

Appendix A23 NGN's RIIO-GD3 Business Plan Business Plan Financial Model Commentary

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1. Overview

NGN welcomes the opportunity to submit the final Business Plan Financial Model v7b (BPFM/Model) and this accompanying Commentary document to support our RIIO-GD3 Business Plan (Business Plan) submission and the associated **Appendix A24 Finance Annex**.

We are submitting this optional Appendix A23 BPFM Commentary document to:

- help Ofgem to navigate our submission by distinguishing between the copies of the Model we have provided and explaining the differences between them;
- document details of any changes in the BPFM relative to v7b as released by Ofgem on 1 October 2024 and outline the remaining issues not covered by Ofgem's change instructions;
- provide Financial Information as required by Ofgem;
- provide the results of the Ofgem-prescribed financeability assessment; and
- provide the results of a supplementary financeability analysis that extends beyond Ofgem's minimum requirements and explain why we have undertaken this additional analysis.

Throughout our submission, we have followed the RIIO-3 Sector Specific Methodology Decision (SSMD)¹, RIIO-3 Business Plan Guidance (BPG)², and RIIO-GD/T3 BPFM Guidance v7 (BPFM Guidance)³, along with supplementary guidance provided by Ofgem since the publication of these documents, through working groups and bilateral communication. Throughout this document, we refer to all of the above guidance collectively as "Ofgem's Guidance", and/or provide more specific references as appropriate.

As prescribed by Ofgem, we have used the BPFM to provide Financial Information and conduct a financeability assessment of our Business Plan under both Ofgem's SSMD working assumptions and NGN's alternative proposals.

We note that since the BPFM attempts to model a simplified version of actual circumstances, its outputs do not fully reflect the real-world financial position of NGN. It neither fully reflects NGN's actual historic position, nor NGN's forecasts as modelled using our internal financial models, which are usually better aligned with the results of the Annual Iteration Processes (AIPs) used for charge-setting purposes and the methodologies used by the credit rating agencies (CRAs). That said, we consider that the key forecast RIIO-GD3 outputs of the BPFM are directionally correct at the time of submission.

However, given that the inputs and modelling assumptions will change, including due to the fact that all crucial financial parameters (e.g. Cost of Capital, Depreciation profile, Totex, Other Revenue Allowances, etc.) will only be defined by Ofgem with some level of accuracy at the Draft Determinations stage, we would like to stress that to make it meaningful for the Final Determinations, our financeability assessment will need to be updated after the Draft Determinations.

We are submitting three versions of the BPFM (key differences are explained in **Section 2**):

(a) **Ofgem-prescribed BPFM** – a RIIO-GD3 Ofgem "official" copy of the Model;

¹ Ofgem (2024), RIIO-3 Sector Specific Methodology Decision – Finance Annex, 18 July. When we refer to "SSMD" or "SSMD Assumptions" throughout the document, we mean SSMD with any subsequent updates made by Ofgem where relevant.

Ofgem (2024), RIIO-3 Business Plan Guidance, 30 September

Ofgem (2024), RIIO-GD/T3 BPFM Guidance v7, 30th September

- (b) NGN Bespoke BPFM a RIIO-GD3 BPFM with NGN bespoke edits; and
- (c) **Extended BPFM** a supplementary copy of (a) extended to RIIO-GD4 (not part of our Business Plan).

Economic Insight has provided independent assurance of NGN's compliance with Section 7 of the RIIO-3 Business Plan Guidance in general and the modelling Guidance from Ofgem in particular⁴. Economic Insight has independently reviewed the Ofgem-prescribed BPFM and the NGN Bespoke BPFM and found no areas of concern based on the assurance process that it has undertaken⁵. However, the **Extended BPFM** has been populated using purely indicative high-level conceptual inputs for RIIO-GD4 which are not part of NGN's RIIO-GD3 Business Plan. The outputs for RIIO-GD4 do not represent NGN's considered forecast position and hence cannot be assured.

As part of our submission, we have run a complete set of the Ofgem-prescribed SSMD stress tests for the notional and actual company. As we detail in <u>Section 6</u> of this document, we find that NGN is debt financeable under these prescribed stress tests in all cases in RIIO-GD3. That is, we achieve financial ratios consistent with a credit rating of at least two notches above the minimum investment-grade credit rating (Baa1/BBB+) based on Moody's and S&P methodologies, in line with NGN's target rating. It is important to reiterate that this is valid at the time of submission, but subject to any possible changes in the future. We have used Ofgem's interpretation of the current CRAs' methodologies and credit ratio thresholds, which can change at any point throughout the RIIO-GD3 price review.

To test our financeability further than the minimum prescribed by Ofgem, NGN has carried out additional stress tests. We have engaged Economic Insight to recommend a set of bespoke stress tests to assure our financeability by accounting for two important limitations of Ofgem's core scenarios:

- Coverage of historical variation. The Ofgem-prescribed stress tests do not in all instances cover the plausible range of values observed in historical fluctuations, for example in inflation and interest rates.
- Consideration of interactions between economic variables. Ofgem's scenarios do not allow for interactions between economic variables, such as inflation and interest rates, which are in practice correlated. Interaction between these variables would be expected in reality and has been observed historically as the macroeconomic environment changes.

After better accounting for these two issues, we find that in the bespoke Economic Insight recommended stress tests, NGN is also debt financeable in RIIO-GD3 in terms of both the notional and actual company, and meets NGN's target credit rating (Baa1/BBB+) current thresholds in all cases, albeit some credit ratios are under pressure in some scenarios. We detail further the specific scenario results and those credit metrics that are depressed in certain stress tests in <u>Section 6</u>.

While longer-term financeability analysis is not a requirement from Ofgem for the RIIO-GD3 Business Plan, we have also conducted a high-level financeability assessment of NGN in RIIO-GD4, the results of which indicate the potential for longer-term problems if Ofgem does not recalibrate its financial package. By assuming that Ofgem's current assumptions for 2030/31 are carried forward to RIIO-GD4, we find that the AICR falls below the likely investment-grade threshold for Moody's, to 0.9x by 2035/36 in Ofgem's Base Case for the actual company. As stated above, this high-level modelling is not part of our Business Plan and is purely indicative.

Economic Insight (2024), "NGN Financeability Assurance Statement. NGN RIIO-GD3 financeability", 06 December Economic Insight (2024), "BPFM Assurance Statement. NGN RIIO-3 financeability", 29 November We are

To help Ofgem analyse our submission, we have colour-coded all three models as follows: NGN-specific inputs and edits are highlighted in green and Ofgem-driven edits (via Change Instructions) are highlighted in yellow.

The remainder of this document is structured as follows:

- <u>Section 2</u> provides additional details about the differences between the submitted copies of the BPFM and outlines our position on their outputs;
- <u>Section 3</u> outlines the remaining issues we would like to raise concerning the BPFM;
- Section 4 sets out the RIIO-GD3 Business Plan Financial Information;
- <u>Section 5</u> sets out the definitions of the Ofgem-prescribed and bespoke scenarios we have used to stress test our financeability;
- **Section 6** sets out the results of our financeability assessment;
- **Section 7** sets out the Change Instructions implemented in all copies of the BPFM;
- Section 8 sets out the additional changes implemented in the NGN Bespoke BPFM;
- Section 9 sets out the additional changes implemented in the Extended BPFM;
- **Section 10** sets out the RIIO-GD2 inputs that we have updated.



2. Differences between submitted copies of BPFM

The main reason for submitting additional copies of the BPFM is Ofgem's direction to submit the "official" BPFM without any bespoke additions or modifications except for Ofgem's Change Instructions issued via GitLab⁶. Therefore, to support our RIIO-GD3 Business Plan, we had to create a copy of the Model with NGN's alternative parameters of the financial package. Furthermore, certain Model alterations (e.g. to include accretion in the S&P FFO/Net Debt ratio calculation) have been agreed by Ofgem, but only if they are implemented in a separate copy of the Model. Finally, Ofgem provided an extended copy of the RIIO-GD3 BPFM, but with calculation functionality only for the notional company. Since a long-term financeability assessment for the actual company would be more meaningful, we had to make further modifications within the **Extended BPFM** to enable this.

The main features of the three copies of the BPFM are therefore as follows:

- **Ofgem-prescribed BPFM** is an "official" RIIO-GD3 copy of the BPFM submitted to satisfy Ofgem's requirements. It has been independently assured by Economic Insight, but there are shortcomings with some of its outputs which we expand upon below;
- NGN Bespoke BPFM is a RIIO-GD3 copy of the BPFM with NGN bespoke edits, which has been independently assured by Economic Insight and is representative of the NGN RIIO-GD3 Business Plan, albeit with some differences to our internal modelling remaining. The bespoke edits include:
 - NGN's Proposed Financial Package for RIIO-GD3;
 - financial metric calculation improvements to better align the Model with the NGN internal modelling forecasts and additional Economic Insight stress tests; and
 - scenario settings that differ from Ofgem's default ones.
- Extended BPFM is a supplementary copy of the Ofgem-prescribed BPFM extended to RIIO-GD4 to demonstrate a hypothetical high-level financeability position if Ofgem's SSMD working assumptions for 2030/31 were to be carried forward to RIIO-GD4. The longer-term inputs for this version are very high-level and assumption driven. The RIIO-GD4 outputs are therefore purely indicative, do not form a part of our Business Plan, and cannot be assured.

Two primary sources of information have been used to populate the BPFM where user input was required:

- Dry Run (DR) 1 of the Price Control Financial Model (PCFM) 2024 has been used as the source file for inputs for RIIO-GD2; and
- Finance Business Plan Data Tables (BPDTs) submitted in the final BPDTs template issued on 1 October have been used for other user inputs.

Even though the RIIO-GD3 outputs of the BPFM have been independently assured, we would like to elaborate on the reasons why neither RIIO-GD2 nor RIIO-GD3 outputs will be fully representative of NGN's actual company position or its performance. These outputs should be treated as modelling outcomes at a point in time. In particular, we note that:

- Outputs are based on the Ofgem BPFM's formulae and settings (which in many cases are a simplification of reality) and Ofgem's and/or NGN's current working assumptions that are subject to change.
- As regards RIIO-GD2, we have used AIP 2024 PCFM Dry Run 1 inputs, but these will change by the time 2025/26 charges are set (January 2025), due to subsequent Dry Run updates (including of the Ofgem-driven finance inputs). Further, the BPFM does not take into account either historical or future annual true-ups, which drive significant differences between Calculated and Allowed Revenue.
- As regards RIIO-GD3, the key financial and cost inputs are by definition subject to change. Ofgem will provide a provisional view on our assumed Depreciation and WACC parameters, Totex, Other Revenue Allowances, Incentive package, etc. only next year at the Draft Determinations stage and will make a final decision at the Final Determinations.
- Further, macroeconomic parameters (e.g. inflation and interest rates) will also necessarily evolve in the future. Consequently, several key financial parameters, including, but not limited to, forecasts of new debt issuance and interest costs, forecast dividends, and actual company gearing, should be regarded as a point-in-time estimate based on current high-level assumptions and are almost certain to change.
- There remain some limitations within the BPFM v7b. Even the RIIO-GD3 outputs should therefore be treated as directionally correct, but imprecise whereas the RIIO-GD4 outputs should be treated as purely indicative. We outline the remaining issues with the BPFM in <u>Section 3</u> below.

3. <u>Summary of remaining issues</u>

3.1 Financeability Analysis

We do not comment on the BPFM's financeability analysis in totality but would like to raise a few comments on some specific features of the BPFM that impact this analysis. The order in which these comments appear below does not indicate our view of their relative importance.

In the proportion of index-linked debt scenarios, SSMD stipulates this should be +/- 10% compared to the notional company assumption for notional analysis and compared to the actual company proportion forecast at the end of RIIO-GD2 for actual company analysis. However, the BPFM does not have the functionality to satisfy this requirement as regards the index-linked debt for the actual company. Ofgem confirmed that this modelling approach is acceptable for its purposes⁷.

In the inflation stress tests, the Risk-free Rate (RfR) (and therefore the Cost of Equity) does not change. We understand it is possible that nominal interest rates will adjust in the same direction as inflation, thereby reducing any impact on the real RfR. However, we consider that it is important to stress test how inflation and real RfR may change at the same time. We have therefore included scenarios in which inflation and the RfR change simultaneously in our bespoke stress tests (see the 'Inflation and Interest Rates Shock' and 'Global Financial Crisis' scenarios below in **Section 5**).

We have not been able to fully reconcile debt- and interest-related calculations made within the Finance BPDTs/BPFM and in our internal models. This is likely to be caused not only by a disconnect in the interest rate assumptions, but also by the methodology Ofgem uses to derive average (new) debt and to split debt and interest between embedded and new elements, and/or to allocate cash balances, inflation accretion, and other adjustments.

It should be noted that the credit rating results estimated on the Rating Simulator Tab are not representative of the real-world position and cannot be fully relied on in the present form. For example, in the RatingSimulator tab, Ofgem assumes the "Baa" score for the Financial Policy sub-factor and states in the rationale that it is the "typical rating for Ofgem-regulated network"; however, Moody's in fact scores all GB GDNs as "Ba" for this element of the credit assessment. If this sub-factor score were set to "Ba" rather than "Baa", our overall modelled credit rating would drop by one notch in several stress tests as demonstrated in Table 6-3 and Table 6-34. However, it would still meet our target credit rating of Baa1 in all cases. Besides, ratios are calculated in a stylised simplified form, disregarding sometimes quite material adjustments that Moody's makes in reality, including the reduction of FFO for pension deficit and the inclusion of operating leases in adjusted debt.

The **Ofgem-prescribed BPFM** calculates the primary ratio used by S&P – FFO / Net debt – using a method which does not align with S&P's methodology (as it does not take away principal inflation accretion from FFO). Consequently, the values used in this copy of the Model do not match the appropriate values for S&P's methodology. We have therefore adjusted the calculation in the **NGN Bespoke BPFM** (as permitted by Ofgem) to subtract principal inflation accretion from FFO. Further to this, the **NGN Bespoke BPFM** also subtracts interest on debt raised in year from FFO in the FFO / Net debt and RCF / Net debt calculation so as to align more closely with our internal calculations (see

⁽Ofgem 2024) Email from Tomo Sandeman, "RIIO-3 PCFM Development Working Group 16- summary notes [OFEICIAL]", 16 October 21:24.

<u>Section 8</u> for further details)⁸. We follow the same methodology in the **Extended BPFM** as in the NGN **Bespoke BPFM** (see <u>Section 9</u> for further details).

3.2 DRS adjustment

Following Ofgem's clarification⁹, the proposed DRS changes are not going to be implemented in the RIIO-GD2 PCFM this year. Therefore, as per GitLab Issue #156 permission, we have reverted the changes implemented in the original BPFM v7b released on 1 October 2024 to the original DRS formula to align RIIO-GD2 revenue to the official DR1 of the AIP 2024. However, we note that when this issue is investigated by Ofgem further next year, and if any formula adjustments are eventually made, this will have an impact on the results of the financeability analysis presented in our RIIO-GD3 Business Plan and this document.

3.3 Tax Clawback

The final RIIO-GD/T3 BPFM Guidance allows Licensees to input values in Rows 882 and 883 of Licensee Inputs (Projected/actual adjusted debt and net interest cost). This is a welcome change since the original SSMD RIIO-GD/T3 BPFM Guidance¹⁰ - if the tax clawback mechanism is to remain in RIIO-GD3 (we don't comment in this document on the merits of this element of the RIIO-GD3 financial package), we believe its impact should be taken into account for financeability analysis. Otherwise, the Licensees' revenue and financial metrics would be artificially overstated.

This issue has been subject to an extensive debate at Ofgem BPFM Working Groups and also over Gitlab (Issues #18, #84 and #176). The final BPFM guidance states on page 33 that the revenue impact of tax clawback should be included for notional company modelling. However, further clarifications from Ofgem confirmed that notional company assessment should not take tax clawback adjustments to revenue allowances into account¹¹.

Following further discussions with Ofgem, it was confirmed that NGN could submit a bespoke copy of the BPFM with the impact of tax clawback included¹². We have complied with Ofgem's guidance:

- In the Ofgem-prescribed BPFM, the results for the notional company exclude the impact of tax clawback and the results for the actual company include the impact of tax clawback (we manually selected the "include/exclude" switch in the Scenarios tab AP60 to toggle tax clawback on or off to hard-code the values).
- In the NGN Bespoke BPFM, we have applied tax clawback for the notional company as well as the actual.

⁹ (Ofgem 2024) Email from Stephanie Fernandes "Query on Directly remunerated services (DRS) [OFFICIAL]", 25 October 17:47

(Ofgem 2024) Email from Tomo Sandeman, "RIIO-3 PCFM Development Working Group 17 [OFFICIAL]", 30 October 13:55 (Ofgem 2024), Email from Tomo Sandeman, "Tax clawback switch [OFFICIAL]", 5 November 13:16 We are

⁸ (Ofgem 2024) Email from Tomo Sandeman, "RIIO-3 PCFM Development Working Group 17 [OFFICIAL]", 30 October 13:55.

¹⁰ (Ofgem 2024), RIIO-GD/T3 BPFM Guidance, 18 July

3.4 Forecasts of new debt, new debt Costs, dividends, and Actual Company gearing

As mentioned above, several key inputs in the BPFM, including, but not limited to, forecasts of new debt, new debt issuance and interest costs, dividends, and actual company gearing, should be regarded as provisional, based on current high-level assumptions, and almost certain to change between now and the Draft Determinations (DD), and again after Final Determinations (FD).

These parameters are highly sensitive to several external factors and variables, many of which are unknown and/or will change following the BPFM submission, including future economic and financial market conditions and Ofgem's decisions in key areas at DD and FD.

In particular, we consider that the following factors are particularly liable to change, which will impact the evolution of our plan and hence the BPFM:

- Totex allowances;
- Incentives;
- Accelerated Depreciation and asset lives;
- Allowed Cost of Equity;
- Allowed Cost of Debt and the precise mechanics thereof;
- The short and medium-term impacts on debt capacity of the nominal element of the Cost of Debt allowance combined with the cessation of indexation of the corresponding portion of RAV;
- Financeability considerations including the expected impact on credit ratings of the overall RIIO-GD3 package;
- The expected path of inflation;
- Financial market conditions including interest rates, credit spreads, the availability of different forms of finance, and liquidity costs;
- Our own approach to managing interest rate exposure through the use of derivatives; and
- Our own decisions on index-linked debt.

For example, in the **Ofgem-prescribed BPFM**, the Cost of Debt is forecast on the assumption that the iBoxx rate will be a constant 6%. As advised by Economic Insight, forecasts based on a forward curve (plus a credit spread) are more informative and reflective of likely trends. Therefore, in the **NGN Bespoke BPFM**, for NGN's Base Case¹³, we forecast the iBoxx rate using a BoE forward curve as of 1 July 2024.

3.5 Customer bill impact

As per Ofgem's guidance, "the bill outputs will not be a submission requirement for final business plans" and companies "should use their own assessments to make these projections"¹⁴.

We note that the BPFM uses the three last available years of the Calculated Revenue as the basis for future bill estimates. Both Allowed and Recovered revenue values are different from the Calculated

¹³ NGN's Base Case means "NGN" scenario as defined in the NGN Bespoke BPFM, which assumes alternative from SSMD Cost of Capital parameters

Ofgem (2024), Email from Tomo Sandeman "RIIO-3 PCFM Development Working Group 12 [OFFICIAL]", 16

revenue and hence customer bills in RIIO-GD3 will also differ (even if one were to assume away other drivers of possible difference with the actual customer bills).

We have compared the customer bill estimation results from our internal high-level modelling with the results in the NGN Bespoke BPFM, under both Ofgem's Base Case¹⁵ and NGN's Base Case. We have found that they are not materially different, as shown in the table below.

