>- Fines&amp;Redress</li> </ul>	This corresponds with our understanding of Ofgem's methodology.	9	Entire sheet
Fin Ratios (Notional)	\$R\$8	=SUM(Input!R216:R217)*Input!R17	Net impact of DARTs on core net debt	The 'Net impact of DARTs on core net debt' is calculated as the sum of the 'Pension scheme administration and Pension Protection Fund Levy' and 'Pension scheme deficit revenue allowances' which reflect all pension related payment for the notional company.	For the notional company, this reflects all pension-related payments.	11	Entire row

Appendix 1 – Assumptions-related Comments							
Worksheet	Address	NGNFM Ver 7.4.xlsm (all sheets)	Label	Comment	Client Response	Fin	Applies to
Fin Ratios (Notional)	\$R\$89	=-Input!R217*Input!R17	Pension scheme deficit repair payments	The 'Recalculated base revenue' to calculate the 'FFO (Moody's) includes the 'Pension' which is addition of the following cost items: a) 'Pension scheme administration cost and PPF levy' b) 'Pension scheme deficit repair payments' c) 'Pension true-up from previous price controls' However, for the 'FFO Moody's' it does not exclude the 'Pension true-up from previous price control'.	Yes, this is intentional. Pension true-up can be included in the revenue (as the true-up compensates for any differences between the allowances and actuals in GD-1), but it does not impact on the actual expenditure in GD-2.	14	Entire row
Fin Ratios (Notional)	\$R\$109	=(Input!R212-Input!R211)*(Input!R152-Input!R151)*Input!R17	Excess fast money for Capex	The 'Excess fast money for capex' is calculated by multiplying the differences between Notional and Outturn shares of Capex in Totex (excl. Repex) to the Applied Totex (excl. Repex).	Yes, this agrees with our understanding of how the Rating agencies treat "excessive" fast money allowed in the Revenue.	15	Entire row
Fin Ratios (Notional)	\$R\$113	=(R92-R90+R106-R110)/-R90	Adjusted ICR	Treatment of Repex in 2014 and 2015 are different to the later years in the calculation of the ratios. The model assumes that for the Moody's, S&P and Ofgem financial ratios in period 2014 and 2015 include either the 'Repex' or 'Repex recovered through Fast money/slow money' as part of FFO or EBITDA.	Repex was expensed prior to 2016. This is why both Moody's and S&P add Repex back in to calculate FFO (full Repex for the former and "slow part" of Repex for the latter, as per our understanding).	16	Entire row
Fin Ratios (Notional)	\$T\$119	=(T73+T79)/-(T76+T77)	FFO Interest Cover (incl. accretion)	'S&P' FFO Interest Cover (incl. accretion) ratio is defined as: (EBITDA - tax paid) / (Cash interest + Principal Inflation Accretion).  Note in 2014 and 2015, Repex recovered through Slow money is also added to the numerator.	This is a simplification of the actual methodology used by the RA. However, we believe that the results should directionally match the real-life calculations performed by the RA.	17	Entire row
Fin Ratios (Notional)	\$T\$120	=(T73+T76+T77+T79)/T66	FFO / Debt	'S&P' FFO / Debt ratio is defined as: (EBITDA - Cash interest - Principal Inflation Accretion - tax paid) / (Closing Net Debt).  Note that in 2014 and 2015, Repex recovered through Slow money is also added to the numerator.	This is a simplification of the actual methodology used by the RA. However, we believe that the results should directionally match the real-life calculations performed by the RA.	18	Entire row