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 average
NGN internal model, Ofgem's Base Case	£215.6	£213.4	£213.3	£215.0	£218.7	£215.2
Ofgem-prescribed BPFM, Ofgem's Base Case, Method 1	£214.2	£212.2	£212.3	£214.4	£218.0	£214.2
Ofgem-prescribed BPFM, Ofgem's Base Case, Method 2	£211.7	£209.4	£209.2	£211.1	£214.5	£211.2
NGN internal model, NGN's Base Case	£213.8	£209.8	£207.8	£207.5	£208.6	£209.5
NGN Bespoke BPFM, NGN's Base Case, Method 1	£212.5	£208.7	£206.9	£207.0	£208.4	£208.7
NGN Bespoke BPFM, NGN's Base Case, Method 2	£210.0	£206.0	£203.9	£203.8	£205.0	£205.8

Table 3-1 Domestic all-in bills, 2023/24 prices

Since this is permitted by Ofgem, we have used our internal estimates in our RIIO-GD3 Business Plan in both Ofgem's and NGN's Base Cases as we consider them to be more accurate.



4. Financial information

4.1. BP working assumptions

In the RIIO-GD/T3 BPFM Guidance v7 published on 30 September 2024, Ofgem required that Licensees should "*record instances where Licensees believe that key inputs should differ from the SSMD working assumptions that are pre-set in the model*". However, subsequent Guidance from Ofgem has removed this requirement given the formulae in Cells AZ14:AZ20 were wrong and not corrected by Ofgem's Change Instruction in time for the RIIO-GD3 Business Plan submission¹⁶.

Nonetheless, we set out in Table 4-1 below the instances where we believe the Cost of Capital assumptions should differ from Ofgem's SSMD assumptions that are pre-set in the Model.

Table 4-1 Key Cost of Capital Differences from SSMD

Parameter	NGN Base Case	Ofgem Base Case
Allowed Cost of Debt	3.25%	2.90%
Allowed Cost of Equity	6.36%	5.43%
Assumed dividends as % of equity (notional company)	c. 6.3-6.5% ¹⁷	3%18

4.2. Credit ratio summary

Ofgem's Guidance¹⁹ requires submissions of a "Credit Ratio Summary" for three tables:

- "Main BP" refers to the actual company under NGN's Base Case in the NGN Bespoke BPFM.
- "Base (notional)" refers to Ofgem's Base Case for the notional company in the Ofgemprescribed BPFM.
- "Base (actual)" refers to Ofgem's Base Case for the actual company in the Ofgem-prescribed BPFM.

We provide the outputs from these three summary tables in turn below, as well as the "Summary Financial Information" for Ofgem's Base Case (notional company) as per the FBPOutputs tab in the **Ofgem-prescribed BPFM**.

<u>Main BP</u>

Table 4-2 NGN's Base Case (actual), NGN Bespoke BPFM

Parameter	Units	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31
FFO interest cover ratio (including accretions)	Scalar	4.82	4.34	4.16	3.86	3.81
FFO interest cover ratio (cash interest only)	Scalar	5.51	4.96	4.72	4.33	4.26

¹⁶ Ofgem (2024) Email from Tomo Sandeman, "RIIO-3 PCFM Development Working Group 17 [OFFICIAL], 30 October 13:55. ¹⁷ We quote this metric as a range as the exact value depends on whether the dividends are reported as a share of regulated

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(Ofgem 2024), RIIO-GD/T3 BPFM Guidance v7, 30 September, paragraph 1.21.

equity (NPV neutral) or regulated equity (closing) (Rows 108, 109 on the FinancialRatios Tab in the BPFM). ¹⁸ We note that in order to maintain the notional gearing at 60% on an annual basis, under Ofgem's Base Case, the return of capital is estimated to be c.3.5-3.7% of equity per annum over and above the Base dividend yield of 3%, bringing the total **level of distributions for the notional company to c.** 6.5-6.7% p.a. on average over RIIO-GD3.

Adjusted interest cover ratio (post- maintenance interest cover ratio)	Scalar	2.19	2.04	1.93	1.80	1.76
FFO / Net Debt	%	14.73%	13.90%	13.81%	13.46%	13.63%
Net Debt / Closing RAV	%	67.55%	68.63%	69.81%	70.05%	70.14%
Dividends as % of Equity RAV	%	9.91%	9.95%	9.68%	6.74%	6.03%
Dividend cover ratio (using statutory depreciation)	Scalar	1.67	1.55	1.61	2.22	2.54

Ofgem Base (notional)

Table 4-3 Ofgem's Base Case (notional), Ofgem-prescribed BPFM

Parameter	Units	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31
FFO interest cover ratio (including accretions)	Scalar	4.63	4.57	4.64	4.73	4.78
FFO interest cover ratio (cash interest only)	Scalar	5.21	5.18	5.28	5.36	5.41
Adjusted interest cover ratio (post- maintenance interest cover ratio)	Scalar	1.87	1.83	1.83	1.82	1.80
FFO / Net Debt	%	16.98%	17.54%	18.15%	18.81%	19.51%
Net Debt / Closing RAV	%	60.00%	60.00%	60.00%	60.00%	60.00%
Dividends as % of Equity RAV	%	6.74%	6.88%	6.71%	6.62%	6.47%
Dividend cover ratio (using statutory depreciation)	Scalar	0.68	0.65	0.67	0.68	0.70

<u>Ofgem Base (actual)</u>

Table 4-4 Ofgem's Base Case (actual), Ofgem-prescribed BPFM

Parameter	Units	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31
FFO interest cover ratio (including accretions)	Scalar	4.95	4.56	4.49	4.30	4.41
FFO interest cover ratio (cash interest only)	Scalar	5.67	5.23	5.13	4.87	4.98
Adjusted interest cover ratio (post- maintenance interest cover ratio)	Scalar	1.99	1.87	1.79	1.67	1.66
FFO / Net Debt	%	15.04%	14.53%	14.83%	14.90%	15.65%
Net Debt / Closing RAV	%	67.81%	69.13%	70.52%	70.92%	71.10%
Dividends as % of Equity RAV	%	9.97%	10.10%	9.93%	7.01%	6.37%
Dividend cover ratio (using statutory depreciation)	Scalar	1.71	1.63	1.75	2.49	2.94

Summary financial information

Parameter	Units	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31
Fast money	£m nominal	140.6	128.9	130.9	128.9	131.0
Pass-through expenditure	£m nominal	120.7	114.9	110.8	110.5	109.1
Depreciation	£m nominal	236.5	242.8	249.6	257.7	266.9
Return	£m nominal	133.3	134.1	133.3	132.8	133.3
Equity issuance cost	£m nominal	-	-	-	-	-
Base revenue	£m nominal	631.2	620.8	624.6	630.0	640.4
Return Adjustment	£m nominal	-	-	-	-	-
Directly remunerated services adjustment	£m nominal	-	-	-	-	-
Cross-subsidy adjustment	£m nominal	-	-	-	-	-
Business plan incentive	£m nominal	-	-	-	-	-
Output delivery incentive	£m nominal	-	-	-	-	-
Other revenue allowances	£m nominal	12.6	13.4	7.2	6.4	5.0
Calculated revenue (before tax)	£m nominal	643.8	634.3	631.8	636.4	645.4
Tax allowance	£m nominal	63.6	65.2	67.0	68.7	71.0
Tax allowance adjustment	£m nominal	-	-	-	-	-
Calculated revenue	£m nominal	707.3	699.5	698.8	705.1	716.4
Less directly remunerated services adjustment	£m nominal	-	-	-	-	-
Less cross-subsidy adjustment	£m nominal	-	-	-	-	-
Recalculated revenue (without DRS adjustment)	£m nominal	707.3	699.5	698.8	705.1	716.4

Table 4-5 Allowed revenue breakdown (notional company, Ofgem's Base Case)

Table 4-6 Regulatory financial position (notional company, Ofgem's Base Case)

Parameter	Units	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31
Farameter	Offics	51-10101-27	51-11/101-20	51-10101-25	51-10181-50	51-10101-51
Closing RAV	£m nominal	3,105.4	3,119.5	3,142.6	3,168.9	3,200.3
Closing Net debt	£m nominal	(1,863.2)	(1,871.7)	(1,885.5)	(1,901.3)	(1,920.2)
Equity	£m nominal	1,242.1	1,247.8	1,257.0	1,267.6	1,280.1
RAV						
Opening RAV (at prior						
year nominal)	£m nominal	3,094.1	3,105.4	3,119.5	3,142.6	3,168.9
Inflation (uplift from						
previous year to	£m nominal	30.8	34.9	36.2	36.5	36.8
current nominal)						
Opening RAV (before	Crea re arrestra a l	2 1 2 4 0	2 1 4 0 2	2 455 6	2 170 0	2 205 6
transfers)	£m nominal	3,124.8	3,140.3	3,155.0	3,179.0	3,205.6
Transfers	£m nominal	-	-	-	-	-
Opening RAV (after	Crea re arrestra a l	2 1 2 4 0	2 1 4 0 2	2.455.6	2 170 0	2 205 6
transfers)	Em nominal	3,124.8	3,140.3	3,155.0	3,179.0	3,205.0
Net additions (after	Care a service of	224 7	242.4	262.6	200.2	201.4
disposals)	£m nominal	231.7	242.1	262.6	280.2	301.4

Deprecation	£m nominal	(251.2)	(262.9)	(275.7)	(290.3)	(306.7)
Closing RAV	£m nominal	3,105.4	3,119.5	3,142.6	3,168.9	3,200.3
Equity						
Opening equity (before						
inflation uplift on	£m nominal	1,506.0	1,242.1	1,247.8	1,257.0	1,267.6
opening RAV)						
Inflation uplift on	fm nominal	30.8	34 9	36.2	36 5	36.8
opening RAV	21111011111	56.6	51.5	50.2	30.5	50.0
Opening equity (after						
inflation uplift on	£m nominal	1,536.8	1,277.1	1,283.9	1,293.5	1,304.3
opening RAV)						
RAV adjustment from						
previous price controls	£m nominal	-	-	-	-	-
(share to equity)						
Earnings after tax (after	с ·	0	54.0		56.4	56.0
regulatory	£m nominal	55.9	54.9	55.6	56.1	56.8
depreciation)	Cas a suria st	(02.2)	(04.4)	(02.6)	(02.4)	(01.0)
Regulatory dividend	£m nominal	(82.2)	(84.1)	(82.6)	(82.1)	(81.0)
(before issuence)	£m nominal	1,510.6	1,247.8	1,257.0	1,267.6	1,280.1
(before issuance)	(m nominal					
Equity issued	Em nominal	-	-	-	-	-
Impact of debt re-set	Em nominal	(268.4)	-	-	-	-
Closing Equity	£m nominal	1,242.1	1,247.8	1,257.0	1,267.6	1,280.1
ΡΔΤ						
PAT (ner regulatory						
earnings statement	fm nominal	55 9	54 9	55.6	56 1	56.8
below)	21111011111	55.5	51.5	33.0	50.1	50.0
less: excess fast money	£m nominal	_	_	_	_	-
add back: retained						
outperformance	£m nominal	-	-	-	-	-
Adjustment for						
regulatory depreciation	Con a serie al					
(if statutory	£m nominai	-	-	-	-	-
depreciation is applied)						
PAT (after regulatory	fm nominal	EE O	E4 0		EG 1	ECO
depreciation)	EIII HOIIIIIai	55.9	54.9	55.0	50.1	50.8
Reconciliation of cash						
flows to movement in						
net debt		(1.050.1)	(1.000.0)	(4.074.7)	(1.005.5)	(1.001.0)
Opening net debt	±m nominal	(1,856.4)	(1,863.2)	(1,8/1.7)	(1,885.5)	(1,901.3)
Closing net debt	±m nominal	(1,863.2)	(1,8/1./)	(1,885.5)	(1,901.3)	(1,920.2)
iviovement in net debt	±m nominal	(6.8)	(8.5)	(13.9)	(15.8)	(18.9)
Add back: principal	£m nominal	9.4	10.6	11.0	11.1	11.2
Not cash flow	fmnominal	26	2 1	(2.0)	(17)	(7 7)
Net cash flow	Em nominal	2.0	2.1	(2.9)	(4./)	(7.7)

 Table 4-7 Regulatory income statement (notional company, Ofgem's Base Case)

Parameter	Units	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31
Operating revenue	£m nominal	751.2	757.3	771.7	794.3	823.1
Less fast pot expenditure	£m nominal	(149.4)	(139.6)	(144.6)	(145.2)	(150.5)

					1	
Less difference in fast						
pot expenditure pre-	£m nominal	-	-	-	-	-
TIM and post-TIM						
Less pass-through	fm nominal	(120.2)	(124.4)	(122.2)	(124 5)	(125.4)
expenditure	LIII IIOIIIIIai	(120.2)	(124.4)	(122.5)	(124.5)	(125.4)
Less equity issuance						
cost	£m nominai	-	-	-	-	-
Less other costs	£m nominal	(14.5)	(15.8)	(8.4)	(7.6)	(6.0)
EBITDA	£m nominal	459.1	477.5	496.3	516.9	541.2
Less depreciation		(251.2)	(262.0)		(200.2)	(200 7)
(Regulatory)	£m nominal	(251.2)	(262.9)	(275.7)	(290.3)	(306.7)
EBIT	£m nominal	208.0	214.6	220.6	226.5	234.5
Less net interest paid						
(excluding principal	£m nominal	(75.2)	(78.5)	(80.1)	(81.9)	(85.0)
inflation accretion)						
Less net interest paid						
(principal inflation	£m nominal	(9.4)	(10.6)	(11.0)	(11.1)	(11.2)
accretion)						
PBT	£m nominal	123.4	125.5	129.6	133.5	138.4
Less tax paid	£m nominal	(67.5)	(70.6)	(74.0)	(77.4)	(81.6)
PAT	£m nominal	55.9	54.9	55.6	56.1	56.8
Less dividends paid	£m nominal	(82.2)	(84.1)	(82.6)	(82.1)	(81.0)
Retained earnings for	Constanting I	(25.2)	(20.2)	(26.0)	(25.0)	(24.2)
the year	±m nominal	(20.3)	(29.3)	(26.9)	(25.9)	(24.2)

Table 4-8 Regulatory cashflow statement (notional company, Ofgem's Base Case)

Parameter	Units	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31
Operating revenue	£m nominal	751.2	757.3	771.7	794.3	823.1
Less total operating costs	£m nominal	(292.1)	(279.8)	(275.4)	(277.4)	(281.9)
Net cash flow from operations	£m nominal	459.1	477.5	496.3	516.9	541.2
Less net interest paid (excluding principal inflation accretion)	£m nominal	(75.2)	(78.5)	(80.1)	(81.9)	(85.0)
Less tax paid	£m nominal	(67.5)	(70.6)	(74.0)	(77.4)	(81.6)
FFO	£m nominal	316.4	328.4	342.3	357.6	374.7
Less dividends paid	£m nominal	(82.2)	(84.1)	(82.6)	(82.1)	(81.0)
RCF	£m nominal	234.3	244.2	259.7	275.5	293.7
Net slow pot expenditure	£m nominal	(231.7)	(242.1)	(262.6)	(280.2)	(301.4)
Less pre-vesting and post-vesting disposal proceeds	£m nominal	-	-	-	-	-
Net cash flow before financing	£m nominal	2.6	2.1	(2.9)	(4.7)	(7.7)

Table 4-9 Financial Ratios (notional company, Ofgem's Base Case)

Parameter	Units	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31
RIIO-2 implied credit rating	Text	A3	A3	A3	A3	A3
Annual implied credit rating	Text	A3	A3	A3	A3	A2

Annual credit rating score	index	6.94	6.94	6.94	6.55	6.39
Adjusted interest cover ratio (post- maintenance interest cover ratio)	scalar	1.87	1.83	1.83	1.82	1.80
Adjusted interest cover ratio (post- maintenance interest cover ratio), adjusted	scalar	1.83	1.79	1.79	1.78	1.76
AICR, adjusted (Moody's)	scalar	1.83	1.79	1.79	1.78	1.76
FFO / Net Debt	%	16.98%	17.54%	18.15%	18.81%	19.51%
FFO / Net Debt, adjusted	%	16.89%	17.44%	18.05%	18.70%	19.40%
FFO / Net Debt, adjusted (Moody's)	%	16.89%	17.44%	18.05%	18.70%	19.40%
FFO interest cover ratio (including accretions)	scalar	4.63	4.57	4.64	4.73	4.78
FFO interest cover ratio (including accretions), adjusted	scalar	4.53	4.46	4.53	4.61	4.66
FFO interest cover ratio (cash interest only)	scalar	5.21	5.18	5.28	5.36	5.41
FFO interest cover ratio (cash interest only), adjusted	scalar	5.09	5.06	5.15	5.23	5.27
Nominal PMICR	scalar	2.02	2.01	2.01	2.00	1.97
Nominal PMICR, adjusted	scalar	1.98	1.96	1.96	1.95	1.92
RCF / Net Debt	%	12.57%	13.05%	13.78%	14.49%	15.29%
RCF / Net Debt, adjusted	%	12.48%	12.95%	13.67%	14.38%	15.18%
Net Debt / Closing RAV (aka Modelled Gearing)	%	60.00%	60.00%	60.00%	60.00%	60.00%
EBITDA / RAV	%	14.79%	15.31%	15.79%	16.31%	16.91%
RoRE (NPV neutral RAV)	%	7.50%	7.49%	7.55%	7.56%	7.58%
Dividend cover	scalar	0.68	0.65	0.67	0.68	0.70
Dividend / Regulated equity (NPV neutral RAV)	%	6.74%	6.88%	6.71%	6.62%	6.47%

5. <u>Financeability assessment – scenario definition</u>

We have extensively tested our financeability, for both the notional and actual company. We have also ensured our financeability is resilient in both Ofgem and bespoke stress test scenarios. Our bespoke scenarios have been informed by advice from Economic Insight (EI). Bespoke scenarios are reflective of historical variance in Ofgem's metrics and historical periods of financial stress.

5.1. Ofgem scenarios

Firstly, we have tested our financial performance under the stress tests set out by Ofgem in the SSMD, as shown in the table below.

Table 5-1 Ofgem's SSMD stress tests

Scenario	High case	Low case
Interest Rates	+2%	-2%
Inflation	+2%	-2%
RPI-CPIH Divergence (due to changes in CPIH)	+0.5%	-0.5%
RPI-CPIH Divergence (due to changes in RPI) ²⁰	+0.5%	-0.5%
Totex Performance	+10%	-10%
RoRE	+2%	-2%
Proportion of Index-Linked Debt	+10%	-10%

5.2. Bespoke scenarios

In addition to Ofgem's stress test scenarios, we chose to run bespoke scenarios, following the advice of Economic Insight. We have chosen to use these scenarios to test our financeability in cases of even higher financial stress than the scenarios prescribed by Ofgem. Additionally, these scenarios address some limitations of those prescribed by Ofgem.

Specifically, Economic Insight identified the following limitations of Ofgem's scenarios:

- Measurement error. Assessing financeability on a notional basis requires Ofgem to make a large number of assumptions about the notional firm. These assumptions will inherently have some uncertainty (or measurement error) built into them due to the complexity of estimating the notionally efficient firm which will by extension apply to the actual company.
- Interdependencies between assumptions. Ofgem's stress testing scenarios only consider the impact of a single factor at a time.
- The assessment horizon. The current approach to financeability assessment focuses on the forthcoming price control only, whereas in light of RIIO-GD3's significant policy developments, their longer-term impact may start to show only in the subsequent price control(s).

²⁰ We note that in BPFM, 'high CPIH inflation divergence' refers to the scenario in which CPIH decreases by 0.5% (which means the wedge between CPIH and RPI increases) and 'low CPIH inflation divergence' refers to the scenario in which CPIH increases) by 0.5% (which means the wedge between CPIH and RPI decreases). The 'high RPI inflation divergence scenario' refers to the scenario in which RPI increases by 0.5% (which means the wedge between CPIH and RPI decreases). The 'high RPI inflation divergence scenario' refers to the scenario in which RPI increases by 0.5% (which means the wedge between CPIH and RPI decreases) and the 'low RPI inflation divergence scenario' refers to the scenario in which RPI decreases by 0.5% (which means the wedge between CPIH and RPI decreases).

To address these limitations, Economic Insight proposed two categories of bespoke scenarios:

- (i) Modifications of Ofgem's scenarios, using historical data and measurement error variation; and
- Macroeconomic financial stress scenarios, in which it is assumed that multiple metrics change concurrently as they did during periods of macroeconomic stress (the Global Financial Crises period between 2006-10 and the COVID-19 pandemic period between 2019-24). These scenarios are summarised in the table below.

Table 5-2 Bespoke stress tests

Scenario type	Factor	Lower bound	Upper bound	
	Interest Rates	-3%	+2% (no change relative to Ofgem-prescribed scenarios).	
Modified Ofgem scenarios	СРІН	-2% (no change relative to Ofgem-prescribed scenarios).	+4%	
	CPIH Divergence	-1%	+1.5%	
	RoRE	-3%	+3%	
	Proportion ILD	-20%	+20%	
	Gas Credit Spread and High Interest Rates	-0%	+2.5%	
Additional scenarios	Inflation and Interest Rates Shock	Apply 2019/20-2023/24 macro variables to the RIIO-GD3 period.		
	Global Financial Crisis	Apply 2005/06-2009/10 mac per	cro variables to the RIIO-GD3 iod.	

For the 'modified Ofgem' scenarios, EI based the upper and lower bounds on the historical ranges in economic variables and forecast errors. Specifically, they used the following combinations of evidence to determine plausible bounds for each of the 'modified Ofgem' scenarios:

- for interest rates, EI analysed historical data and compared the results with outturn values, along with an analysis of forecast errors; for CPIH and RPI-CPIH divergence they used historical data and OBR forecast errors;
- for performance factors (Totex and ODIs) they analysed historical performance data for the industry; and
- for ILD, EI examined cross-sectional variation in the levels of ILD held across various RAV-regulated networks in the UK.

we are the **network**

We note that, in relation to performance factors, these ranges are neither indicative of historical NGN performance nor of NGN's predicted performance over RIIO-GD3. Rather, they reflect historical industry variations.

For the 'additional scenarios' in the table above, EI proposed and tested three scenarios that allow us to model our financeability when multiple metrics change simultaneously. We considered this an appropriate stress test given in practice it is plausible that several key factors do interact in reality, for example, interest rates and inflation. We detail the 'additional scenarios' in more detail below.

Gas credit spread & high interest rates scenario

This scenario builds on Ofgem's High Interest Rate scenario. It stress tests the case where, as well as interest rates more generally increasing by 2%, the gas credit spread is 0.5% higher (to reflect a potentially higher premium required by investors for asset stranding risk in gas distribution). The metrics that change in this scenario are as follows.

- Risk-free Rate and the SONIA rate are increased by 2% from Ofgem's Base Case.
- Nominal interest rate on actual debt is increased by 2.5% from Ofgem's Base Case, reflecting the 2% increase in interest rates and an additional 0.5% for a higher gas credit spread.
- RPI and CPIH real interest rates are calculated from the nominal interest rate using the formula: (1 + real interest rate) = (1 + nominal interest rate) / (1 + inflation rate).
- Cost of Equity is calculated using the CAPM, where: Cost of Equity = Risk-free Rate + Beta * (Total Market Return (TMR) Risk-free Rate). Beta and the TMR are unchanged from the Ofgem Base Case (without prejudice to NGN's alternative assumptions on these parameters), while, as noted above, the RfR is increased by 2% from Ofgem's Base Case.
- Cost of Debt is calculated using an extending trailing average of the iBoxx Utilities index²¹. To allow a trailing average to be calculated for future dates, the iBoxx yield must be forecast. The forecast yield in this scenario is set to 2.5% above Ofgem's Base Case (6%) from 2026-27 to 2030-31.

Inflation and interest rates shock scenario

This scenario is designed to stress test the impact of a high inflation / high-interest rate scenario, similar to the recent post-COVID period (2019/20 to 2023/24). This allows us to test our financeability when multiple metrics change simultaneously. To conduct this stress test, we change key variables in line with historical data, based on El's analysis:

- Risk-free Rate for 2026/27 to 2030/31 is set equal to the historical RfR from 2019/20 to 2023/24, based on index-linked gilts.
- SONIA rate for 2026/27 to 2030/31 is set equal to the historical SONIA rate from 2019/20 to 2023/24.
- Nominal interest rate on actual debt for 2026/27 to 2030/31 is set equal to the historical yield on the iBoxx Utilities index from 2019/20 to 2023/24.
- RPI & CPIH inflation rates for 2026/27 to 2030/31 are set equal to the historical inflation rates from 2019/2020 to 2023/24.
- RPI and CPIH real interest rates are calculated from the nominal interest rate and RPI / CPIH inflation using the formula: (1 + real interest rate) = (1 + nominal interest rate) / (1 + inflation rate).
- Cost of Equity is calculated using the CAPM, where: Cost of Equity = Risk-free Rate + Beta * (Total Market Return (TMR) Risk-free Rate). Beta and the TMR are unchanged from Ofgem's

²¹ Economic Insight calibrated a trailing average starting from 31/03/2018 and extending annually to 31/03/2031 because it was the closest identified approximation of Ofgem's updated SSMD working assumption of 2.90% CPIH-real allowed Cost of Debt on average over RIIO-GD3.

Base Case (without prejudice to NGN's alternative assumptions on these parameters), while, as noted above, the RfR is set using historical data from the 2019/20 to 2023/24 period.

• Cost of Debt is calculated using an extending trailing average of the iBoxx Utilities index²². To allow a trailing average to be calculated for future dates, the iBoxx yield must be forecast. The forecast yield in this Scenario for 2026/27 to 2030/31 is set equal to the actual historical yield on the iBoxx Utilities index from 2019/20 to 2023/24.

Global Financial Crisis scenario

This scenario is designed to stress test the impact of a major recession, similar to the period around the 2008 Financial Crisis (2005/06 to 2009/10). As in the case of the Inflation and Interest Rates Shock scenario, this allows us to test the impact of multiple variables changing simultaneously. To conduct this stress test, we change key variables in line with historical data, based on El's analysis:

- Risk-free rate for 2026/27 to 2030/31 is set equal to the historical RfR from 2005/06 to 2009/10, based on index-linked gilts.
- SONIA rate for 2026/27 to 2030/31 is set equal to the historical SONIA rate from 2005/06 to 2009/10.
- Nominal interest rate on actual debt for 2026/27 to 2030/31 is set equal to the historical yield on the iBoxx Utilities index from 2005/06 to 2009/10.
- RPI & CPIH inflation rates for 2026/27 to 2030/31 are set equal to the historical inflation rates from 2005/06 to 2009/10.
- RPI and CPIH real interest rates are calculated from the nominal interest rate and RPI / CPIH inflation using the formula: (1 + real interest rate) = (1 + nominal interest rate) / (1 + inflation rate).
- Cost of Equity is calculated using the CAPM, where: Cost of Equity = Risk-free Rate + Beta *
 (Total Market Return (TMR) Risk-free Rate). Beta and the TMR are unchanged from Ofgem's
 Base Case (without prejudice to NGN alternative assumptions on these parameters), while, as
 noted above, the RfR is set using historical data from the 2005/06 to 2009/10 period.
- Cost of Debt is calculated using an extending trailing average of the iBoxx Utilities index²³. To allow a trailing average to be calculated for future dates, the iBoxx yield must be forecast. The forecast yield in this Scenario for 2026/27 to 2030/31 is set equal to the actual historical yield on the iBoxx Utilities index from 2005/06 to 2009/10.

It is our view that the rationale for these bespoke scenarios, and their results, should be taken into account by Ofgem when conducting a financeability assessment of the Business Plans and when making determinations at the DD and FD stages.

²² Economic Insight calibrated a trailing average starting from 31/03/2018 and extending annually to 31/03/2031because it was the closest identified approximation of Ofgem updated SSMD working assumptions of 2.90% CPIH-real allowed Cost of Debt on average over RIIO-GD3.

²³ Economic Insight calibrated a trailing average starting from 31/03/2018 and extending annually to 31/03/2031because it was the closest identified approximation of Ofgem updated SSMD working assumptions of 2.90% CPIH-real allowed Cost of Debt on average over RIIO-GD3.

6. <u>Financeability assessment – results</u>

We have tested our financeability in Ofgem's prescribed scenarios, and also using our alternative view of the Base Case and the bespoke Economic Insight scenarios as set out above. We find that we would be able to maintain an investment-grade credit rating across them all, provided that the CRAs' assessment criteria do not change and/or diverge from those assumed in BPFM, as assessed at the time of submission.

6.1. Our target credit rating

As set out in **Chapter 7** of the Business Plan, we target a credit rating of at least Baa1 from Moody's and BBB+ from S&P. This is two notches above the minimum investment-grade credit rating required by Ofgem for Licensees, which is Baa3 for Moody's and BBB- for S&P.

6.2. Financeability analysis scoring – overall credit rating

Throughout our financeability analysis, we adopt the following thresholds for assessing the overall credit ratings (i.e. the rating issued by the CRAs to Northern Gas Networks):

- Green represents a credit rating of at least Baa1 / BBB+, and therefore meets both our overall credit rating target and Ofgem's requirement for an investment-grade rating.
- Yellow represents a credit rating of Baa2 / BBB, and therefore does not meet our credit rating target but nevertheless does meet Ofgem's requirement for an investment-grade rating.
- Red represents a credit rating of Baa3 / BBB- or below. This does not meet our credit rating and represents a risk of losing the investment-grade credit rating.

6.3. Financeability analysis scoring – individual credit metric assessment

We have also considered key individual credit metrics that Moody's and S&P use to produce their overall credit ratings, for example, AICR and FFO/Net Debt, as part of our financeability assessment. For the individual metrics, we have adopted the following criteria to score:

- Green indicates that we do not consider the metric to pose a concern.
- Yellow indicates that the metric may warrant consideration but is not posing a concern to our overall rating.
- Red indicates the metric could pose a risk to our overall credit rating.

6.4. Ofgem's Base Case (SSMD assumptions)

The tables below²⁴ show the impact of Ofgem's Base Case proposals on key credit metrics for the notional and actual company. Overall, under Ofgem's Base Case proposals, the key credit metrics show

²⁴ Reported using the Ofgem-prescribed BPFM from FBPOutputs, FinancialRatios or RatingSimulator tabs as appropriate. The FFO/Net Debt (S&P) metric was adjusted for inflation accretion to better reflect the S&P methodology as permitted by Ofgem and is therefore reported from the NGN Bespoke BPFM.

that if a company matched the notional assumptions, particularly with respect to gearing (kept constant at 60% each year by varying the equity injection/return of capital levels where possible according to Ofgem's new guidance for RIIO-GD3) and the Cost of Debt, then it could be financeable at those levels.

However, for the actual company, certain financial metrics deteriorate over the RIIO-GD3 period, and gearing rises above the 70% upper bound of our internal target range in the last three years of RIIO-GD3²⁵.

Additionally, the Capex to RAV ratio is slightly higher than Moody's Baa rating target for this ratio for both the notional and actual company. However, given other metrics, we do not consider this poses a risk to our overall rating. This is also prevalent throughout the stress tests, as detailed further in the following sections.

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	A3	A3	A3	A3	A2	A3
Capex to RAV ratio	7.62%	7.54%	8.31%	8.70%	9.42%	8.32%
AICR, adjusted (Moody's)	1.83	1.79	1.79	1.78	1.76	1.79
Net Debt / Total closing RAV	60.00%	60.00%	60.00%	60.00%	60.00%	60.00%
RCF / Net Debt	12.48%	12.95%	13.67%	14.38%	15.18%	13.73%
FFO / Net Debt, (S&P)	16.37%	16.86%	17.45%	18.10%	18.80%	17.52%

Table 6-1 Credit metrics (notional company, Ofgem's Base Case)

Table 6-2 Credit metrics (actual company, Ofgem's Base Case)

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	A3	A3	A3	A3	A3	A3
Capex to RAV ratio	7.62%	7.54%	8.31%	8.70%	9.42%	8.32%
AICR, adjusted (Moody's)	1.99	1.87	1.79	1.67	1.66	1.80
Net Debt / Total closing RAV	67.81%	69.13%	70.52%	70.92%	71.10%	69.90%
RCF / Net Debt	9.58%	9.15%	9.67%	11.44%	12.57%	10.48%
FFO / Net Debt, (S&P)	15.04%	14.53%	14.83%	14.90%	15.65%	14.99%

²⁵ Actual company gearing while demonstrating a similar upward trend, stays within NGN's internal gearing limit (our prudent approach to financing among other things presupposes that gearing should not consistently exceed c. 70%) when estimated using our internal modelling, which differs from the BPFM. Differences mainly arise in the nominal closing RAV calculations (we use FYE inflation as per the current RFPR methodology), tax paid forecast and credit metric adjustments that are often made by the CRAs but assumed away in BPFM.

6.5. Ofgem's stress test scenarios (SSMD assumptions)

We meet an investment-grade credit rating (RIIO-GD3 average) in all of Ofgem's stress tests, for both the notional and actual company. We maintain at least an A3 rating in all cases, and A2 in some cases, as summarised in the table below. However, as mentioned in <u>Section 3</u>, if we were allowed by Ofgem to change the assumption used in the BPFM for this assessment as regards the sub-factor score of the Financial Policy from "Baa" as assumed by Ofgem to "Ba" actually used by Moody's to rate the GB GDNs, the results would differ as also shown in the table below. In many scenarios, under "Ba" for the Financial Policy sub-factor score, our overall credit rating falls one notch to Baa1, which still meets NGN's overall credit rating target.

	Scenario	Notional company (RIIO- GD3 average) – "Baa" score for Financial Policy	Notional company (RIIO- GD3 average) – "Ba" score for Financial Policy	Actual company (RIIO-GD3 average) - "Baa" score for Financial Policy	Actual company (RIIO-GD3 average) – "Ba" score for Financial Policy
Ofg	em Base Case	A3	A3	A3	Baa1
Interest Rate	High	A2	A3	A3	A3
	Low	A3	A3	A3	Baa1
Inflation	High	A2	A3	A3	Baa1
	Low	A3	A3	A3	Baa1
CPIH	High	A3	A3	A3	Baa1
Divergence	Low	A2	A3	A3	Baa1
RPI	High	A3	A3	A3	Baa1
Divergence	Low	A3	A3	A3	Baa1
Totex	Out	A2	A3	A2	A3
Performance	Under	A3	Baa1	A3	Baa1
RoRE	High	A2	A2	A3	A3
	Low	A3	Baa1	A3	Baa1
Index-Linked	High	A3	A3	A3	Baa1
Debt	Low	A2	A3	A3	Baal

Table 6-3 RIIO-GD3 average Moody's rating, Ofgem's SSMD assumptions

As for the individual credit ratios that underpin the CRAs' credit rating assessment, we find that most pose no cause for concern across the Ofgem-prescribed scenarios.

However, there are several cases of some individual credit metric deterioration that warrants attention and a small number that could pose a risk to our overall credit rating:

- AICR poses no concern to our credit rating in all cases, with some attention required in the 'Low RoRE' stress test scenario for both the notional and actual company.
- Net Debt / Total closing RAV requires attention in 10 out of 14 of the Ofgem-prescribed scenarios for the actual company, with 2 cases posing a threat to our overall credit rating. These 2 cases are for the actual company in 'Totex Underperformance' and 'Low RoRE'.
- Capex to RAV ratio requires attention in all Ofgem-prescribed stress tests for both the notional and actual company but does not pose a threat to our overall credit rating in RIIO-GD3 given it does not significantly exceed 10%.

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We outline our performance in each scenario in detail below.

Interest Rate – High Case

In the High Interest Rate Case, credit metrics behave similarly to Ofgem's Base Case, both in credit rating and direction over RIIO-GD3. However, gearing remains below 70% for the actual company, whereas it rises above 70% in Ofgem's Base Case.

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	A3	A3	A3	A2	A2	A2
Capex to RAV ratio	7.62%	7.54%	8.31%	8.70%	9.42%	8.32%
AICR, adjusted (Moody's)	1.83	1.78	1.77	1.74	1.70	1.77
Net Debt / Total closing RAV	59.81%	59.61%	59.40%	59.18%	58.95%	59.39%
RCF / Net Debt	12.82%	13.34%	14.13%	14.91%	15.80%	14.20%
FFO / Net Debt, (S&P)	16.73%	17.29%	17.95%	18.69%	19.49%	18.03%

 Table 6-4 Credit metrics (notional company, High Interest Rate Case, Ofgem's SSMD assumptions)

Table 6-5. Credit metrics (actual company, High Interest Rate Case, Ofgem's SSMD assumptions)

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	A2	A2	A2	A3	A3	A3
Capex to RAV ratio	7.62%	7.54%	8.31%	8.70%	9.42%	8.32%
AICR, adjusted (Moody's)	2.12	2.14	1.77	1.77	1.77	1.91
Net Debt / Total closing RAV	62.46%	61.18%	67.23%	66.11%	65.03%	64.40%
RCF / Net Debt	14.37%	14.63%	13.95%	14.61%	15.75%	14.66%
FFO / Net Debt, (S&P)	15.25%	14.80%	15.14%	15.36%	16.17%	15.34%

Interest Rate - Low Case

In the Low Interest Rate Case, credit metrics behave similarly to Ofgem's Base Case, both in credit rating and direction over RIIO-GD3. However, the AICR for the notional company increases over RIIO-GD3, rather than decreases (as in Ofgem's Base Case).

 Table 6-6 Credit metrics (notional company, Low Interest Rate Case, Ofgem's SSMD assumptions)

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	A3	A3	A3	A3	A3	A3
Capex to RAV ratio	7.62%	7.54%	8.31%	8.70%	9.42%	8.32%
AICR, adjusted (Moody's)	1.82	1.80	1.81	1.83	1.84	1.82
Net Debt / Total closing RAV	60.19%	60.39%	60.59%	60.80%	61.01%	60.60%
RCF / Net Debt	12.14%	12.56%	13.23%	13.88%	14.61%	13.28%
FFO / Net Debt, (S&P)	16.02%	16.45%	16.96%	17.54%	18.17%	17.03%

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	A3	A3	A3	A3	A3	A3
Capex to RAV ratio	7.62%	7.54%	8.31%	8.70%	9.42%	8.32%
AICR, adjusted (Moody's)	2.07	1.92	1.82	1.68	1.69	1.84
Net Debt / Total closing RAV	67.94%	69.43%	71.05%	71.71%	72.17%	70.46%
RCF / Net Debt	9.38%	8.86%	9.28%	10.94%	11.99%	10.09%
FFO / Net Debt, (S&P)	14.83%	14.21%	14.40%	14.37%	15.02%	14.57%

Table 6-7 Credit metrics (actual company, Low Interest Rate Case, Ofgem's SSMD assumptions)

Inflation – High Case

Under the High Inflation Case, credit metrics behave similarly to Ofgem's Base Case, both in credit rating and direction over RIIO-GD3. However, gearing for the actual company remains below 70%, whereas in Ofgem's Base Case it increases above 70%.

Table 6-8.	Credit metrics	(notional company.	Hiah Inflation	Case. Ofae	m's SSMD assumptions)
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Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	A3	A3	A3	A2	A2	A2
Capex to RAV ratio	7.67%	7.65%	8.49%	8.94%	9.73%	8.49%
AICR, adjusted (Moody's)	1.83	1.81	1.81	1.81	1.80	1.81
Net Debt / Total closing RAV	59.73%	59.42%	59.13%	58.85%	58.60%	59.15%
RCF / Net Debt	12.54%	13.09%	13.90%	14.70%	15.59%	13.96%
FFO / Net Debt, (S&P)	15.97%	16.46%	17.15%	17.91%	18.72%	17.24%

Table 6-9 Credit metrics (actual company, High Inflation Case, Ofgem's SSMD assumptions)

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	A3	A3	A3	A3	A3	A3
Capex to RAV ratio	7.67%	7.65%	8.49%	8.94%	9.73%	8.49%
AICR, adjusted (Moody's)	2.00	1.89	1.81	1.72	1.72	1.83
Net Debt / Total closing RAV	67.29%	68.13%	69.00%	68.86%	68.49%	68.35%
RCF / Net Debt	9.77%	9.46%	10.14%	12.10%	13.43%	10.98%
FFO / Net Debt, (S&P)	14.70%	14.22%	14.64%	14.89%	15.81%	14.85%

Inflation – Low Case

Under the Low Inflation Case, for the actual company, gearing deteriorates more over RIIO-GD3 relative to Ofgem's Base Case, rising to almost 75% by 2030-31. Additionally, FFO / Net Debt (S&P) decreases over RIIO-GD3 for the actual company, rather than increases (as in Ofgem's Base Case). However, it still remains above S&P's implied BBB+ threshold.