Appendix 1 – Assumptions-related Comments							
Worksheet	Address	NGNFM Ver 7.4.xlsm (all sheets)	Label	Comment	Client Response	Fin	Applies to
Fin Ratios (Actual)	\$T\$79	=(T\$64-T\$62-T\$76)/-T\$62	AICR (NGN)	AICR is calculated as 'FFO (Moody's) + Cash Interest - Regulatory Capital Charge) / (Cash Interest). The Regulatory Capital Charge element in the equation includes RAV depreciation, Repex recovered through Fast money and Excess fast money for Capex. This applies to AICR calculations for both notional ratios and actual NGN and NGNH ratios.	This is a simplification of the actual methodology used by the RA. However, we believe that the results should directionally match the real-life calculations performed by the RA.	22	'Fin Ratios (Actual)!\$T\$79
Fin Ratios (Actual)	\$R\$80	=(R\$64+R\$72-R\$62-R\$76)/(-R\$62+18)	AICR (NGNH)	The formula to calculate the Moody 'AICR (NGNH)' is adjusted with a hardcoded value '18' added to the denominator 'Interest Coupon (excl. accretion)'. Please clarify what does this value signify.	£18m signifies fixed interest costs on shareholders' loan which are added to interest payments by the RA when they consider NGN Holdings' position.	23	'Fin Ratios (Actual)!\$R\$80
Fin Ratios (Actual)	\$R\$82	=(R\$40+180)/R\$37	Net Debt / RAV (NGNH)	The formula to calculate the 'Net Debt / RAV (NGNH)' adjust 'Net debt' to include additional debt with a hardcoded value '180'. Please clarify what does this hard code value signify.	£180m is a shareholders' loan.	24	'Fin Ratios (Actual)!\$R\$82
Fin Ratios (Actual)	\$R\$83	=(R64+R72)/R40	FFO / Net Debt	For the purpose of calculating the 'FFO / Net Debt' and 'RCF/Net Debt. the 'Repex' is added to 'FFO' for the period 2014 and 2015, it is inconsistent with formula used for rest of the timeline.	Repex was expensed prior to 2016. This is why both Moody's and S&P add Repex back in to calculate FFO (full Repex for the former and "slow part" of Repex for the latter, as per our understanding).	25	'Fin Ratios (Actual)!\$R\$83:\$R\$84
Summary (Actual)	\$AB\$17	=Z4*PRODUCT(Z5:AA5)	Totex+NCC variance	The model assumes that variances in Base Revenue in RIIQ2 period are trued up / clawed back 2 years later on a NPV neutral basis (i.e. the variances are grossed up using the WACC of the two years).	We believe this is an appropriate way of calculating the timing differences between the original and alternative revenue (for stress-testing an actual company).	27	'Summary (Actual)!\$AB\$17
Live Results	\$B\$157	=AVERAGE(Revenue!\$R\$4:\$Y\$4)+AVERAGE (Revenue!\$R\$5:\$Y\$5)	Fast Pot	In this table in the Live Results, 'Fast Pot' includes both 'Fast Pot Expenditure' and 'Non-Controllable Opex'.	Row 157 in ver. 7.4 This is correct.	32	Entire row

Appendix 1 – Assumptions-related Comments							
Worksheet	Address	NGNFM Ver 7.4.xlsm (all sheets)	Label	Comment	Client Response	Fin	Applies to
Debt	\$Z\$74	=Z64*Z68+(1-Z64)*\$Y\$65	Embedded debt (OBR)	The cost of embedded debt is calculated as $N \times \text{CND} + (1 - N) \times \text{CED}$ , where N is the proportion of the new debt, CND is the forecast average cost of new debt, based on 1-5 year trombone rates, and CED is the forecast average cost of embedded debt, based on a fixed sector average cost of embedded debt at the start of the RIIQ2 period. This assumption also applies to Z82, Z90, Z98	This is per our understanding of how embedded debt could be calculated should Ofgem wish to proceed with this option.	36	Entire row
Finance	\$R\$12	=(Input!R242+Input!R243)*Input!R17*Input!R36	RAV adjustment from previous price controls (share to net debt)	"RAV adjustment from previous price controls (share to net debt)" includes the debt portion of 'LRAV (Legacy price control RAV additions adjustment)' and 'RIIO post-vesting RAV additions'. Please confirm	This approach has been borrowed from PCFM. Unless the methodology is changed, suggest leaving as is.	40	Entire row