For the notional company, credit metrics behave similarly to Ofgem's Base Case, both in credit rating and direction over RIIO-GD3.

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	A3	A3	A3	A3	A2	A3
Capex to RAV ratio	7.57%	7.43%	8.13%	8.46%	9.10%	8.14%
AICR, adjusted (Moody's)	1.82	1.77	1.76	1.74	1.71	1.76
Net Debt / Total closing RAV	60.27%	60.60%	60.91%	61.21%	61.50%	60.90%
RCF / Net Debt	12.42%	12.80%	13.44%	14.06%	14.76%	13.49%
FFO / Net Debt, (S&P)	16.78%	17.27%	17.75%	18.29%	18.88%	17.79%

Table 6-10 Credit metrics (notional company, Low Inflation Case, Ofgem's SSMD assumptions)

Table 6-11 Credit metrics (actual company, Low Inflation Case, Ofgem's SSMD assumptions)

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	A3	A3	A3	A3	A3	A3
Capex to RAV ratio	7.57%	7.43%	8.13%	8.46%	9.10%	8.14%
AICR, adjusted (Moody's)	1.97	1.83	1.72	1.60	1.57	1.74
Net Debt / Total closing RAV	68.37%	70.28%	72.35%	73.46%	74.39%	71.77%
RCF / Net Debt	9.37%	8.73%	9.02%	10.63%	11.53%	9.85%
FFO / Net Debt, (S&P)	15.35%	14.70%	14.79%	14.70%	15.23%	14.95%

CPIH Divergence – High Case

Under the High CPIH Divergence Case, credit metrics behave similarly to Ofgem's Base Case, both in credit rating and direction over RIIO-GD3.

Table 6-12 Credit metrics (notional company, High CPIH Divergence Case, Ofgem's SSMD assumptions)

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	A3	A3	A3	A3	A2	A3
Capex to RAV ratio	7.60%	7.51%	8.27%	8.64%	9.34%	8.27%
AICR, adjusted (Moody's)	1.82	1.79	1.78	1.77	1.75	1.78
Net Debt / Total closing RAV	60.07%	60.15%	60.22%	60.30%	60.36%	60.22%

RCF / Net Debt	12.46%	12.91%	13.61%	14.30%	15.08%	13.67%
FFO / Net Debt, (S&P)	16.48%	16.96%	17.53%	18.15%	18.82%	17.59%

 Table 6-13 Credit metrics (actual company, High CPIH Divergence Case, Ofgem's SSMD assumptions)

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	A3	A3	A3	A3	A3	A3
Capex to RAV ratio	7.60%	7.51%	8.27%	8.64%	9.34%	8.27%
AICR, adjusted (Moody's)	1.99	1.87	1.77	1.65	1.64	1.78
Net Debt / Total closing RAV	67.95%	69.39%	70.95%	71.51%	71.87%	70.33%
RCF / Net Debt	9.54%	9.07%	9.51%	11.24%	12.31%	10.34%
FFO / Net Debt, (S&P)	15.12%	14.60%	14.83%	14.86%	15.56%	15.00%

<u>CPIH Divergence – Low Case</u>

Under the Low CPIH Divergence Case, credit metrics behave similarly to Ofgem's Base Case, both in credit rating and direction over RIIO-GD3. However, for the actual company, FFO / Net Debt (S&P) decreases over RIIO-GD3 (although it still remains above S&P's implied BBB+ threshold). In Ofgem's Base Case, this metric increases.

 Table 6-14 Credit metrics (notional company, Low CPIH Divergence Case, Ofgem's SSMD assumptions)

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	A3	A3	A3	A2	A2	A2
Capex to RAV ratio	7.63%	7.57%	8.35%	8.76%	9.50%	8.36%
AICR, adjusted (Moody's)	1.83	1.79	1.79	1.78	1.77	1.79
Net Debt / Total closing RAV	59.93%	59.85%	59.78%	59.71%	59.64%	59.78%
RCF / Net Debt	12.49%	12.98%	13.73%	14.46%	15.28%	13.79%
FFO / Net Debt, (S&P)	16.78%	17.27%	17.75%	18.29%	18.88%	17.79%

Table 6-15. Credit metrics (actual company, Low CPIH Divergence Case, Ofgem's SSMD assumptions)

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	A3	A3	A3	A3	A3	A3
Capex to RAV ratio	7.63%	7.57%	8.35%	8.76%	9.50%	8.36%
AICR, adjusted (Moody's)	1.99	1.88	1.79	1.69	1.68	1.81
Net Debt / Total closing RAV	67.68%	68.88%	70.13%	70.37%	70.39%	69.49%
RCF / Net Debt	9.63%	9.23%	9.79%	11.64%	12.82%	10.62%
FFO / Net Debt, (S&P)	15.35%	14.70%	14.79%	14.70%	15.23%	14.95%

<u> RPI Divergence – High Case</u>

Under the High RPI Divergence Case, credit metrics behave similarly to Ofgem's Base Case, both in credit rating and direction over RIIO-GD3.

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	A3	A3	A3	A3	A2	A3
Capex to RAV ratio	7.62%	7.54%	8.31%	8.70%	9.42%	8.32%
AICR, adjusted (Moody's)	1.83	1.79	1.79	1.78	1.76	1.79
Net Debt / Total closing RAV	60.00%	60.00%	60.00%	60.00%	60.00%	60.00%
RCF / Net Debt	12.48%	12.95%	13.67%	14.38%	15.18%	13.73%
FFO / Net Debt, (S&P)	16.37%	16.86%	17.45%	18.10%	18.80%	17.52%

 Table 6-16 Credit metrics (notional company, High RPI Divergence Case, Ofgem's SSMD assumptions)

 Table 6-17 Credit metrics (actual company, High RPI Divergence Case, Ofgem's SSMD assumptions)

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	A3	A3	A3	A3	A3	A3
Capex to RAV ratio	7.62%	7.54%	8.31%	8.70%	9.42%	8.32%
AICR, adjusted (Moody's)	1.99	1.87	1.79	1.67	1.66	1.80
Net Debt / Total closing RAV	67.81%	69.13%	70.52%	70.92%	71.10%	69.90%
RCF / Net Debt	9.58%	9.15%	9.67%	11.44%	12.57%	10.48%
FFO / Net Debt, (S&P)	15.04%	14.53%	14.83%	14.90%	15.65%	14.99%

<u> RPI Divergence – Low Case</u>

Under the Low RPI Divergence Case, credit metrics behave similarly to Ofgem's Base Case, both in credit rating and direction over RIIO-GD3.

Table 6-18 Credit metrics (notional company, Low RPI Divergence Case, Ofgem's SSMD assumptions)

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	A3	A3	A3	A3	A2	A3
Capex to RAV ratio	7.62%	7.54%	8.31%	8.70%	9.42%	8.32%
AICR, adjusted (Moody's)	1.83	1.79	1.79	1.78	1.76	1.79
Net Debt / Total closing RAV	60.00%	60.00%	60.00%	60.00%	60.00%	60.00%
RCF / Net Debt	12.48%	12.95%	13.67%	14.38%	15.18%	13.73%
FFO / Net Debt, (S&P)	16.37%	16.86%	17.45%	18.10%	18.80%	17.52%

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	A3	A3	A3	A3	A3	A3
Capex to RAV ratio	7.62%	7.54%	8.31%	8.70%	9.42%	8.32%
AICR, adjusted (Moody's)	1.99	1.87	1.79	1.67	1.66	1.80
Net Debt / Total closing RAV	67.81%	69.13%	70.52%	70.92%	71.10%	69.90%
RCF / Net Debt	9.58%	9.15%	9.67%	11.44%	12.57%	10.48%
FFO / Net Debt, (S&P)	15.04%	14.53%	14.83%	14.90%	15.65%	14.99%

Table 6-19 Credit metrics (actual company, Low RPI Divergence Case, Ofgem's SSMD assumptions)

Totex Outperformance Case

Under the Totex Outperformance Case, for both the notional and actual company, the Capex to RAV ratio increases over RIIO-GD3 (as in Ofgem's Base Case) but does not warrant attention until the final year of RIIO-GD3. Additionally, gearing remains below 70% in all years for the actual company and decreases slightly over RIIO-GD3. This is in contrast to Ofgem's Base Case, where gearing for the actual company increases over RIIO-GD3, surpassing 70%. For the notional company, AICR increases over RIIO-GD3, rather than decreases (as in Ofgem's Base Case).

Table 6 20 Credit matrics	(notional con	nnany Totovi	Outparformanca	Caco	Ofaam's SSMD	accumptions
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Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	A2	A2	A2	A2	A2	A2
Capex to RAV ratio	6.86%	6.81%	7.53%	7.91%	8.60%	7.54%
AICR, adjusted (Moody's)	1.94	1.92	1.94	1.96	1.97	1.95
Net Debt / Total closing RAV	59.21%	58.39%	57.49%	56.52%	55.48%	57.42%
RCF / Net Debt	13.14%	13.84%	14.89%	15.98%	17.24%	15.02%
FFO / Net Debt, (S&P)	17.09%	17.87%	18.86%	19.95%	21.20%	18.99%

Table 6-21 Credit metrics (actual company, Totex Outperformance Case, Ofgem's SSMD assumptions)

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	A2	A2	A2	A3	A3	A2
Capex to RAV ratio	6.86%	6.81%	7.53%	7.91%	8.60%	7.54%
AICR, adjusted (Moody's)	2.13	2.04	1.97	1.87	1.89	1.98
Net Debt / Total closing RAV	67.05%	67.58%	68.15%	67.66%	66.91%	67.47%
RCF / Net Debt	10.10%	9.85%	10.49%	12.57%	13.97%	11.40%
FFO / Net Debt, (S&P)	15.64%	15.39%	15.89%	16.25%	17.30%	16.09%

Totex Underperformance Case

In the Totex Underperformance Case, the Capex to RAV ratio deteriorates earlier in RIIO-GD3 for both the notional and actual company relative to Ofgem's Base Case. Additionally, gearing deteriorates more for the actual company, relative to Ofgem's Base Case, rising to over 75% by 2030-31. The credit metrics behave similarly to Ofgem's Base Case in terms of direction over RIIO-GD3, with the exception of FFO / Net Debt (S&P) for the actual company. This metric decreases under the Totex Underperformance Case, rather than increases (as in Ofgem's Base Case), but still meets S&P's implied BBB+ threshold.

Table 6-22 Credit metrics (notional company, Totex Underperformance Case, Ofgem's SSMD assumptions)

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	A3	A3	A3	A3	A3	A3
Capex to RAV ratio	8.38%	8.26%	9.07%	9.46%	10.21%	9.08%
AICR, adjusted (Moody's)	1.72	1.67	1.64	1.61	1.57	1.64
Net Debt / Total closing RAV	60.78%	61.59%	62.46%	63.38%	64.36%	62.51%
RCF / Net Debt	11.84%	12.11%	12.57%	13.00%	13.46%	12.60%
FFO / Net Debt, (S&P)	15.68%	15.92%	16.18%	16.49%	16.81%	16.22%

 Table 6-23 Credit metrics (actual company, Totex Underperformance Case, Ofgem's SSMD assumptions)

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	A3	A3	A3	A3	A3	A3
Capex to RAV ratio	8.38%	8.26%	9.07%	9.46%	10.21%	9.08%
AICR, adjusted (Moody's)	1.86	1.72	1.62	1.50	1.47	1.63
Net Debt / Total closing RAV	68.57%	70.67%	72.88%	74.13%	75.20%	72.29%
RCF / Net Debt	9.08%	8.49%	8.87%	10.43%	11.34%	9.64%
FFO / Net Debt, (S&P)	14.46%	13.72%	13.81%	13.70%	14.20%	13.98%

<u>RoRE – High Case</u>

Under the High RoRE Case, gearing remains below 70% for the actual company, and even decreases slightly over RIIO-GD3. This is in contrast to Ofgem's Base Case, where gearing for the actual company increases to above 70% over RIIO-GD3. For the notional company, AICR increases over RIIO-GD3, whereas it decreases in Ofgem's Base Case.

Table 6-24 Credit metrics (notional company, High RoRE Case, Ofgem's SSMD assumptions)

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	A2	A2	A2	A2	A2	A2
Capex to RAV ratio	7.62%	7.54%	8.31%	8.70%	9.42%	8.32%

AICR, adjusted (Moody's)	2.16	2.14	2.16	2.18	2.18	2.16
Net Debt / Total closing RAV	59.20%	58.36%	57.49%	56.58%	55.64%	57.45%
RCF / Net Debt	14.00%	14.75%	15.79%	16.87%	18.09%	15.90%
FFO / Net Debt, (S&P)	17.95%	18.78%	19.76%	20.84%	22.04%	19.88%

Table 6-25 Credit metrics (actual company, High RoRE Case, Ofgem's SSMD assumptions)

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	A3	A3	A3	A3	A3	A3
Capex to RAV ratio	7.62%	7.54%	8.31%	8.70%	9.42%	8.32%
AICR, adjusted (Moody's)	2.37	2.27	2.19	2.08	2.09	2.20
Net Debt / Total closing RAV	67.00%	67.46%	67.98%	67.46%	66.71%	67.32%
RCF / Net Debt	10.91%	10.66%	11.33%	13.41%	14.85%	12.23%
FFO / Net Debt, (S&P)	16.43%	16.17%	16.69%	17.05%	18.13%	16.89%

<u>RoRE – Low Case</u>

In the Low RoRE Case, AICR decreases more than in Ofgem's Base Case for both the notional and actual company, and may warrant consideration towards the end of RIIO-GD3. Gearing for the actual company also increases more than in Ofgem's Base Case, rising to c. 76% by the end of RIIO-GD3. FFO / Net Debt (S&P) decreases over RIIO-GD3 for the actual company, rather than increases (as in Ofgem's Base Case). The latter metric still remains above S&P's implied BBB+ threshold.

 Table 6-26 Credit metrics (notional company, Low RoRE Case, Ofgem's SSMD assumptions)

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	A3	A3	A3	A3	A3	A3
Capex to RAV ratio	7.62%	7.54%	8.31%	8.70%	9.42%	8.32%
AICR, adjusted (Moody's)	1.50	1.46	1.44	1.41	1.38	1.44
Net Debt / Total closing RAV	60.80%	61.64%	62.51%	63.42%	64.36%	62.55%
RCF / Net Debt	11.00%	11.24%	11.72%	12.16%	12.66%	11.76%
FFO / Net Debt, (S&P)	14.84%	15.04%	15.33%	15.65%	16.00%	15.37%

Table 6-27 Credit metrics (actual company, Low RoRE Case, Ofgem's SSMD assumptions)

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	A3	A3	A3	A3	Baa1	A3
Capex to RAV ratio	7.62%	7.54%	8.31%	8.70%	9.42%	8.32%
AICR, adjusted (Moody's)	1.62	1.51	1.42	1.32	1.30	1.43

Net Debt / Total closing RAV	68.63%	70.81%	73.10%	74.41%	75.52%	72.49%
RCF / Net Debt	8.29%	7.71%	8.08%	9.65%	10.55%	8.86%
FFO / Net Debt, (S&P)	13.68%	12.97%	13.06%	12.95%	13.45%	13.22%

Index Linked Debt – High Case

In the High Index Linked Debt Case, the credit metrics behave similarly to Ofgem's Base Case, both in credit rating and direction over RIIO-GD3.

 Table 6-28 Credit metrics (notional company, High Index Linked Debt Case, Ofgem's SSMD assumptions)

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	A3	A3	A3	A3	A2	A3
Capex to RAV ratio	7.61%	7.53%	8.28%	8.66%	9.37%	8.29%
AICR, adjusted (Moody's)	1.87	1.83	1.82	1.81	1.79	1.82
Net Debt / Total closing RAV	60.04%	60.08%	60.12%	60.16%	60.19%	60.12%
RCF / Net Debt	12.47%	12.93%	13.64%	14.34%	15.13%	13.71%
FFO / Net Debt, (S&P)	16.20%	16.65%	17.22%	17.85%	18.54%	17.29%

 Table 6-29 Credit metrics (actual company, High Index Linked Debt Case, Ofgem's SSMD assumptions)

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	A3	A3	A3	A3	A3	A3
Capex to RAV ratio	7.61%	7.53%	8.28%	8.66%	9.37%	8.29%
AICR, adjusted (Moody's)	1.94	1.82	1.74	1.63	1.61	1.75
Net Debt / Total closing RAV	67.86%	69.21%	70.62%	71.04%	71.23%	69.99%
RCF / Net Debt	9.41%	8.98%	9.50%	11.27%	12.40%	10.31%
FFO / Net Debt, (S&P)	14.86%	14.34%	14.63%	14.71%	15.46%	14.80%

Index Linked Debt - Low Case

In the Low Index Linked Debt Case, the credit metrics behave similarly to Ofgem's Base Case, both in credit rating and direction over RIIO-GD3.

Table 6-30 Credit metrics (notional company, Low Index Linked Debt Case, Ofgem's SSMD assumptions)

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	A3	A3	A3	A2	A2	A2
Capex to RAV ratio	7.62%	7.56%	8.34%	8.73%	9.46%	8.34%
AICR, adjusted (Moody's)	1.79	1.76	1.75	1.75	1.73	1.75

Net Debt / Total closing RAV	59.96%	59.92%	59.88%	59.84%	59.81%	59.88%
RCF / Net Debt	12.48%	12.96%	13.70%	14.42%	15.23%	13.76%
FFO / Net Debt, (S&P)	16.55%	17.08%	17.69%	18.35%	19.06%	17.75%

Table 6-31 Credit metrics (actual company, Low Index Linked Debt Case, Ofgem's SSMD assumptions)

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	A3	A3	A3	A3	A3	A3
Capex to RAV ratio	7.62%	7.56%	8.34%	8.73%	9.46%	8.34%
AICR, adjusted (Moody's)	2.04	1.93	1.84	1.72	1.71	1.85
Net Debt / Total closing RAV	67.77%	69.06%	70.43%	70.81%	70.98%	69.81%
RCF / Net Debt	9.75%	9.32%	9.84%	11.62%	12.74%	10.66%
FFO / Net Debt, (S&P)	15.22%	14.72%	15.02%	15.10%	15.84%	15.18%

6.6. NGN's Base Case (alternative financial parameters)

We have tested our financeability under alternative parameters to Ofgem's Base Case financial parameters that reflect our views with regards to changes in the Cost of Equity; the Cost of Debt; and the approach to Depreciation (see **Chapter 7** of the Business Plan for more details). We have also included the impact of the tax clawback for both the notional and actual company (tax clawback was excluded in Ofgem's Base Case for the notional company) and report all results for NGN's Base Case and Bespoke Scenarios using the NGN Bespoke BPFM.

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	A3	A3	A3	A3	A3	A3
Capex to RAV ratio	7.62%	7.49%	8.18%	8.48%	9.06%	8.17%
AICR, adjusted (Moody's)	1.89	1.85	1.85	1.84	1.82	1.85
Net Debt / Total closing RAV	60.00%	60.00%	60.00%	60.00%	60.00%	60.00%
RCF / Net Debt	11.71%	11.89%	12.26%	12.55%	12.86%	12.25%
FFO / Net Debt, (S&P)	15.74%	15.81%	15.91%	15.99%	16.04%	15.90%

Table 6-32 Credit metrics (notional company, NGN's Base Case, NGN's assumptions)

Table 6-33 Credit metrics (actual company, NGN's Base Case, NGN's assumptions)

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	A3	A3	A3	A3	A3	A3
Capex to RAV ratio	7.62%	7.49%	8.18%	8.48%	9.06%	8.17%
AICR, adjusted (Moody's)	2.19	2.04	1.93	1.80	1.76	1.94

Net Debt / Total closing RAV	67.55%	68.63%	69.81%	70.05%	70.14%	69.23%
RCF / Net Debt	9.29%	8.56%	8.73%	10.09%	10.67%	9.47%
FFO / Net Debt, (S&P)	14.73%	13.90%	13.81%	13.46%	13.63%	13.91%

6.7. NGN's bespoke scenarios (SSMD assumptions)

We have modelled all bespoke scenarios relative to Ofgem's Base Case for better comparability with Ofgem-prescribed stress test scenarios.

We meet an investment-grade credit rating (on average over RIIO-GD3) in all of our bespoke stress tests, for both the notional and actual company. We maintain an A2 or A3 rating in all cases except for the Modified Low RoRE Scenario, where we still meet a Baa1 rating, as summarised in the table below. However, as mentioned in <u>Section 3</u>, if we were allowed by Ofgem to change the assumption used in the BPFM for this assessment as regards the sub-factor score of the Financial Policy from "Baa" as assumed by Ofgem to "Ba" actually used by Moody's to rate the GB GDNs, the results would differ as also shown in the table below. In many scenarios, under "Ba" for the Financial Policy sub-factor score, our overall credit rating falls one notch to Baa1, which still meets NGN's overall credit rating target.

Scenario		Notional company (RIIO-GD3 average) – "Baa" score for Financial Policy	Notional company (RIIO- GD3 average) – "Ba" score for Financial Policy	Actual company (RIIO-GD3 average) - "Baa" score for Financial Policy	Actual company (RIIO-GD3 average) – "Ba" score for Financial Policy
NGN Base Ca	ise ²⁶	A3	Baa1	A3	A3
Ofgem Base	Case	A3	A3	A3	Baa1
Interest Rate (modified)	Low	А3	Baa1	A3	Baa1
Inflation (modified)	High	A2	A3	A3	Baa1
СРІН	High	A3	A3	A3	Baa1
Divergence (modified)	Low	A2	A3	A3	Baa1
RoRE	High	A2	A2	A2	A3
(modified)	Low	Baa1	Baa1	Baa1	Baa1
Index	High	A3	A3	A3	Baa1
Linked Debt (modified)	Low	A2	A3	A3	Baa1
Gas Credit S Rates	pread and High Interest	A2	A3	A3	Baa1
Inflation and	Interest Rates Shock	A3	A3	A3	A3
Global Finan	cial Crisis	A2	A3	A3	Baa1

 Table 6-34 RIIO-GD3 average Moody's rating, Economic Insight-recommended bespoke scenarios

As for the individual ratios that underpin the CRAs' credit rating assessment, we find that most pose no cause for concern across the bespoke Economic Insight recommended scenarios. However, there

We provide an overall credit rating summary for NGN's Base case for completeness. All bespoke stress tests are relative to Ofgem's Base case.

are several cases of an individual credit metric that warrants attention and a small number that could pose risk to our overall credit rating:

- AICR warrants further attention in two cases, for both the notional and actual company in the 'Modified Low RoRE' stress test. In the case of the latter, the AICR falls to below 1.2x in 2029-30 and therefore poses a risk to our overall credit rating.
- Net Debt / Total closing RAV requires attention in 8 out of 11 of the bespoke scenarios for the actual company, with 1 scenario posing a threat to the overall credit rating. The latter scenario is the 'Modified Low RoRE' stress test, which is the same scenario where AICR shows particular strain. It is important to highlight, therefore, that AICR and Net Debt / Total closing RAV show strain and potential risk to our overall credit rating in the same scenario.
- CAPEX to RAV ratio requires further attention in all bespoke stress tests for both the notional and actual company but does not pose a threat to our overall credit rating in RIIO-GD3 given it does not significantly exceed 10%.

Interest Rate – Modified Low Case

In the Modified Low Interest Rate Case, the credit metrics behave similarly to Ofgem's Base Case, both in credit rating and direction over RIIO-GD3. However, for the notional company, AICR increases over RIIO-GD3, rather than decreases (as in Ofgem's Base Case).

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	A3	A3	A3	A3	A3	A3
Capex to RAV ratio	7.62%	7.54%	8.31%	8.70%	9.42%	8.32%
AICR, adjusted (Moody's)	1.79	1.80	1.83	1.84	1.85	1.82
Net Debt / Total closing RAV	60.28%	60.58%	60.88%	61.19%	61.51%	60.89%
RCF / Net Debt	11.97%	12.37%	13.01%	13.63%	14.33%	13.06%
FFO / Net Debt, (S&P)	15.84%	16.24%	16.73%	17.27%	17.85%	16.79%

Table 6-35 Credit metrics (notional company, Modified Low Interest Rate, Ofgem's SSMD assumptions)

Table 6-36 Credit metrics (actual company, Modified Low Interest Rate, Ofgem's SSMD assumptions)

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	A3	A3	A3	A3	A3	A3
Capex to RAV ratio	7.62%	7.54%	8.31%	8.70%	9.42%	8.32%
AICR, adjusted (Moody's)	2.16	1.94	1.83	1.72	1.79	1.89
Net Debt / Total closing RAV	67.94%	69.54%	71.26%	72.00%	72.47%	70.64%
RCF / Net Debt	9.39%	8.69%	9.09%	10.80%	11.92%	9.98%
FFO / Net Debt, (S&P)	14.83%	14.04%	14.20%	14.21%	14.94%	14.44%

Inflation – Modified High Case

In the Modified High Inflation Case, gearing remains below 70% for the actual company, and even decreases slightly over RIIO-GD3 for both the notional and actual company. This is in contrast to Ofgem's Base Case, where gearing for the actual company increases to above 70% by 2028-29. All other credit metrics behave similarly to Ofgem's Base Case, both in credit rating and direction over RIIO-GD3.

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	A3	A3	A3	A2	A2	A2
Capex to RAV ratio	7.72%	7.75%	8.66%	9.18%	10.05%	8.67%
AICR, adjusted (Moody's)	1.84	1.82	1.84	1.84	1.83	1.83
Net Debt / Total closing RAV	59.47%	58.86%	58.29%	57.77%	57.30%	58.34%
RCF / Net Debt	12.60%	13.23%	14.13%	15.01%	15.98%	14.19%
FFO / Net Debt, (S&P)	15.57%	16.06%	16.85%	17.72%	18.63%	16.96%

 Table 6-37 Credit metrics (notional company, Modified High Inflation, Ofgem's SSMD assumptions)

Table 6-38 Credit metrics (actual company, Modified High Inflation, Ofgem's SSMD assumptions)

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	A3	A3	A3	A3	A3	A3
Capex to RAV ratio	7.72%	7.75%	8.66%	9.18%	10.05%	8.67%
AICR, adjusted (Moody's)	2.01	1.90	1.84	1.74	1.76	1.85
Net Debt / Total closing RAV	66.79%	67.19%	67.59%	67.03%	66.26%	66.97%
RCF / Net Debt	9.95%	9.77%	10.61%	12.68%	14.18%	11.44%
FFO / Net Debt, (S&P)	14.34%	13.89%	14.42%	14.75%	15.79%	14.64%

<u>CPIH Divergence – Modified High Case</u>

In the Modified High CPIH Divergence Case, the credit metrics behave similarly to Ofgem's Base Case, both in credit rating and direction over RIIO-GD3.

 Table 6-39 Credit metrics (notional company, Modified High CPIH Divergence, Ofgem's SSMD assumptions)

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	A3	A3	A3	A3	A2	A3
Capex to RAV ratio	7.58%	7.46%	8.18%	8.52%	9.18%	8.18%
AICR, adjusted (Moody's)	1.82	1.78	1.77	1.75	1.72	1.77
Net Debt / Total closing RAV	60.20%	60.45%	60.68%	60.90%	61.11%	60.67%
RCF / Net Debt	12.43%	12.84%	13.50%	14.14%	14.87%	13.55%

FFO / Net Debt, (S&P) 16.68%	17.17%	17.67%	18.24%	18.86%	17.72%
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Table 6-40 Credit metrics (actual company, Modified High CPIH Divergence, Ofgem's SSMD assumptions)

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	A3	A3	A3	A3	A3	A3
Capex to RAV ratio	7.58%	7.46%	8.18%	8.52%	9.18%	8.18%
AICR, adjusted (Moody's)	1.98	1.85	1.74	1.62	1.59	1.76
Net Debt / Total closing RAV	68.22%	69.96%	71.86%	72.78%	73.51%	71.27%
RCF / Net Debt	9.44%	8.85%	9.18%	10.84%	11.79%	10.02%
FFO / Net Debt, (S&P)	15.29%	14.68%	14.81%	14.76%	15.35%	14.98%

<u>CPIH Divergence – Modified Low Case</u>

In the Modified Low CPIH Divergence Case, the credit metrics behave similarly to Ofgem's Base Case, both in credit rating and direction over RIIO-GD3, with the exception of gearing. Gearing remains below 70% for the actual company, whereas in Ofgem's Base Case it rises above 70% in RIIO-GD3.

 Table 6-41 Credit metrics (notional company, Modified Low CPIH Divergence, Ofgem's SSMD assumptions)

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	A3	A3	A3	A2	A2	A2
Capex to RAV ratio	7.64%	7.59%	8.40%	8.82%	9.58%	8.41%
AICR, adjusted (Moody's)	1.83	1.80	1.80	1.79	1.78	1.80
Net Debt / Total closing RAV	59.87%	59.71%	59.56%	59.42%	59.29%	59.57%
RCF / Net Debt	12.51%	13.02%	13.79%	14.54%	15.38%	13.85%
FFO / Net Debt, (S&P)	16.17%	16.66%	17.30%	18.00%	18.76%	17.38%

Table 6-42 Credit metrics (actual company, Modified Low CPIH Divergence, Ofgem's SSMD assumptions)

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	A3	A3	A3	A3	A3	A3
Capex to RAV ratio	7.64%	7.59%	8.40%	8.82%	9.58%	8.41%
AICR, adjusted (Moody's)	2.00	1.88	1.80	1.70	1.70	1.82
Net Debt / Total closing RAV	67.55%	68.63%	69.75%	69.85%	69.71%	69.10%
RCF / Net Debt	9.68%	9.30%	9.91%	11.81%	13.05%	10.75%
FFO / Net Debt, (S&P)	14.87%	14.38%	14.74%	14.94%	15.79%	14.94%

RoRE – Modified High Case

Under the Modified High RoRE Case, gearing remains below 70% even for the actual company, and decreases over RIIO-GD3 for both the actual and notional company. This is in contrast to Ofgem's Base Case, where gearing for the actual company increases to above 70% by 2028-29. Additionally, for the notional company, the AICR increases over RIIO-GD3, rather than decreases (as in Ofgem's Base Case).

RIIO-GD3 Parameter 31-Mar-27 31-Mar-28 31-Mar-29 31-Mar-30 31-Mar-31 Average Overall Moody's A2 A2 A2 A2 A2 A2 rating 7.62% 7.54% 8.31% 8.70% 9.42% 8.32% Capex to RAV ratio AICR, adjusted 2.32 2.32 2.36 2.40 2.42 2.36 (Moody's) Net Debt / Total 58.80% 57.54% 56.23% 54.87% 53.45% 56.18% closing RAV 19.73% 17.07% RCF / Net Debt 14.78% 15.68% 16.92% 18.22% FFO / Net Debt, 18.76% 19.78% 20.99% 22.34% 23.86% 21.15% (S&P)

Table 6-43 Credit metrics (notional company, Modified High RoRE, Ofgem's SSMD assumptions)

Table 6-44 Credit metrics (actual company, Modified High RoRE, Ofgem's SSMD assumptions)

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	A3	A3	A3	A2	A2	A2
Capex to RAV ratio	7.62%	7.54%	8.31%	8.70%	9.42%	8.32%
AICR, adjusted (Moody's)	2.56	2.48	2.41	2.30	2.33	2.42
Net Debt / Total closing RAV	66.59%	66.63%	66.70%	65.74%	64.52%	66.03%
RCF / Net Debt	11.59%	11.44%	12.22%	14.48%	16.10%	13.16%
FFO / Net Debt, (S&P)	17.14%	17.02%	17.67%	18.21%	19.49%	17.91%

RoRE – Modified Low Case

In the Modified Low RoRE Case, AICR decreases for both the notional and actual company, as in Ofgem's Base Case. However, it decreases more so than in Ofgem's Base Case, and unlike the latter, warrants attention in most of RIIO-GD3. Gearing also deteriorates more over RIIO-GD3, relative to Ofgem's Base Case, rising to 76% in 2029-30 for the actual company. The AICR and gearing values for 2029-30 for the actual company pose a threat to our credit rating.

 Table 6-45 Credit metrics (notional company, Modified Low RoRE, Ofgem's SSMD assumptions)

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	Baa1	Baa1	Baa1	Baa1	Baa1	Baa1
Capex to RAV ratio	7.62%	7.54%	8.31%	8.70%	9.42%	8.32%
AICR, adjusted (Moody's)	1.34	1.29	1.27	1.24	1.31	1.29
Net Debt / Total closing RAV	61.20%	62.46%	63.77%	65.13%	61.20%	62.75%

RCF / Net Debt	10.27%	10.43%	10.81%	11.14%	12.92%	11.11%
FFO / Net Debt, (S&P)	14.08%	14.17%	14.33%	14.53%	16.47%	14.72%

Table 6-46 Credit metrics (actual company, Modified Low RoRE, Ofgem's SSMD assumptions)

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	A3	Baa1	Baa1	Baa1	Baa1	Baa1
Capex to RAV ratio	7.62%	7.54%	8.31%	8.70%	9.42%	8.32%
AICR, adjusted (Moody's)	1.44	1.33	1.25	1.16	1.29	1.29
Net Debt / Total closing RAV	69.03%	71.64%	74.38%	76.16%	71.16%	72.48%
RCF / Net Debt	7.65%	7.02%	7.33%	8.80%	11.04%	8.37%
FFO / Net Debt, (S&P)	13.01%	12.21%	12.22%	12.02%	14.12%	12.72%

Index Linked Debt – Modified High Case

In the Modified High Index Linked Debt Case, the credit metrics behave similarly to Ofgem's Base Case, both in credit rating and direction over RIIO-GD3.

Table 6-47 Credit metrics (notional company, Modified High Index Linked Debt, Ofgem's SSMD assumptions)

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	A3	A3	A3	A3	A2	A3
Capex to RAV ratio	7.60%	7.51%	8.26%	8.63%	9.33%	8.26%
AICR, adjusted (Moody's)	1.92	1.87	1.86	1.85	1.82	1.86
Net Debt / Total closing RAV	60.08%	60.16%	60.24%	60.31%	60.38%	60.23%
RCF / Net Debt	12.47%	12.92%	13.62%	14.31%	15.08%	13.68%
FFO / Net Debt, (S&P)	16.02%	16.44%	16.99%	17.61%	18.28%	17.07%

Table 6-48 Credit metrics (actual company, Modified High Index Linked Debt, Ofgem's SSMD assumptions)

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	A3	A3	A3	A3	A3	A3
Capex to RAV ratio	7.60%	7.51%	8.26%	8.63%	9.33%	8.26%
AICR, adjusted (Moody's)	1.89	1.77	1.69	1.58	1.57	1.70
Net Debt / Total closing RAV	67.90%	69.28%	70.72%	71.15%	71.36%	70.08%
RCF / Net Debt	9.24%	8.80%	9.32%	11.10%	12.22%	10.14%
FFO / Net Debt, (S&P)	14.68%	14.15%	14.44%	14.52%	15.26%	14.61%

Index Linked Debt - Modified Low Case

In the Modified Low Index Linked Debt Case, the credit metrics behave similarly to Ofgem's Base Case, both in credit rating and direction over RIIO-GD3.

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's A3		A3	A3	A2	A2	A2
Capex to RAV ratio	7.63%	7.57%	8.36%	8.77%	9.51%	8.37%
AICR, adjusted (Moody's)	1.75	1.72	1.72	1.72	1.70	1.72
Net Debt / Total closing RAV	59.92%	59.84%	59.76%	59.69%	59.62%	59.77%
RCF / Net Debt	12.49%	12.98%	13.72%	14.46%	15.28%	13.79%
FFO / Net Debt, (S&P) 16.73%		17.29%	17.92%	18.60%	19.33%	17.97%

Table 6-49 Credit metrics (notional company, Modified Low Index Linked Debt, Ofgem's SSMD assumptions)

Table 6-50 Credit metrics (actual company, Modified Low Index Linked Debt, Ofgem's SSMD assumptions)

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average	
Overall Moody's rating	A3	A3	A3	A3	A3	A3	
Capex to RAV ratio	7.63%	7.57%	8.36%	8.77%	9.51%	8.37%	
AICR, adjusted (Moody's)	2.10	1.98	1.89	1.77	1.75	1.90	
Net Debt / Total closing RAV	67.73%	68.99%	70.34%	70.70%	70.85%	69.72%	
RCF / Net Debt	9.93%	9.50%	10.00%	11.79%	12.92%	69.72% 10.83%	
FFO / Net Debt, (S&P)	15.40%	14.91%	15.21%	15.29%	16.04%	15.37%	

Gas Credit Spread and High Interest Rates

In the Gas Credit Spread and High Interest Rates Case, the credit metrics behave similarly to Ofgem's Base Case, both in credit rating and direction over RIIO-GD3.

Table 6-51 Credit metrics (notional company, Gas Credit Spread and High Interest Rates, Ofgem's SSMD assumptions)

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	A3	A3	A3	A2	A2	A2
Capex to RAV ratio	7.62%	7.54%	8.31%	8.70%	9.42%	8.32%
AICR, adjusted (Moody's)	1.86	1.79	1.75	1.72	1.70	1.76
Net Debt / Total closing RAV	59.81%	59.61%	59.40%	59.18%	58.95%	59.39%
RCF / Net Debt	12.82%	13.34%	14.12%	14.91%	15.80%	14.20%
FFO / Net Debt, (S&P)	16.73%	17.29%	17.95%	18.68%	19.49%	18.03%

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average	
Overall Moody's rating	A3	A3	A3	A3	A3	A3	
Capex to RAV ratio	7.62%	7.54%	8.31%	8.70%	9.42%	8.32%	
AICR, adjusted (Moody's)	1.87	1.78	1.72	1.62	1.57	1.71	
Net Debt / Total closing RAV	67.79%	69.02%	70.28%	70.48%	70.53%	69.62%	
RCF / Net Debt	9.63%	9.29%	9.90%	11.80%	12.87%	10.70%	
FFO / Net Debt, (S&P)	15.08%	14.67%	15.08%	15.28%	15.97%	15.22%	

Table 6-52 Credit metrics (actual company, Gas Credit Spread and High Interest Rates, Ofgem's SSMD assumptions)

Inflation and Interest Rates Shock

In the Inflation and Interest Rates Shock Case, for the actual company, gearing returns to below 70% by the end of RIIO-GD3. This is in contrast to Ofgem's Base Case, where gearing remains above 70% from 2028-29 to 2030-31. Additionally, for the notional company, AICR increases over RIIO-GD3, whereas in Ofgem's Base Case it decreases.