## **Appendix 2 – Key Model outputs**

Average annual values, £m 2019 prices	RIIO-1	GD-2 Scenarios						Active Scenario
NGNFM Mode		SSMC December	SSMD May	SSMD Metrics	Sensitivity 1	Sensitivity 2	Bid	Bid
Dividend Maximisation Mode								GD-2 Default
Revenue Drivers								All credit metrics
Price Base	31 March 2019	31 March 2019						31 March 2019
Measure of inflation	RPI	Ofgem Inflation	Ofgem Inflation	Ofgem Inflation	Ofgem Inflation	Ofgem Inflation	Ofgem Inflation	Ofgem Inflation
Inflation scenario (+,-,%)	0.0%	0.0%	0.0%	0.0%	-1.0%	1.0%	0.0%	0.0%
Interest rate scenario (+,-,%)	0.0%	0.0%	0.0%	0.0%	-1.0%	1.0%	0.0%	0.0%
CPI/RPI differential	0%	1.01%	1.05%	1.05%	1.05%	1.05%	1.01%	1.01%
Notional gearing	65.0%	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%
Equity issuance threshold	5.0%	5.0%	5.0%	5.0%	5.0%	10.0%	5.0%	5.0%
Cost of equity (% real, RPI)	6.70%	2.96%	3.22%	3.71%	3.71%	3.71%	3.95%	3.95%
CoD methodology	10-year trailing average (B/E)	10-year trailing average (OBR)	11-15-year trombone (OBR)	11-15-year trombone (OBR)	11-15-year trombone (OBR)	11-15-year trombone (OBR)	14-18-year trombone (OBR)	14-18-year trombone (OBR)
Totex Input	PCFM	Bid Totex	Bid Totex	Bid Totex	Bid Totex	Bid Totex	Bid Totex	Bid Totex
Totex Applied	Outturn	Allowance	Allowance	Allowance	Outturn	Outturn	Allowance	Allowance
TIM Incentive Strength	63.98%	35%	35%	35%	35%	35%	35%	35.0%
Incentive income, £m	4	0	0	0	0	0	0	0
Notional dividend payout ratio	5.0%	4.0%	4.3%	4.8%	4.8%	4.8%	3.5%	3.5%
Replex capitalisation share	75%	100%	100%	100%	100%	100%	100%	100%
Asset life, years	45	45	45	45	45	45	45	45
Depreciation backdate	2003	31/03/2077	31/03/2077	31/03/2077	31/03/2077	31/03/2077	31/03/2077	31/03/2077
Opening Debt	Reset to notional	Reset to Notional	Reset to Notional	Reset to Notional	Reset to Notional	Reset to Notional	Reset to Notional	Reset to Notional
Financial Ratios Drivers								
Interest Mode	Forecast (w.derivatives)	Notional (PCFM)	Notional (PCFM)	Notional (PCFM)	Notional (PCFM)	Notional (PCFM)	Notional (PCFM)	Notional (PCFM)
Share of ILD	25%	25%	25%	25%	25%	25%	25%	25%
ILD issue year	2022	2022	2022	2022	2022	2022	2022	2022
ILD maturity year	2077	2077	2077	2077	2077	2077	2077	2077
Dividend payout Mode	Forecast	Notional	Notional	Notional	Notional	Notional	Notional	Notional
Forecast dividend payout ratio	12%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Expenditure performance								
Load Capex under(-)/over(+) spend,%	5.7%	0.0%	0.0%	0.0%	-10.0%	10.0%	0.0%	0.0%
Other Capex under(-)/over(+) spend,%	27.5%	0.0%	0.0%	0.0%	-10.0%	10.0%	0.0%	0.0%
Opex under(-)/over(+) spend,%	-18.5%	0.0%	0.0%	0.0%	-10.0%	10.0%	0.0%	0.0%
Replex under(-)/over(+) spend,%	-11.1%	0.0%	0.0%	0.0%	-10.0%	10.0%	0.0%	0.0%
NCC under(-)/over(+) spend,%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Applied values								
Cost of debt (% real)	2.18%	1.75%	1.93%	1.93%	1.93%	1.92%	2.51%	2.51%
Totex, £m	242.4	252.9	252.9	252.9	227.6	278.2	252.9	252.9
Totex average under(-)/over(+) spend, %	-10.9%	0.0%	0.0%	0.0%	-10.0%	10.0%	0.0%	0.0%
Total Expenditure, £m	312.1	343.2	343.2	343.2	317.9	368.5	343.2	343.2
Key Financial Outputs								
Base revenue	430.5	387.2	393.0	398.4	392.7	403.4	408.7	408.7
Costs	-182.3	-183.0	-183.0	-183.0	-173.8	-192.2	-183.0	-183.0
EBITDA	248.0	204.2	210.0	215.4	218.9	211.2	225.7	225.7
Interest	-46.4	-52.9	-55.5	-55.5	-49.8	-61.5	-62.1	-62.1
Capex+Replex	-130.8	-161.1	-161.1	-161.1	-145.0	-177.2	-161.1	-161.1
Pension Repair+Tax	-34.0	-20.1	-20.6	-21.5	-23.4	-19.1	-22.2	-22.2
Operating Cash Flow	36.8	-29.9	-27.2	-22.8	0.7	-46.6	-19.6	-19.6
Dividend	-88.9	-37.3	-40.1	-44.7	-44.2	-45.3	-32.5	-32.5
Net Cash Flow	-52.1	-67.2	-67.4	-67.5	-43.5	-91.9	-52.1	-52.1
Equity issuance (threshold =5%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Debt Movement	50.2	66.4	66.6	66.7	42.7	91.1	51.3	51.3

Average annual values, £m 2019 prices NGNFM Mode Dividend Maximisation Mode	RIIO-1	GD-2 Scenarios						Active Scenario
		SSMC December	SSMD May	SSMD Metrics	Sensitivity 1	Sensitivity 2	Bid	Bid
								GD-2 Default
								All credit metrics
<b>Credit Ratios: Moody's</b>								
Adjusted ICR (>1.4x)	2.05	1.33	1.37	1.46	1.67	1.28	1.46	1.46
Debt / RAV (<70%)	65%	62%	62%	62%	60%	64%	60%	60%
FFO / Debt (>9%)	14.0%	9.5%	9.7%	10.0%	10.9%	9.1%	10.5%	10.5%
RCF / Debt (>7%)	7.6%	6.9%	6.9%	6.9%	7.7%	6.1%	8.2%	8.2%
Capex / RAV (<12%)	7.3%	6.9%	6.9%	6.9%	6.3%	7.5%	6.9%	6.9%
<b>Credit Ratios: S&amp;P</b>								
FFO / Debt (>9%)	13.6%	9.3%	9.5%	9.8%	10.8%	8.8%	10.3%	10.3%
FFO Interest Cover (>2.5x)	5.1	3.6	3.5	3.6	4.0	3.2	3.3	3.3
<b>Bank Covenant</b>								
PMICR (>1.3)	2.41	1.42	1.45	1.55	1.76	1.36	1.53	1.53
<b>Customer Bills</b>								
Base Domestic Customer Bill	136	122	124	126	124	127	129	129
% change	2%	-10%	-9%	-7%	-9%	-6%	-5%	-5%