Table 6-53 Credit metrics (notional company, Inflation and Interest Rates Shock, Ofgem's SSMD assumptions)

Parameter 31-Mar-27		31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's A3		A3	A3	A3	A2	A3
Capex to RAV ratio	7.61%	7.54%	8.44%	9.00%	9.82%	8.48%
AICR, adjusted (Moody's)	1.75	1.75	1.79	1.88	1.92	1.82
Net Debt / Total closing RAV	60.42%	60.76%	60.56%	60.01%	59.78%	60.31%
RCF / Net Debt	11.80%	12.14%	12.90%	14.08%	15.12%	13.21%
FFO / Net Debt, (S&P)	15.77%	15.88%	15.50%	16.29%	17.96%	16.28%

Table 6-54 Credit metrics (actual company, Inflation and Interest Rates Shock, Ofgem's SSMD assumptions)

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	A3	A3	A3	A3	A3	A3
Capex to RAV ratio	7.61%	7.54%	8.44%	9.00%	9.82%	8.48%
AICR, adjusted (Moody's)	2.16	1.99	1.96	1.91	1.92	1.99
Net Debt / Total closing RAV	68.05%	69.76%	70.69%	69.80%	69.18%	69.49%
RCF / Net Debt	9.28%	8.70%	9.49%	11.84%	13.32%	10.53%
FFO / Net Debt, (S&P)	14.87%	13.62%	13.23%	14.01%	15.58%	14.26%

Global Financial Crisis

In the Global Financial Crisis Case, the credit metrics behave similarly to Ofgem's Base Case, both in credit rating and direction over RIIO-GD3.

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's A3		A3	A3	A2	A2	A2
Capex to RAV ratio	7.63%	7.58%	8.37%	8.78%	9.52%	8.38%
AICR, adjusted (Moody's)	1.88	1.86	1.85	1.83	1.81	1.85
Net Debt / Total closing RAV	59.90%	59.74%	59.60%	59.48%	59.45%	59.64%
RCF / Net Debt	12.55%	13.08%	13.85%	14.57%	15.30%	13.87%
FFO / Net Debt, (S&P) 16.32%		16.78%	17.45%	18.13%	18.81%	17.50%

 Table 6-55 Credit metrics (notional company, Global Financial Crisis, Ofgem's SSMD assumptions)

Table 6-56 Credit metrics (actual company, Global Financial Crisis, Ofgem's SSMD assumptions)

Parameter	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	RIIO-GD3 Average
Overall Moody's rating	A3	A3	A3	A3	A3	A3
Capex to RAV ratio	7.63%	7.58%	8.37%	8.78%	9.52%	8.38%
AICR, adjusted (Moody's)	1.98	1.90	1.83	1.71	1.70	1.83
Net Debt / Total closing RAV	67.76%	68.90%	70.09%	70.27%	70.34%	69.47%
RCF / Net Debt	9.56%	9.20%	9.85%	11.67%	12.75%	10.61%
FFO / Net Debt, (S&P)	14.83%	14.35%	14.77%	14.93%	15.66%	14.91%

6.8. RIIO-4 Ofgem's Base Case (SSMD assumptions)

While longer-term financeability analysis is not an Ofgem requirement for the RIIO-GD3 Business Plan, we have also conducted a high-level financeability assessment of NGN in RIIO-GD4, the results of which indicate the potential for longer-term problems if Ofgem does not recalibrate its financial package.

As per Ofgem's modelling approach implied in the **Extended BPFM**, Ofgem's current SSMD assumptions for 2030/31 have been carried forward to future periods in the absence of better estimates. When we have done so for RIIO-GD4 and used conservative assumptions for Totex evolution, assumed that dividends would remain in line with an average RIIO-GD3 levels and modelled the Cost of Debt for the actual company using iBoxx Utilities index and Ofgem's assumption of the additional cost of borrowing (25 bps), the findings are quite stark.

For example, the AICR falls significantly below the likely investment-grade threshold for Moody's, falling to 0.9x by 2035/36 in Ofgem's Base Case for the actual company. Importantly, the problem is that AICR falls not just in a single year over RIIO-GD4. A sustained downward trajectory coupled with the average estimate of AICR of just c.1.1x for the actual company pose a significant risk to our credit rating. Gearing also deteriorates over RIIO-GD4 in Ofgem's Base Case for the actual company, reaching c. 77% by 2035-36 which also poses a risk to our overall credit rating.

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As stated in <u>Section 2</u>, this high-level modelling that has been undertaken in the <u>Extended BPFM</u> is not part of our Business Plan and is purely indicative.

Parameter	31-Mar-32	31-Mar-33	31-Mar-34	31-Mar-35	31-Mar-36	RIIO-GD4 Average
Capex to RAV ratio	8.51%	7.69%	6.93%	6.18%	5.41%	6.94%
AICR, adjusted (Moody's)	1.76	1.76	1.76	1.76	1.76	1.76
Net Debt / Total closing RAV	60.01%	60.02%	60.03%	60.04%	59.98%	60.01%
RCF / Net Debt	15.26%	15.45%	15.74%	16.14%	16.78%	15.87%
FFO / Net Debt, (S&P)	19.85%	21.01%	22.31%	23.77%	25.50%	22.49%

Table 6-57 Credit metrics (notional company, RIIO-GD4 Ofgem Base Case, Ofgem's SSMD assumptions)

Table 6-58 Credit metrics (actual company, RIIO-GD4 Ofgem Base Case, Ofgem's SSMD assumptions)

Parameter	31-Mar-32	31-Mar-33	31-Mar-34	31-Mar-35	31-Mar-36	RIIO-GD4 Average
Capex to RAV ratio	8.51%	7.69%	6.93%	6.18%	5.41%	6.94%
AICR, adjusted	1.33	1.13	1.16	1.00	0.90	1.10
(Moody's)						
Net Debt / Total	72.24%	73.53%	74.32%	75.38%	76.58%	74.41%
closing RAV						
RCF / Net Debt	10.90%	10.77%	11.84%	11.96%	12.38%	11.57%
FFO / Net Debt,	15.60%	15.53%	16.56%	16.61%	16.96%	16.25%
(S&P)						

7. Ofgem-prescribed 'Change Instructions' implemented

Ofgem has issued a number of Change Instructions through Gitlab. We have implemented those that were relevant to the GD 7b version of the Model in all 3 versions of the BPFM submitted alongside our Business Plan. For reference, a summary of implemented change instructions is provided below.

Table 7-1 Ofgem-prescribed Change Instructions

No.	Description	Change Instruction (Gitlab Issue Number)	Summary of the Change	BPFM Tab Reference
1	Directly remunerated services adjustment	<u>Gitlab Issue</u> <u>#156</u>	An error was identified in the calculation of DRS adjustment (Row 338, MainInputs Tab) which was due to be corrected as part of the AIP process. Ofgem confirmed that licensees may revert back to the previous algebra to correct for this error.	MainInputs
2	Totex Out and Underperformanc e stress tests	<u>Gitlab Issue</u> <u>#157</u>	Notional company results were previously being impacted by including non-retained overspend for Cap rate 1 and 2 totex (excluding repex) and repex. This change instruction corrected for this to ensure that the calculation only included the fast pot expenditure that is unfunded through revenues.	Financial Statements
3	High and low inflation stress test	<u>Gitlab Issue</u> <u>#160</u>	Inflation rate sensitivities applied from RIIO-GD2 and interest rate sensitivities from RIIO-GD3. Amendments were made to the inflation rate sensitivity testing, to apply from RIIO-GD3 rather than RIIO-GD2 to ensure consistency with the interest rate sensitivity.	Scenarios
4	Natural condition on scenarios tab	<u>Gitlab Issue</u> <u>#162</u>	Ofgem provided confirmation that licensees may use either the natural setting or the licensee inputs setting for their base case and stress test scenarios, provided it was consistent.	Scenarios
5	Inflation sensitivities	<u>Gitlab Issue</u> <u>#165</u>	Inflation sensitivities on Scenarios tab were being entered for each year of RIIO-GD3 but were applied to the base figure which was in calendar year. Amendments were made to the inflation sensitivities block so that the stressed scenarios are displayed as the additional increment for the regulatory year. These are then added onto the base figures in calendar with the appropriate proportion.	Scenarios
6	Adjustments to actual company opening debt	<u>Gitlab Issue</u> <u>#168</u>	Ofgem confirmed that licensees may amend the adjustment figures that the macro produces in order to improve the accuracy of the RIIO-GD3 opening debt position (in Finance&Tax(actual) rows: GD 227-235; GT 252; ET 229- 231).	Finance&Ta x(actual)
7	Bills input price base	<u>Gitlab Issue</u> <u>#169</u>	The Domestic charges inputs section which feeds through to the Bills tab were incorrectly labelled. This change instruction corrected for this.	InputSumm ary and LicenseeInp ut
8	Financeability & risk assessment modelling issues	<u>Gitlab Issue</u> <u>#170</u>	Some amendments were required to three financial ratios.	RatingSimul ator and Financial Ratios

9	Tax allowance - RevenueSummary	<u>Gitlab Issue</u> <u>#171</u>	The tax allowance adjustment was being double counted in the RevenueSummary tab. To correct for this, the formula simply needed to be copied across the remainer of row 39.	Revenue Summary
10	RPI divergence stress tests	<u>Gitlab Issue</u> <u>#177</u>	There was misalignment in the stress tests resulting in the high divergence scenario reducing the base case RPI inflation rate, leaving CPIH inflation as base case and therefore reduces the wedge. Likewise, running the low RPI divergence scenario increased the base case RPI inflation rate and therefore increased the wedge. This change instruction swapped around the order of the scenarios.	Scenarios
11	Actual Company Nominal PMICR – Inflation on RAV	<u>Gitlab Issue</u> <u>#178</u>	Actual Company Nominal PMICR (row 138) doesn't add the inflation on RAV (row 136) to the FFO. Instead, it adds the result of the highlighted section of the following formula – which results in only a very small fraction of the inflation on RAV actually being added to the FFO.	FinancialRat ios
12	Inability to Select Additional Scenarios from Drop Down List	<u>Gitlab Issue</u> <u>#188</u>	Licensees were only able to select up to 20 scenarios in the Scenarios tab. This change enabled an additional 10 scenarios to be modelled.	Scenarios

We also highlighted a minor issue at PCFM Development Working Group 17 on 30 October 2024 that the formula required to average the RIIO-GD3 live assumptions in cells AZ14 to AZ20 in the FBPOutputs tab were hardcoded values. We therefore have copied across the formula as required in the NGN Bespoke BPFM and the Extended BPFM.

8. Additional changes implemented in the NGN Bespoke BPFM

We have made a number of changes in the **NGN Bespoke BPFM** to take into account NGN's Proposed Financial Package for RIIO-GD3, some financial metric calculation improvements and more appropriate scenario settings to better align the Model with NGN's internal modelling forecasts, and additional Economic Insight stress tests. The table below provides the details of the implemented changes.

No.	Description	Change Instructions	Rationale for and Impact of the Change	BPFM Bespoke Tab Reference	Cell Referen ce(s)
13	Aligning calculation of FFO/Net debt with S&P approach - Notional company	E50: changed text to "FFO / Net Debt (S&P), adjusted" AP50 changed formula to " =(AP41 + AP18 + AP19 + AP43) / -AP44 " and copied over into AQ50:AY50.	Under the S&P methodology, principal inflation accretion should be removed from FFO and FFO should be adjusted for interest on debt raised in year	FinancialRat ios	E50, AP50 to AY50
14	Using S&P calculated values in RatingSimulator sheet - Notional company	AP53 changed formula to "=FinancialRatios!AP50" in cell AP53 and copied over into AQ53:AY53	Under the S&P methodology, principal inflation accretion should be removed from FFO and FFO should be adjusted for interest on debt raised in year	RatingSimul ator	AP53 to AY53
15	Using S&P calculated values in OutputSummary sheet - Notional company	E242 changed text to "FFO / Net Debt, adjusted (S&P) (notional)"	Under the S&P methodology, principal inflation accretion should be removed from FFO and FFO should be adjusted for interest on debt raised in year	OutputSum mary	E242
16	Using S&P calculated values in ScenarioRun_AllOutp utData sheet - Notional company	E224 changed text to "FFO / Net Debt, adjusted (S&P) (notional)"	Under the S&P methodology, principal inflation accretion should be removed from FFO and FFO should be adjusted for interest on debt raised in year	ScenarioRun _AllOutputD ata	E224
17	Using S&P calculated values in FBPOutputs sheet - Notional company	E151 changed text to "FFO / Net Debt, adjusted (S&P) (notional)", E32 changed text to "FFO / Net Debt, adjusted (S&P) ", AU32 changed formula to "=AU151" and copied over into AV32:AY32	Under the S&P methodology, principal inflation accretion should be removed from FFO and FFO should be adjusted for interest on debt raised in year	FBPOutputs	E151, E32, AU32 to AY32

Table 8-1 Additional changes implemented, NGN Bespoke BPFM

18	Aligning calculation of FFO/Net debt with S&P approach - Actual company	E154: changed text to "FFO / Net Debt (S&P), adjusted" AU154 changed formula to " =(AU145 + AU147+AU123 +AU122) / -AU148" and copied over into AV154:AY154	Under the S&P methodology, principal inflation accretion should be removed from FFO and FFO should be adjusted for interest on debt raised in year	FinancialRat ios	E154, AU154 to AY154
19	Using S&P calculated values in RatingSimulator sheet - Actual company	AU315 changed formula from to "=FinancialRatios!AU154" and copied over into AV315:AY315	Under the S&P methodology, principal inflation accretion should be removed from FFO and FFO should be adjusted for interest on debt raised in year	RatingSimul ator	AU315 to AY315
20	Using S&P calculated values in OutputSummary sheet - Actual company	E272 changed text to "FFO / Net Debt, adjusted (S&P) (actual)"	Under the S&P methodology, principal inflation accretion should be removed from FFO and FFO should be adjusted for interest on debt raised in year	OutputSum mary	E272
21	Implementing new scenarios - calculating new user defined values for CoE, CoD, inflation and interest rates	Several new tabs have been added to calculate the user defined inputs for the additional scenarios. These tabs are: - 'Additional scenarios inputs' - this contains the user defined inputs for each additional scenario. - 'CoD estimates extra scenarios' - this calculates the new CoD for the new scenarios where appropriate. - 'CPIH index', 'RPI Index', 'iBoxx', 'SONIA', 'Real spot curve 1979-2015' and 'Real spot curve 2016-2024' - these contain the raw data used to calculate the new user defined inputs.	Implement bespoke stress tests	See change instructions	N.A
22	Implementing new stress testing scenarios - including definitions of new scenarios.	Added definitions for each of the bespoke Economic Insight recommended additional scenarios which are aligned with the descriptions set out in Appendix A23 BPFM Commentary.	Implement bespoke stress tests	Scenarios	ВК10:В U97

23	Implementing new stress testing scenarios - adding user defined CoD input values.	AU137 added formula "=IF(n_scenario='Additional scenario inputs'!\$B\$8,'Additional scenario inputs'!AU16,IF(n_scenario ='Additional scenario inputs'!\$B\$82,'Additional scenario inputs'!AU90,IF(n_scenario ='Additional scenario inputs'!\$B\$107,'Additional scenario inputs'!AU115,IF(n_scenari o='Additional scenario inputs'!\$B\$139,'Additional scenario inputs'!AU147,"- "))))" and copied over into AV137:AY137	Implement bespoke stress tests	Scenarios	AU137: AY137
24	Implementing new stress testing scenarios - adding user defined CoE input values.	AU144 added formula "=IF(n_scenario='Additional scenario inputs'!\$B\$8,'Additional scenario inputs'!AU17, IF(n_scenario = 'Additional scenario inputs'!\$B\$82,'Additional scenario inputs'!AU91, IF(n_scenario='Additional scenario inputs'!\$B\$107,'Additional scenario inputs'!\$B\$107,'Additional scenario inputs'!\$B\$139,'Additional scenario inputs'!AU148,"- "))))" and copied over into AV144:AY144	Implement bespoke stress tests	Scenarios	AU144: AY144
25	Implementing new stress testing scenarios - adding user defined RPI input values	E153 changed text to "EI scenario additional increment (FY)" AU153 added formula "=IF(n_scenario='Additional scenario inputs'!\$B\$37,'Additional scenario inputs'!AU43, IF(n_scenario='Additional scenario inputs'!\$B\$107,'Additional scenario inputs'!\$B\$107,'Additional scenario inputs'!\$B\$139,'Additional scenario inputs'!\$B\$139,'Additional scenario inputs'!AU168,"- ")))" and copied over into AV153:AY153	Implement bespoke stress tests	Scenarios	E153, AU153: AY153

27Implementing iBoxx forward curve for NGN caseAS183 changed formula to "=IF(n_scenario="NGN", NorthernIAS1458, CHODSE(\$G\$182,AS194,AS 205,AS216,AS227)]", and copied into AT183:AY183Implement bespoke stress testsScenariosA\$183: AY18328Implementing new stress testing scenarios - adding use defined interest rate input valuesAP227 added formula "=IF(n_scenario="Additional scenario inputs'I\$B\$8,'Additional scenario inputs'I\$B\$8,'Additional scenario inputs'I\$B\$8,'Additional scenario inputs'I\$B\$8,'Additional scenario inputs'I\$B\$8,'Additional scenario inputs'I\$B\$8,'Additional scenario inputs'I\$B\$8,'Additional scenario inputs'I\$B\$8,'Additional scenario inputs'I\$B\$8,'Additional scenario inputs'I\$B\$8,'Additional scenario inputs'I\$B\$8,'Additional scenario inputs'I\$B\$107,'Additional scenario inputs'I\$B\$139,'Additional scenario inputs'I\$B\$139,'Additional scenario inputs'I\$B\$139,'Additional scenario inputs'I\$B\$139,'Additional scenario inputs'I\$B\$139,'Additional scenario inputs'I\$B\$139,'Additional scenario inputs'I\$B\$139,'Additional scenario inputs'I\$B\$139,'Additional scenario inputs'I\$B\$139,'Additional scenario inputs'I\$B\$139,'Additional scenario inputs'I\$B\$139,'Additional scenario='Additional s	26	Implementing new stress testing scenarios - adding user defined CPIH input values	E161changed text to "EI scenario additional increment (FY)", AU161 added formula "=IF(n_scenario='Additional scenario inputs'!\$B\$37,'Additional scenario inputs'!AU44,IF(n_scenario ='Additional scenario inputs'!\$B\$46,'Additional scenario inputs'!\$B\$52,'Additional scenario inputs'!AU56,IF(n_scenario ='Additional scenario inputs'!\$B\$107,'Additional scenario inputs'!\$B\$107,'Additional scenario inputs'!\$B\$107,'Additional scenario inputs'!\$B\$107,'Additional scenario inputs'!\$B\$139,'Additional scenario inputs'!\$U169,"- ")))))" and copied over into AV161:AY161	Implement bespoke stress tests	Scenarios	E161, AU161: AY161
AP227 added formula "=IF(n_scenario='Additional scenario inputs'!\$B\$8,'Additional scenario inputs'!\$P29,IF(n_scenario= 'Additional scenario inputs'!\$P29,IF(n_scenario= 'Additional scenario inputs'!\$P\$8,2,'Additional scenario inputs'!\$P\$8,2,'Additional scenario inputs'!\$P\$8,2,'Additional scenario inputs'!\$P\$8,2,'Additional scenario inputs'!\$P\$8,2,'Additional scenario inputs'!\$P\$8,2,'Additional scenario inputs'!\$P\$8,2,'Additional scenario inputs'!\$P\$8,2,'Additional scenario inputs'!\$P\$9,107,'Additional scenario inputs'!\$P127,IF(n_scenari o='Additional scenario inputs'!\$P127,IF(n_scenari o='Additional scenario inputs'!\$P127,IF(n_scenari o='Additional scenario inputs'!\$P\$9,'' "))))" and copied into AP227:AY229Implement bespoke stress testsScenarios AP227: AY22929Implementing new stress testing scenarios - addingAP230 added formula "=IF(OR(n_scenario='Additi onal scenario inputs'!\$P\$8,8, n_scenario:inputs'!\$P\$8,82,Implement bespoke stress testsScenarios AP230: AY233	27	Implementing iBoxx forward curve for NGN case	AS183 changed formula to "=IF(n_scenario="NGN", Northern!AS1458, CHOOSE(\$G\$182,AS194,AS 205,AS216,AS227))", and copied into AT183:AY183	Implement bespoke stress tests	Scenarios	AS183: AY183
29 Implementing new stress testing scenarios - adding AP230 added formula "=IF(OR(n_scenario='Additi onal scenario inputs'!\$B\$8, n_scenarios - adding scenario inputs'!\$B\$82, Implement bespoke stress tests Scenarios AP230: AP230: AP230: AP230: AP230: AP233	28	Implementing new stress testing scenarios - adding user defined interest rate input values	AP227 added formula "=IF(n_scenario='Additional scenario inputs'!\$B\$8,'Additional scenario inputs'!AP29,IF(n_scenario= 'Additional scenario inputs'!\$B\$82,'Additional scenario inputs'!AP102,IF(n_scenari o='Additional scenario inputs'!\$B\$107,'Additional scenario inputs'!\$B\$139,'Additional scenario inputs'!\$P5,''- "))))" and copied into AP227:AY229	Implement bespoke stress tests	Scenarios	AP227: AY229
	29	Implementing new stress testing scenarios - adding	AP230 added formula "=IF(OR(n_scenario='Additi onal scenario inputs'!\$B\$8, n_scenario='Additional scenario inputs'!\$B\$82	Implement bespoke stress tests	Scenarios	AP230: AY233