Scenario	Constant	31-Mar-14	31-Mar-15	31-Mar-16	31-Mar-17	31-Mar-18	31-Mar-19	31-Mar-20	31-Mar-21	31-Mar-22	31-Mar-23	31-Mar-24	31-Mar-25	31-Mar-26
<b>Allowances:</b>														
Allowed Base Revenue	2019 prices	447	445	458	447	434	438	441	448	403	405	409	412	415
<b>Allowed Base Revenue</b>	<b>Nominal</b>	<b>397</b>	<b>403</b>	<b>419</b>	<b>418</b>	<b>421</b>	<b>438</b>	<b>454</b>	<b>474</b>	<b>435</b>	<b>446</b>	<b>459</b>	<b>471</b>	<b>485</b>
<b>GD-1 Incentives/True-ups</b>														
MOD	Nominal	0	1	-7	-8	-14	-23	-31	-38	-2	-2	N/A	N/A	N/A
Incentives	Nominal	2	3	8	10	13	14	14	13	13	12	N/A	N/A	N/A
NTS Exit Capacity	Nominal	0	0	-4	-2	-3	-4	-4	-9	-8	-5	N/A	N/A	N/A
Other pass-through costs	Nominal	0	0	-2	-5	-4	-4	2	2	1	0	N/A	N/A	N/A
Other true-ups	Nominal	-1	3	0	8	-3	-12	13	-1	-4	0	N/A	N/A	N/A
ABC Pensions	Nominal	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>GD-2 Incentives</b>														
Totex+NCC variance	Nominal	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	0	0
Other Incentives	Nominal	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	0	0
<b>Total Revenue</b>	<b>Nominal</b>	<b>398</b>	<b>410</b>	<b>415</b>	<b>421</b>	<b>410</b>	<b>409</b>	<b>448</b>	<b>442</b>	<b>436</b>	<b>452</b>	<b>459</b>	<b>471</b>	<b>485</b>
<b>Domestic Customer Bill</b>	<b>2019 prices</b>	<b>141</b>	<b>143</b>	<b>143</b>	<b>142</b>	<b>133</b>	<b>129</b>	<b>137</b>	<b>132</b>	<b>127</b>	<b>129</b>	<b>129</b>	<b>130</b>	<b>131</b>
<b>Domestic Customer Bill</b>	<b>Nominal</b>	<b>126</b>	<b>129</b>	<b>131</b>	<b>133</b>	<b>129</b>	<b>129</b>	<b>141</b>	<b>139</b>	<b>137</b>	<b>142</b>	<b>145</b>	<b>149</b>	<b>153</b>
<b>Operating Costs</b>														
Controllable Opex	Nominal	-168	-177	-79	-79	-81	-86	-87	-88	-102	-102	-103	-104	-106
Non-controllable Opex	Nominal	-58	-60	-62	-61	-68	-63	-71	-81	-100	-101	-103	-104	-105
<b>EBITDA</b>	<b>Nominal</b>	<b>172</b>	<b>172</b>	<b>275</b>	<b>281</b>	<b>261</b>	<b>260</b>	<b>290</b>	<b>272</b>	<b>234</b>	<b>249</b>	<b>253</b>	<b>264</b>	<b>275</b>
Interest Paid	Nominal	-57	-45	-46	-46	-47	-49	-59	-45	-47	-49	-52	-55	-57
Capex&Repex	Nominal	-41	-50	-149	-148	-146	-165	-161	-162	-170	-179	-185	-186	-185
Pension scheme deficit repair payments	Nominal	-8	-8	-9	-28	-11	-4	-4	-4	-4.5	-4.6	-4.7	-4.8	-4.9
Tax paid	Nominal	-11	-10	-21	-39	-13	-29	-36	-29	-22	-24	-23	-24	-25
<b>Operating cash flow</b>	<b>Nominal</b>	<b>55</b>	<b>60</b>	<b>51</b>	<b>21</b>	<b>45</b>	<b>13</b>	<b>30</b>	<b>32</b>	<b>-9</b>	<b>-7</b>	<b>-11</b>	<b>-6</b>	<b>3</b>
Dividend P/O ratio	%	10%	11%	11%	12%	12%	12%	12%	12%	5%	5%	5%	5%	5%
Dividend	Nominal	-71	-77	-80	-90	-91	-91	-91	-94	-49	-51	-53	-55	-56
Net cash flow	Nominal	-16	-17	-29	-70	-47	-79	-61	-62	-58	-58	-64	-61	-53
<b>Debt movement</b>	<b>Nominal</b>	<b>30</b>	<b>-14</b>	<b>39</b>	<b>74</b>	<b>43</b>	<b>79</b>	<b>61</b>	<b>62</b>	<b>58</b>	<b>58</b>	<b>64</b>	<b>61</b>	<b>53</b>
AICR NGN [>]	1.4	2.2	2.2	2.1	2.2	1.9	1.6	2.0	1.9	1.8	1.8	1.7	1.6	1.6
AICR NGNH [>]	1.2	1.6	1.6	1.5	1.6	1.4	1.2	1.5	1.3	1.3	1.3	1.2	1.2	1.2
Debt/RAV NGN [<]	70%	67.0%	64.6%	65.1%	66.4%	65.2%	66.0%	66.1%	66.4%	66.4%	66.2%	66.1%	66.1%	65.9%
Debt/RAV NGNH [<]	85%	76.9%	74.2%	74.4%	75.4%	73.8%	74.3%	74.0%	74.0%	73.7%	73.2%	73.0%	72.7%	72.3%
FFO Interest Cover [>]	2.5	5.1	4.6	4.7	6.0	5.2	4.4	5.1	5.5	4.5	4.6	4.4	4.3	4.4
FFO/Debt [>]	9%	15.3%	16.1%	14.5%	13.9%	12.7%	12.0%	13.3%	12.4%	9.9%	10.2%	9.9%	10.0%	10.1%
RCF/Debt [>]	7%	9.5%	9.8%	8.1%	7.1%	6.0%	5.7%	7.2%	6.4%	6.9%	7.2%	6.9%	6.9%	7.1%
PMICR (Bank Covenant) [>]	1.3	2.8	2.4	2.3	3.3	2.5	1.9	2.4	2.2	1.9	1.9	1.8	1.7	1.7

Limitations for GD-2:

1. GD-1 close-outs are taken as per K-Model and JT's assumptions for MOD
2. Movements in working capital are assumed to be zero.
3. Tax is calculated as per the current Ofgem's notional methodology.