	user defined interest rate input values	n_scenario='Additional scenario inputs'!\$B\$107, n_scenario='Additional scenario inputs'!\$B\$139), AP197, "-")" and copied into AP230:AY233			
30	Implementing new stress testing scenarios - adding user defined interest rate input values	AP234 added formula "=IF(n_scenario='Additional scenario inputs'!\$B\$8,'Additional scenario inputs'!AP32,IF(n_scenario= 'Additional scenario inputs'!\$B\$82,'Additional scenario inputs'!AP105,IF(n_scenari o='Additional scenario inputs'!\$B\$107,'Additional scenario inputs'!\$B\$139,'Additional scenario inputs'!\$B\$139,'Additional scenario inputs'!AP162,"- "))))" and copied into AQ234:AY234	Implement bespoke stress tests	Scenarios	AP234: AY234
31	Implementing new stress testing scenarios - adding user defined interest rate input values	AP235 added formula "=IF(OR(n_scenario='Additi onal scenario inputs'!\$B\$8, n_scenario='Additional scenario inputs'!\$B\$82, n_scenario='Additional scenario inputs'!\$B\$107, n_scenario='Additional scenario inputs'!\$B\$139),AP202,"-")" and copied into AP235:AY236	Implement bespoke stress tests	Scenarios	AP235: AY236
32	Implementing new stress testing scenarios - including definitions of new scenarios.	E137, E144, E226 changed text to "Additional El scenarios"	Implement bespoke stress tests	Scenarios	E137, E144, E226
33	Implementing new stress testing scenarios - ScenarioRun_AllOutp utData adjustments	BK25 changed formula to "=Scenarios!BS\$10" and copied over into BL25:BZ25, AI17 changed formula to "=MATCH(I25,\$AH\$25:\$BP\$ 25,0)"	Implement bespoke stress tests	ScenarioRun _AllOutputD ata	BK25:BZ 25, AI17

34	Implementing iBoxx forward curve for NGN case	D1456 added text "NGN iBoxx - forward curve", E1458 added text "iBoxx forward curve", AS1458 Added formula "=AVERAGEIFS('Daily Data'!\$1:\$1,'Daily Data'!\$A:\$A,"<="&Northern !AS4,'Daily Data'!\$A:\$A,">"&Northern! AR4, 'Daily Data'!\$1:\$1, "<>#N/A")" and copied over into AT1458:AY1458	Implement bespoke stress tests and to use the iBoxx forward curve for the NGN case	Northern	D1456, E1458, AS1458: AY1458
35	Implementing iBoxx forward curve for NGN case	Tab added	Data for iBoxx forward curve	Daily data	N.A
36	Summarising Financial Ratios for use in Chapter 7 of NGN's Business Plan	Tab added named "FinSummary(NGN)"	Summarises financial data for use in Chapter 7 of NGN's Business Plan	FinSummary (NGN)	N.A
37	Aligning RCF / Net Debt calculation with Moody's methodology	AU155 changed to "=(AU146 + AU122) / - AU148" and copied over into AV155:AY155	The formula was changed to no longer remove principal inflation accretion so as to align with Moody's methodology	FinancialRat ios	AU155 to AY155
38	Correcting errors in FBPOutputs sheet	AZ14 replaced hardcoded values with formula "=AVERAGE(AU14:AY14)" and copied over to AZ15:AZ20,	Correcting an error by Ofgem in FBPOutputs sheet	FBPOutputs	AZ15:A Z20

39	Submitting Values into FBPOutputs Credit Ratio Summary Table	AZ28 changed text to "Main BP (NGN-bespoke, actual company)", BO28 changed text to "Live (actual company)", AZ29:BD35 added hardcoded values from BO29:BS35 with scenario set to NGN, BE29:BN35 added corresponding hardcoded values from Ofgem Prescribed BPFM, BO29 added formula "=FinancialRatios!AU125" and copied over to BP29:BS29, BO30 added formula "=FinancialRatios!AU126" and copied over to BP30:BS30, BO31 added formula "=RatingSimulator!AU326" and copied over to BP31:BS31, BO32 added formula "=FinancialRatios!AU154" and copied over to BP31:BS31, BO33 added formula "=FinancialRatios!AU154" and copied over to BP32:BS32, BO33 added formula "=FinancialRatios!AU162" and copied over to BP32:BS33, BO34 added formula "=- 'Finance&Tax'!AU309*'Fin ance&Tax'!AU39*'Fin ance&Tax'!AU39*'Fin ance&Tax'!AU300*'Fin ance&Tax'!AU30*'A	Hardcoded values were added for the Main BP, Base(notional) and Base(actual) as requested by Ofgem. A live (actual company) section was added to show how values for the actual company were sourced.	FBPOutputs	AZ28, BO28, AZ29:BS 35, AU31:A Y31
40	scenario to capture NGN's proposals as outlined in chapter 7 of NGN's business plan	scenario which is aligned with NGN's proposals as outlined in chapter 7 of NGN's business plan.	Implementing a scenario to capture NGN's proposals as outlined in chapter 7 of NGN's business plan	Scenarios	BI10:BI 97

41	Implementing a scenario to capture NGN's proposals as outlined in chapter 7 of NGN's business plan for cost of debt	E136 changed text to "NGN", AT136 added link to hardcoded values source, AU136:AY136 added hardcoded values capturing NGN's CoD single input figures to use	Implementing a scenario to capture NGN's proposals as outlined in chapter 7 of NGN's business plan for cost of debt	Scenarios	E136, AT136: AY136
42	Implementing a scenario to capture NGN's proposals as outlined in chapter 7 of NGN's business plan for cost of equity	E143 changed text to "NGN", AT143 added link to hardcoded values source, AU143:AY143 added hardcoded values capturing NGN's CoE single input figures to use	Implementing a scenario to capture NGN's proposals as outlined in chapter 7 of NGN's business plan for cost of equity	Scenarios	E143, AT143: AY143
43	Implementing a scenario to capture NGN's proposals as outlined in chapter 7 of NGN's business plan for assumed return of capital as a % of equity	E174 changed text to "Ofgem case", E175 changed text to "NGN case", AT175:AY175 added values capturing the assumed return of capital as a % of equity in the NGN case	Implementing a scenario to capture NGN's proposals as outlined in chapter 7 of NGN's business plan for assumed return of capital as a % of equity	Scenarios	E174, E175, AU175 to AY175
44	Implementing a scenario to capture NGN's proposals as outlined in chapter 7 of NGN's business plan for depreciation profile	AT954 added link to hardcoded values source, AU954:AY954 added hardcoded values capturing NGN's forecast based on NGN's proposals	Implementing a scenario to capture NGN's proposals as outlined in chapter 7 of NGN's business plan for depreciation profile	Northern	AT954: AY954

9. Additional changes implemented in the Extended BPFM

We have made a number of changes in the **Extended BPFM** to extend it to RIIO-GD4. The table below provides the details of the implemented changes:

Table 9-1: Additional changes implemented, Extended BPFM

No.	Description	Change Instructions	Rationale for the Change	BPFM Extended Tab Reference	Cell Referen ce(s)
45	Additional RIIO4 inputs section	A1456 added label "RIIO4 inputs", B1458 added label "Final RIIO-3 value used - these do not represent NGN forecasts and are instead the last value in RIIO-3 held constant for RIIO-4", B1465 added label "NGN RIIO-4 Inputs used:", Row 1457 inserted 20 additional rows	A section was added to the Northern tab to allow for additional RIIO-4 inputs to be added.	Northern	A1456, B1458, B1465
46	RIIO-4 actual company calculations - RevenueSummary	AY48 to AY66 copied formulae over into cells AZ48 to BD66	The formulas were extended so that BPFM calculates RIIO4 values for the actual company.	RevenueSu mmary	AZ48 to BD66
47	RIIO-4 actual company calculations - Finance&Tax(actual)	Inserted 5 columns into column AZ, AY4 to AY48, AY51 to AY78, AY147 to AY248 copied formulae over into AZ4 to BD48, AZ51 to BD78, AZ147 to BD248 respectively	The formulas were extended so that BPFM calculates RIIO4 values for the actual company.	Finance&Ta x(actual)	AZ4 to BD48, AZ51 to BD78, AZ147 to BD248

48	RIIO-4 actual company calculations – FinancialStatements	AY162 to AY316 copied formulae over into cells AZ162 to BD316	The formulas were extended so that BPFM calculates RIIO4 values for the actual company.	FinancialSta tements	AZ162 to BD316
49	RIIO-4 actual company calculations - FinancialRatios	AY112 to AY151, AY154 to AY171 copied formulae over into cells AZ112 to BD151, AZ154 to BD171	The formulas were extended so that BPFM calculates RIIO4 values for the actual company.	FinancialRat ios	AZ112 to BD151, AZ154 to BD171
50	RIIO-4 actual company calculations - RatingSimulator	Inserted 5 columns into column AZ AY4 to AY14, AY38 to AY52, AY56 to AY67, AY300 to AY314, AY318 to AY329 copied formulae over into cells AZ4 to BD14, AZ38 to BD52, AZ56 to BD67, AZ300 to BD314, AZ318 to BD329 respectively	The formulas were extended so that BPFM calculates RIIO4 values for the actual company.	RatingSimul ator	AZ4 to BD14, AZ38 to BD52, AZ56 to BD67, AZ300 to BD314, AZ318 to BD329
51	Linked RIIO-4 minimum equity issuance threshold into BPFM calculations	AP49 changed value to "0.05" Added textbox with "Note: Scenarios AP49 has been changed from "RIIO-2 thresholds" to "0.05" so as to calculate RIIO-4 financial ratios for the actual company in the base case."	This scenario setting is changed so Extended BPFM calculates financial ratios for the actual company in RIIO-4	Scenarios	AP49

52	RIIO-4 directly remunerated services adjustment input	E1460 added label "Directly remunerated services adjustment", G1460 added formula "="£m "&RIGHT(YEAR(PriceBase- 365),2)&"/"&RIGHT(YEAR(P riceBase),2)&" prices"", AZ1460 to BD1460 added formula "=MainInputs!\$AY336"	An input was added for RIIO- 4 directly remunerated services adjustment to allow for the calculation of financial ratios for the actual company in RIIO-4.	Northern	E1460, G1460, AZ1460 to BD1460
53	Linked RIIO-4 directly remunerated services adjustment into BPFM calculations	AZ336 added formula "=Northern!AZ1460" and copied over into cells from BA336 to BD336	The input for RIIO-4 directly remunerated services was linked into BPFM to allow for the calculation of financial ratios for the actual company in RIIO-4.	MainInputs	AZ336 to BD336
54	RIIO-4 other revenue allowance input	E1461 added label "Other revenue allowance", G1461 added formula "="£m "&RIGHT(YEAR(PriceBase- 365),2)&"/"&RIGHT(YEAR(P riceBase),2)&" prices"", AZ1461 to BD1461 added formula "=MainInputs!\$AY296"	An input was added for RIIO- 4 other revenue allowance to allow for the calculation of financial ratios for the actual company in RIIO-4.	Northern	E1461, G1461, AZ1461 to BD1461
55	Linked RIIO-4 other revenue allowance into BPFM calculations	AZ296 added formula "=Northern!AZ1461" and copied over into cells from BA296 to BD296	The input for RIIO-4 other revenue allowance was linked into BPFM to allow for the calculation of financial ratios for the actual company in RIIO-4.	MainInputs	AZ296 to BD296
56	RIIO-4 costs associated with "Other revenue" input	E1462 added label "Costs associated with "Other revenue"", G1462 added formula "="£m "&RIGHT(YEAR(PriceBase- 365),2)&"/"&RIGHT(YEAR(P riceBase),2)&" prices"", AZ1462 to BD1462 added formula "=MainInputs!\$AY298"	An input was added for RIIO- 4 costs associated with "Other revenue" to allow for the calculation of financial ratios for the actual company in RIIO-4.	Northern	E1462, G1462, AZ1462 to BD1462

57	Linked RIIO-4 costs associated with "Other revenue" into BPFM calculations	AZ298 added formula "=Northern!AZ1462" and copied over into cells from BA298 to BD298	The input for RIIO-4 costs associated with "Other revenue" was linked into BPFM to allow for the calculation of financial ratios for the actual company in RIIO-4.	MainInputs	AZ298 to BD298
58	RIIO-4 statutory depreciation as per BPDT input	E1463 added label "Statutory depreciation as per BPDT", G1463 added formula "="£m "&RIGHT(YEAR(PriceBase- 365),2)&"/"&RIGHT(YEAR(P riceBase),2)&" prices"", AZ1463 to BD1463 added formula "=InputSummary!\$AY714"	An input was added for RIIO- 4 statutory depreciation as per BPDT to allow for the calculation of financial ratios for the actual company in RIIO-4.	Northern	E1463, G1463, AZ1463 to BD1463
59	Linked RIIO-4 statutory depreciation as per BPDT into BPFM calculations	AZ714 added formula "=Northern!AZ1463" and copied over into cells from BA714 to BD714	The input for RIIO-4 statutory depreciation as per BPDT was linked into BPFM to allow for the calculation of financial ratios for the actual company in RIIO-4.	InputSumm ary	AZ714 to BD714
60	RIIO-4 capex as per BPDT input	RIIO-4 capex as per 3PDT input RIIO-4 capex as per 3PDT input BPDT input RIIO-4 capex as per 3CT A capex as		Northern	E1467, G1467, AZ1467 to BD1467
61	Linked RIIO-4 capex as per BPDT into BPFM calculations	AZ715 added formula "=Northern!AZ1467" and copied over into cells from BA715 to BD715	The input for RIIO-4 capex as per BPDT was linked into BPFM to allow for the calculation of financial ratios for the actual company in RIIO-4.	InputSumm ary	AZ715 to BD715
62	RIIO-4 Total Distributions (Dividends + Return of Equity) (Actual) input	E1468 added label "Total Distributions (Dividends + Return of Equity) (Actual)", G1468 added label "£m nominal", AZ1468 to BD1468 added NGN inputs based on high level modelling assumptions	An input was added for RIIO- 4 Total Distributions (Dividends + Return of Equity) (Actual) to allow for the calculation of financial ratios for the actual company in RIIO-4.	Northern	E1468, G1468, AZ1468 to BD1468

63	Linked RIIO-4 Total Distributions (Dividends + Return of Equity) (Actual) into BPFM calculations	AZ726 added formula "=- Northern!AZ1468" and copied over into cells from BA726 to BD726	The input for RIIO-4 Total Distributions (Dividends + Return of Equity) (Actual) was linked into BPFM to allow for the calculation of financial ratios for the actual company in RIIO-4.	InputSumm ary	AZ726 to BD726
64	RIIO-4 Modelled Closing Net Debt (incl. accretion) input	E1469 added label "Modelled Closing Net Debt (incl. accretion)", G1469 added label "£m nominal", AZ1469 to BD1469 added NGN inputs based on high level modelling assumptions, AZ882 added formula "=AZ1469" and copied over into BA882:BD882	An input was added for RIIO- 4 Modelled Closing Net Debt (incl. accretion) to allow for the calculation of financial ratios for the actual company in RIIO-4.	Northern	E1469, G1469, AZ1469 to BD1469
65	Linked RIIO-4 Modelled Closing Net Debt (incl. accretion) into BPFM calculations	AZ93 added formula "=Northern!AZ1469" and copied over into cells from BA93 to BD93	The input for RIIO-4 Modelled Closing Net Debt (incl. accretion) was linked into BPFM to allow for the calculation of financial ratios for the actual company in RIIO-4.	FinInput	AZ93 to BD93
66	RIIO-4 Net interest paid (excluding principal inflation accretion) (Actual) input	E1470 added label "Net interest paid (excluding principal inflation accretion) (Actual)", G1470 added label "£m nominal", AZ1470 to BD1470 added NGN inputs based on high level modelling assumptions	An input was added for RIIO- 4 Net interest paid (excluding principal inflation accretion) (Actual) to allow for the calculation of financial ratios for the actual company in RIIO-4.	Northern	E1470, G1470, AZ1470 to BD1470
67	Linking RIIO-4 Net interest paid (excluding principal inflation accretion) (Actual) into BPFM calculations	AZ49 added formula "=- Northern!AZ1470" and copied over into cells from BA49 to BD49	The input for RIIO-4 Net interest paid (excluding principal inflation accretion) was linked into BPFM to allow for the calculation of financial ratios for the actual company in RIIO-4.		AZ49 to BD49

68	RIIO-4 Net interest paid (principal inflation accretion) (Actual) input	E1471 added label "Net interest paid (principal inflation accretion) (Actual)", G1471 added label "£m nominal", AZ1471 to BD1471 added NGN inputs based on high level modelling assumptions, AZ883 added formula "=AZ1470+AZ1471" and copied over into BA883:BD883	An input was added for RIIO- 4 Net interest paid (principal inflation accretion) (Actual) to allow for the calculation of financial ratios for the actual company in RIIO-4.	Northern	E1471, G1471, AZ1471 to BD1471
69	Linking RIIO-4 Net interest paid (principal inflation accretion) (Actual) into BPFM calculations	AZ50 added formula "=- Northern!AZ1471" and copied over into cells from BA50 to BD50	The input for RIIO-4 Net interest paid (principal inflation accretion) (Actual) was linked into BPFM to allow for the calculation of financial ratios for the actual company in RIIO-4.	Finance&Ta x(actual)	AZ50 to BD50
70	RIIO-4 totex tax pools allocations input	E1472 added label "Totex allocation to "General" tax pool", E1473 added label "Totex allocation to "Special Rate" tax pool", E1474 added label "Totex allocation to "Structures and Buildings" tax pool", E1475 added label "Totex allocation to "Deferred Revenue" tax pool", E1476 added label "Totex allocation to "Revenue" tax pool", E1477 added label "Totex allocation to "Revenue" tax pool", E1477 added label "Totex allocation to "Non Qualifying" tax pool", AZ1472:BD1477 added NGN inputs based on high level modelling assumptions, AZ699 added formula "=AZ1472" and copied over into AZ699:BD704 AZ705 added formula "=SUM(AZ699:AZ704)" and	An input was added for RIIO- 4 totex tax pools allocations input to allow for the calculation of financial ratios for the actual company in RIIO-4.	Northern	E1472 to E1477, AZ1472 to BD1477 , AZ699 to BD705

		copied over into BA705:BD705			
71	Aligned calculation of FFO/Net debt with S&P approach - Notional company	E50: changed text to "FFO / Net Debt (S&P), adjusted", AP50 changed formula to " =(AP41 + AP18 + AP19 + AP43) / -AP44 " and copied over into AQ50:BD50	Under the S&P methodology, principal inflation accretion should be removed from FFO and FFO should be adjusted for interest on debt raised in year	FinancialRat ios	E50, AP50 to BD50
72	Linked S&P calculated values into RatingSimulator sheet - Notional company	AP53 changed formula to "=FinancialRatios!AP50" in cell AP53 and copied over into AQ53:BD53	Under the S&P methodology, principal inflation accretion should be removed from FFO and FFO should be adjusted for interest on debt raised in year	RatingSimul ator	AP53 to BD53
73	Linked S&P calculated values into OutputSummary sheet - Notional company	E242 changed text to "FFO / Net Debt, adjusted (S&P) (notional)"	Under the S&P methodology, principal inflation accretion should be removed from FFO and FFO should be adjusted for interest on debt raised in year	OutputSum mary	E242
74	Linked S&P calculated values into ScenarioRun_AllOutp utData sheet - Notional company	E224 changed text to "FFO / Net Debt, adjusted (S&P) (notional)"	Under the S&P methodology, principal inflation accretion should be removed from FFO and FFO should be adjusted for interest on debt raised in year	ScenarioRun _AllOutputD ata	E224
75	Linked S&P calculated values into FBPOutputs sheet - Notional company	E151 changed text to "FFO / Net Debt, adjusted (S&P) (notional)", E32 changed text to "FFO / Net Debt, adjusted (S&P) ", AU32 changed formula to "=AU151" and copied over into AV32:AY32	Under the S&P methodology, principal inflation accretion should be removed from FFO and FFO should be adjusted for interest on debt raised in year	FBPOutputs	E151, E32, AU32 to AY32

76	Aligned calculation of FFO/Net debt with S&P approach - Actual company	E154: changed text to "FFO / Net Debt (S&P), adjusted" AU154 changed formula to " =(AU145 + AU147+AU123 +AU122) / -AU148" and copied over into AV154:BD154	Under the S&P methodology, principal inflation accretion should be removed from FFO and FFO should be adjusted for interest on debt raised in year	FinancialRat ios	E154, AU154 to BD154
77	Linked S&P calculated values into RatingSimulator sheet - Actual company	AU315 changed formula from to "=FinancialRatios!AU154" and copied over into AV315:BD315	Under the S&P methodology, principal inflation accretion should be removed from FFO and FFO should be adjusted for interest on debt raised in year	RatingSimul ator	AU315 to BD315
78	Linked S&P calculated values into OutputSummary sheet - Actual company	E272 changed text to "FFO / Net Debt, adjusted (S&P) (actual)"	Under the S&P methodology, principal inflation accretion should be removed from FFO and FFO should be adjusted for interest on debt raised in year	OutputSum mary	E272

79Added DisclaimerA text box with the disclaimer was added to the following sheets: Cover, Extension, Scenarios, InputSummary, MainInputs, Totex, TIM, Depn, FuelPoor, Return&RAV, TaxPools, Finance&Tax, Revenue, Finance&Tax, Revenue, Finance&Tax, Revenue, FinancialRatios, FinRatios RoEE decomposition, RatingSimulator, OutputSummary, ScenarioRun_AllOutputDat a, FBPOutputs, Bills, Annual Inflation, Monthly Inflation, NorthernThe disclaimer was added to He disclaimer was added to Finance&Ta assumptions and do not represent the NGN Business FinancialRatios, FinRatios RoEE decomposition, RatingSimulator, OutputSummary, ScenarioRun_AllOutputDat a, FBPOutputs, Bills, Annual Inflation, Monthly Inflation, NorthernThe disclaimer was added to make clear that NGN's RIIO- GD4 inputs are based purely on high level modelling assumptions and do not represent the NGN Business FinancialRat ios, FinancialRatios FinancialRatios, FinRatios RoEE decomposition, RatingSimulator, OutputSummary, ScenarioRun_AllOutputDat a, FBPOutputs, Bills, Annual Inflation, Monthly Inflation, NorthernThe disclaimer was added to temes as case scenario to provide indicative RIIO-GD4 ata, FBPOutputs, Bills, Annual Inflation, Monthly	79	Added Disclaimer	A text box with the disclaimer was added to the following sheets: Cover, Extension, Scenarios, InputSummary, MainInputs, Totex, TIM, Depn, FuelPoor, Return&RAV, TaxPools, Finance&Tax, Revenue, FinInput, RevenueSummary, Finance&Tax(actual), FinancialStatements, FinancialStatements, FinancialRatios, FinRatios RoRE decomposition, RatingSimulator, OutputSummary, ScenarioRun_AllOutputDat a, FBPOutputs, Bills, Annual Inflation, Monthly Inflation, Northern	The disclaimer was added to make clear that NGN's RIIO- GD4 inputs are based purely on high level modelling assumptions and do not represent the NGN Business Plan. Further it was used to indicate that the Extended BPFM model was only intended to be used in the Ofgem base case scenario to provide indicative RIIO-GD4 values.	Cover, Extension, Scenarios, InputSumm ary, MainInputs, Totex, TIM, Depn, FuelPoor, Return&RA V, TaxPools, Finance&Ta x, Revenue, FinInput, RevenueSu mmary, Finance&Ta x, (actual), FinancialSta tements, FinancialSta financia	N.A
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80	Unused cells hidden	Totex, TIM, FuelPoor, Return&RAV, TaxPools, Finance&Tax, Revenue, FinInput, RevenueSummary, FinancialStatements, FinancialRatios, FinRatios RoRE decomposition, Bills columns BE to CW shaded all cells and text grey and hidden FBPOutputs BE37 to CW170 shaded all cells and text grey	These cells were shaded grey and hidden as RIIO-5 and beyond is not the intended focus of the model.	Totex, TIM, FuelPoor, Return&RA V, TaxPools, Finance&Ta x, Revenue, FinInput, RevenueSu mmary, FinancialSta tements, FinancialRat ios, FinRatios RoRE decompositi on, FBPOutputs, Bills	See Change Instruct ions
		Relabelled BT27 to "RIIO-			
81	RIIO-4 FBPOutputs table – actual	GD4 Base (actual)" and BY27 to "RIIO-GD4 Live (actual)", BY29 added formula "=FinancialRatios!AZ125", BY30 added formula "=FinancialRatios!AZ126", BY31 added formula "=RatingSimulator!AZ326", BY32 added formula "=FinancialRatios!AZ154", BY33 added formula "=FinancialRatios!AZ162", BY34 added formula "=- 'Finance&Tax(actual)'!AZ53 /('Finance&Tax'!AZ309*'Fin ance&Tax'!AZ188)", BY35 added formula "=- FinancialStatements!AZ247 /FinancialStatements!AZ25 1", Copied formulas in BY29:BY35 to BZ29:CC35, Added hardcoded values into BT29:BX35 using of values in BY29:CC35 in base case with tax clawback set on	The FBPOutputs table was populated with RIIO-4 actual financial ratios. The live links are left in for the actual company to make it clearer how the ratios are sourced.	FBPOutputs	BT27 to CC35

82	RIIO-4 FBPOutputs table – notional	Relabelled BO27 to "RIIO- GD4 Base (notional)" and CD27 to "RIIO-GD4 Live (notional)", CD29 added formula "=AZ153", CD30 added formula "=AZ155", CD31 added formula "=AZ155", CD32 added formula "=AZ151", CD33 added formula "=AZ161", CD34 added formula "=AZ165" CD35 added formula "=AZ164" Copied formulas in CD29:CD35 into CE29:CH35, Added hardcoded values into BO29:BS35 using values in CD29:CH35 in base case with tax clawback set off, AU31 changed formula to "=AU149" and copied over into AV31:Y31	The FBPOutputs table was populated with RIIO-4 notional financial ratios. The live links are left in for the notional company to make it clearer how the ratios are sourced.	FBPOutputs	BO27 to BS35 and CD27 to CH35
83	Aligned RCF / Net Debt calculation with Moody's methodology	AU155 changed to "=(AU146 + AU122) / - AU148" and copied over into AV155:BD155	The formula was changed to no longer remove principal inflation accretion so as to align with Moody's methodology	FinancialRat ios	AU155 to BD155
84	Corrected errors in FBPOutputs sheet	AZ14 replaced hardcoded values with formula "=AVERAGE(AU14:AY14)" and copied over to AZ15:AZ20,	Corrected an error by Ofgem in FBPOutputs sheet	FBPOutputs	AZ15:A Z20

85	RIIO-GD4 pass- through costs inputs	Copied labels from E215:E224 and G215:G224 pasted into E1478:E1487 and G1478:G1487 respectively, AZ1478:BD1487 added NGN inputs based on high level modelling assumptions, AZ215 added formula "=AZ1478" and copied over into cells AZ215:BD224	An input was added for RIIO- GD4 pass-through costs to allow for the calculation of financial ratios for the actual company in RIIO-4.	Northern	E1478 to E1487, G1478 to G1487, AZ1478 to BD1487 , AZ215 to BD224
86	RIIO-GD4 Totex non- variant allowances inputs	Copied labels from E13:E17 and G13:G17 pasted into E1488:E1492 and G1488:G1492 respectively, AZ1488:BD1492 added NGN inputs based on high level modelling assumptions, AZ13 added formula "=AZ1488" and copied over into cells AZ13:BD17	An input was added for RIIO- GD4 totex non-variant allowances to allow for the calculation of financial ratios for the actual company in RIIO-4.	Northern	E1488 to E1492, G1488 to G1492, AZ1488 to BD1492 , AZ13 to BD17

10. <u>RIIO-GD2 value updates</u>

We have updated a number of the RIIO-GD2 inputs to ensure that the inputs feeding into the BPFM are as reflective of the latest position as possible. We note below the inputs that have been updated to reflect the AIP 2024 Dry Run 1 estimates. All updates below are made on the Northern tab of all 3 versions of the BPFM submitted.

Rows 346 to 350 of the Northern tab contain the Totex Variant Allowances allocation percentages for the HSE Policy Reopener. To maintain consistency with the AIP 2024 DR1, we have retained the values as 100% Repex. However, as shown in the 2023/24 RRP, this is not a true representation of the actual Totex split, which would more likely be represented by 16% Capex and 84% Direct Opex.

Note that we have also updated Row 159 to mirror the parameters set out for the RIIO-GD3 Variant Activity 1 - NI Increase additional cost. This was required in order for the allowances to be included in overall Totex.

At the PCFM Development Working Group 16 on 16 October 2024 it was discussed that differences in the RIIO-GD2 Calculated Revenue (used in the BPFM) vs Allowed Revenue may cause discrepancies in the RIIO-GD3 opening net debt levels in Finance&Tax(Actual). Ofgem determined that if Licensees wish to adjust the opening debt position for the start of RIIO-GD3, they may use the debt adjustment macro lines in the Finance&Tax(Actual) tab to do this. Instead of running the macro, Ofgem stated that Licensees should manually type values into the empty cells. Any inputs should be explained in **Appendix A23 BPFM Commentary** document. In line with this, we have therefore input an adjustment of c. £38m into Row 232 on the Finance&Tax(actual) tab in order to align our opening net debt position with the BPDTs.

No.	Details of Issue	Cell Reference(s)	Original Value	Updated Value
	VARIANT ALLOWANCES			
87	RIIO-GD2 value change - variant allowance Tier 1 Mains decommissioned Price Control Deliverable	Row 994	50.9, 50.4, 50.0, 49.5, 49.0	51.5, 51, 50.6, 50.1, 49.6
88	RIIO-GD2 value change - variant allowance Commercial fleet Price Control Deliverable	Row 1000	1.0, 0.8, 0.3, 0.1, 0.1	1.0, 0.8, 0.1, 0.1, 0.1
89	RIIO-GD2 value change - variant allowance Tier 2A mains and services replacement volume driver	Row 1011	1.5, 0.8, 0.7, 0.7, 0.7	1.5, 0.8, 0.4, 0.2, 0.8
90	RIIO-GD2 value change - variant allowance HSE policy Re-opener	Row 1012	0.0, 0.0, 0.0, 0.0, 0.0	0.9, 2.0, 1.7, 2.4, 9.6
91	RIIO-GD2 value change - variant allowance Fuel Poor Network Extension Scheme volume driver	Row 1015	1.7, 0.4, 0.4, 0.4, 0.4	1.7, 0.4, 0.2, 0.2, 0.2
92	RIIO-GD2 value change - variant allowance Specified Streetworks Costs Re-opener	Row 1018	0.0, 0.0, 0.0, 0.0, 0.0	2.3, 2.2, 2.1, 2.6, 2.3

Table 10-1 RIIO-GD2 value updates

93	RIIO-GD2 value change - variant allowance Domestic Connections volume driver	Row 1020	3.5, 2.5, 2.6, 2.6, 1.1	3.5, 2.5, 2.6, 2.6, 1.8
94	RIIO-GD2 value change - variant allowance Net zero pre-construction works and small net zero projects re- opener	Row 1025	0.0, 0.0, 0.0, 0.0, 0.0	0.0, 0.0, 0.0, 2.5, 2.5
95	RIIO-GD2 value change - variant allowance Cyber Resilience OT Non-Baseline	Row 1026	0.0, 0.3, 1.5, 1.2, 1.0	0.0, 0.3, 1.5, 2.9, 2.7
96	RIIO-GD2 value change - variant allowance Cyber Resilience IT Non-Baseline	Row 1027	0.0, 0.3, 0.6, 0.7, 0.4	0.0, 0.3, 0.6, 3.2, 2.9
	CAPITALISATION RATES			
97	RIIO-GD2 Capitalisation Rate 1: Actual load related capex	Row 1039	15.7, 16.7, 23.1, 20.9, 17.9	15.7, 16.7, 17.6, 24.0, 23.5
98	RIIO-GD2 Capitalisation Rate 1: Actual other capex	Row 1040	22.5, 23.5, 32.2, 34.2, 36.3	22.5, 23.5, 26.0, 31.9, 25.8
99	RIIO-GD2 Capitalisation Rate 1: Actual business support (opex)	Row 1041	20.6, 22.9, 25.1, 24.9, 25.2	20.6, 22.9, 25.0, 27.6, 26.5
100	RIIO-GD2 Capitalisation Rate 1: Actual directs (opex)	Row 1042	50.1, 58.6, 61.6, 61.9, 63.0	50.1, 58.6, 65.2, 68.2, 67.1
101	RIIO-GD2 Capitalisation Rate 1: Actual replacement expenditure	Row 1043	99.2, 95.0, 102.3, 103.0, 96.3	96.0, 90.7, 99.6, 97.3, 91.0
102	RIIO-GD2 Capitalisation Rate 2: Actual load related capex	Row 1046	5.2, 2.9, 2.9, 3.0, 1.5	5.2, 2.9, 2.8, 2.8, 2.0
103	RIIO-GD2 Capitalisation Rate 2: Actual other capex	Row 1047	0.0, 0.5, 2.1, 1.9, 1.3	0.0, 0.5, 2.1, 8.6, 8.1
104	RIIO-GD2 Capitalisation Rate 2: Actual replacement expenditure	Row 1050	1.5, 0.8, 0.7, 0.7, 0.7	4.7, 5.1, 4.2, 5.2, 12.6
	PASS THROUGH COSTS			
105	RIIO-GD2 Shrinkage Forecasts	Row 1054	16.8, 16.9, 9.5, 11.3, 9.5	16.8, 16.9, 7.6, 8.0, 8.7
106	RIIO-GD2 Licensed Activity Forecasts	Row 1055	2.5, 2.6, 3.1, 3.2, 3.2	2.5, 2.6, 3.0, 3.5, 3.6
107	RIIO-GD2 Prescribed Rates Forecasts	Row 1056	45.6, 45.6, 37.6, 40.2, 41.2	45.6, 45.6, 37.6, 40.1, 40.9
108	RIIO-GD2 NTS Exit Flat Capacity Costs and NTS Exit Flex Capacity Costs Forecasts	Row 1061	42.7, 40.2, 32.3, 38.2, 50.4	42.7, 40.2, 32.3, 36.3, 53.5
109	RIIO-GD2 CDSP Costs Forecasts	Row 1062	3.6, 2.9, 3.6, 3.7, 3.8	3.6, 2.9, 3.5, 2.9, 4.0
	INCENTIVE REVENUE			

110	RIIO-GD2 Customer Satisfaction Survey ODI Forecasts	Row 1070	1.4, 1.6, 1.7, 1.8, 1.8	1.4, 1.6, 1.6, 1.6, 1.6
111	RIIO-GD2 Shrinkage Management ODI Forecasts	Row 1074	(0.3), 0.4, 0.0, 0.1, 0.1	(0.3), 0.4, 0.4, 0.3, 0.1
	OTHER REVENUE ALLOWANCES			
112	RIIO-GD2 Network Innovation Allowance Forecasts	Row 1079	1.2, 1.7, 3.3, 2.9, 1.3	1.2, 1.7, 2.3, 2.8, 2.3
113	RIIO-GD2 VCMA	Row 1081	0.5, 1.5, 3.8, 7.0, 5.6	0.5, 1.5, 4.7, 6.9, 6.0
	DIRECTLY REMUNERATED SERVICES			
114	RIIO-GD2 Post-vesting directly remunerated services	Row 1109	0.9, 1.0, 1.0, 1.0, 1.0	0.9, 1.0, 1.2, 1.0, 1.0
115	Identified directly remunerated services costs	Row 1111	(0.6), (0.8), (0.8), (0.8), (0.8)	(0.6), (0.8), (1.0), (1.0), (1.0)
	FINANCE INPUTS			
116	Adjusted Net Debt	Row 1121	1630.3, 1723.9, 1538.8, 1509.6, 1517.7	1630.3, 1723.9, 1796.5, 1956.1, 2044.9
117	Tax Deductible Net Interest Cost	Row 1122	51.4, 78.7, 55.2, 41.5, 37.8	51.4, 78.8, 60.4, 65.1, 67.9
118	Tax liability allowance adjustments - driven by tax trigger events	Row 1124	(1.0), (1.6), (12.0), (12.1), (12.4)	(3.3), (4.7), (8.3), (11.6), (9.0)
119	General Pool Opening Balance Adjustment	Row 1126	(5.7), (31.4), (34.3)	(18.2), (20.2), (30.3)
120	Special Rate Pool Opening Balance Adjustment	Row 1127	(4.8), (13.6), (12.8)	(13.7), (10.7), (14.2)
121	Totex allocation to General tax pool	AR1139 to AT1139	12.22%, 12.92%, 14.69%	10.27%, 13.69%, 10.98%
122	Totex allocation to Special Rate tax pool	AR1140 to AT1140	9.84%, 8.99%, 7.49%	8.04%, 9.52%, 7.70%
123	Totex allocation to Deferred revenue pool	AR1142 to AT1142	41.2%, 41.42%, 40.06%	42.78%, 38.6%, 40.49%
124	Totex allocation to Revenue pool	AR1143 to AT1143	34.57%, 34.67%, 36.41%	37.19%, 36.06%, 36.45%
125	Totex allocation to non qualifying tax pool	AR1144 to AT1144	2.06%, 2.01%, 1.35%	1.72%, 2.13%, 4.38%
126	Recovered revenue billed basis	AR1156 to AS1156	564.3, 0.0	562.6, 522.4
127	Bad debt	AR1157	0.0	(1.0)
128	Recovered revenue	AR1158 to AS1158	564.3, 0.0	563.6, 522.4
129	Recovered revenue – NTS exit flat capacity	AR1159 to AS1159	37.7, 0.0	37.9, 26.1

130	Recovered revenue – SOLR	AR1060 to AS1060	26.0, 0.0	26.0, 0.8
	INCENTIVES AND OTHER NON-BASE REVENUE ITEMS			
131	NERV assumed cost multiplier	Row 1413	-	111.1%
	POST-VESTING ASSETS			
132	Disposals net sales proceeds	Row 1440	0.6, 0.1, 0.1, 0.1, 0.1	0.6, 0.7, 0.3, 0.0, 0.0
	NGN iBOXX FORWARD CURVE			
133	NGN Base Case iBoxx Forward Curve	Row 1458	N/A	6.11, 6.20, 6.31, 6.45, 6.60, 6.75, 6.88