# Appendix 5

NGN Board minutes

12 November 2019

RIIO-GD2 Business Plan

**NORTHERN GAS NETWORKS LIMITED**  
**(05167070)**

**RESTRICTED**

Meeting of the Board of Northern Gas Networks Limited (“NGN”) held by conference call on 21 November 2019 at 8am GMT.

**Present:**

**Name:**

Mr Andrew Hunter  
Mr C T Wan  
Mr Dominic Chan  
Mr Neil McGee  
Mr John Burnham  
Mr Paul Rogerson  
Mr Mark Horsley  
Mr Kim Slaminka  
Mr Riaan Potgieter

**Capacity:**

Chairman – CK Infrastructure Holdings Limited (CKI)  
Director – Power Assets Holdings Limited  
Director – Power Assets Holdings Limited (by telephone)  
Director – Power Assets Holdings Limited  
Director  
Director  
Director & Chief Executive Officer – NGN  
CKI – Alternate Director for Mr Duncan Macrae  
Stepstone Global on behalf of SAS Trustee Corporation –  
Alternate Director for Mr Simon Beer

**In Attendance:**

Mr Alex O’Connell  
Mr David Waite  
Mr Gareth Mills  
Mr Stephen Parker  
  
Mr Neil Herrington

Legal Director & Company Secretary – NGN  
Finance Director – NGN  
Head of RIIO GD2 – NGN  
Corporate Governance and Regulatory Assurance Director  
- NGN  
CKI

**Apologies:**

Mr H L Kam  
Mr Simon Beer  
Mr Duncan Macrae  
Mr Charles Tsai

Director – CKI  
Director – on behalf of SAS Trustee Corporation  
Director – CKI  
Director – Power Assets Holdings Limited

**QUORUM**

The Chairman declared that the Meeting had been duly convened in accordance with NGN’s Articles of Association and that a Quorum was present.

In accordance with section 177 of the Companies Act 2006, the members of the Board who were personally interested in the matters to be discussed at the meeting disclosed the nature of their interests (if any).

## **1. RIIO-GD2 2021-2026 PRICE REVIEW BUSINESS PLAN SUBMISSION**

- 1.1 A paper was presented by the Chief Executive Officer and the Regulation Director on the above.
- 1.2 It was noted that NGN must submit a business plan (together with cost and financial templates and Ofgem's populated model) to Ofgem by 9 December 2019, detailing forecasts outputs, costs and revenues and how the plan has been informed by effective stakeholder and customer engagement.
- 1.3 NGN had undertaken an extensive enhanced stakeholder engagement exercise as required by Ofgem, pursuant to which NGN had set up and effectively engaged with an independent Customer Engagement Group together with engaging with Ofgem's independent RIIO2 Challenge Group. The engagement had provided very clear insights into the requirements and expectations of NGN's customers and wider stakeholders and these had been incorporated into NGN's Business Plan, in respect of which NGN had received a 92% acceptability rate.
- 1.4 As required by Ofgem, NGN Business Plan includes three measurable outcomes and outputs for the GD2 period, namely maintaining a safe and resilient network, delivering an environmentally sustainable network and meeting the needs of consumers and network users.
- 1.5 Average annual expenditure on the repex programme was forecast to increase by £10.5m per annum in GD2 as compared to GD1 to reflect stakeholder support for NGN accelerating elements of the repex programme.
- 1.6 Capex was forecast at £274m across GD2, representing a 7% reduction on capex across GD - network investment was decreasing as NGN had already tackled many of its poorest performing assets, meaning it could increasingly maintain rather than replace its assets; and non-network investment was decreasing due to NGN's significant, non-recurring investment in new digital technology made in GD1.
- 1.7 Controllable opex was forecast at £88m on average per annum in GD2, representing a 4% increase as compared with GD1, the main driver being the higher asset maintenance costs and the planned completion of NGN's holder demolition programme over GD2.
- 1.8 Ofgem's prescribed financial parameters were as follows for GD2: annual average WACC of 2.88%; expected outperformance of 0.5%; RPI-CPI wedge of 1.1%; depreciation rates to remain at GD1 levels; average annual cost of equity of 4.3%; average annual cost of debt of 1.93%. Ofgem had not prescribed the target credit rating to determine the assessment of financeability (NGN had maintained a target credit rating of BBB+/Baa1 for the GD1 period in order to preserve long term customer value). It was noted there was a risk that Ofgem may prescribe a lower credit rating than that maintained by NGN although NGN would challenge any such

proposal on the basis that independent research commissioned by Frontier Economics had shown that the maintaining of the existing credit rating in GD2 would result in a long term customer value of c £100m NPV.

- 1.9 It was noted that NGN did not agree with several of the key assumptions within the Ofgem base case and were proposing an alternative set of financial parameters (which were set out at Appendix A to the board papers).
- 1.10 It was noted that an assurance plan had been followed in developing NGN's Business Plan which in turn had been independently validated by EY (at Appendix C to the board papers).
- 1.11 The Board was requested to approve NGN's Board Assurance Statement (as attached at Appendix B to the board papers) for inclusion in the Business Plan, on the basis that:
  - The Business Plan had been informed by customer engagement and feedback from the CEG (as validated by EY).
  - The expenditure forecasts had been produced using a robust and efficient process (as validated by EY).
  - The plan and in particular the outcomes and output commitments were deliverable.
  - Associated costs had been tested for accuracy, ambition and efficiency (as validated by EY).
  - The Business Plan was financeable on both a notional and actual capital structure basis either using Ofgem's Sector Specific Methodology Decision working assumptions for cost of capital allowances and expected incentive outperformance, or that all applicable measures to aid financeability had been considered, including robust evidence and justification – KPMG had carried out independent analysis and stress testing against associated sensitivities to the base assumptions as set out in Appendix E to the papers.
- 1.12 The Board was requested to note the various risks inherent in the GD2 process until Ofgem makes its final determination in November 2020, namely:
  - The financial parameters will not be set by Ofgem until final determination in November 2020 based on market evidence at the time.
  - The risk of a tougher regulatory outcome than anticipated as several key areas of the RIIO 2 framework (key elements of the incentive package, expenditure allowances and output targets) have yet to be determined.
  - The risk of a CMA referral(s), including the ability of a third party to appeal the price determination by Ofgem on specific issues within their proposals.
  - The risk that any determination from other sectors such as water or NATS could set a regulatory precedent to NGN's detriment.

1.13 The Board was requested to note the contents of the board papers and to provide its approval for:

- the submission of NGN's Business Plan and associated documents, tables and financial models to Ofgem on 9 December 2019;
- the Chief Executive Officer to be granted delegated authority to sign any documents associated with the Business Plan and/or approve any non-material changes to the Business Plan and/or any associated documents in advance of submission to Ofgem; and
- the Chairman (Mr Andy Hunter) be granted delegated authority to sign the Board Assurance Statement on behalf of the Board to be included in the NGN Business Plan.

**NOTED AND APPROVED**

## **2. ANY OTHER BUSINESS**

2.1 It was noted that distribution networks may apply for a business plan incentive of up to 2% of totex per annum which in NGN's case would amount to up to c. £5m per annum, provided that their plans are ambitious, efficient, compliant and ensure customer value. It was further noted that NGN was well placed to bid for this incentive.

2.2 The Chief Executive Officer wished to place on record his thanks to the Regulation Director, Gareth Mills, and his team for their tireless work in the preparation of NGN's Business Plan.

**NOTED**

APPROVED AS A CORRECT RECORD OF THE PROCEEDINGS AT THE MEETING OF THE BOARD OF NORTHERN GAS NETWORKS LIMITED HELD BY CONFERENCE CALL ON 21 NOVEMBER 2019 AT 8AM GMT.

*Signed:* .....  
Chairman

*Date:* .....