Guidance

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RIIO-GD/T3 BPFM Guidance

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This document is a user guide for the RIIO-GD/T3 Business Plan Financial Model. This document is aimed at people using the financial model, both in the run-up to submission of Final Business Plans and beyond. It explains how to use and update the model, which data sources feed the model, and describes some of the key model assumptions and dependencies.

Contents

1. Quick user guide

1A. Structure of the model and key terms

1.1 The model is structured as a set of distinct functional blocks, each performing different tasks. The diagram on the next page gives an overview of the structure. Boxes outlined in green indicate tabs containing key inputs; red outlines indicate tabs containing key outputs.

1.2 A few key definitions that are illustrated on the diagram are used throughout this user guide.

- Price control revenue refers to the tabs that take main inputs and use them to calculate the notional price control revenue. This occurs on the tabs Totex through to Revenue.

- Financeability refers to the subsequent section of the model that determines the possible implications of price control revenue for company financeability. Financeability covers both notional company and actual company.

- LicenseeInputs refers collectively to all tabs in which individual Licensee inputs to the model are stored.

1. Quick user guide

Annual Inflation

Monthly Inflation

Input: stores inflation data

Licensee Inputs tabs

Input: stores Licensee-specific inputs

Scenarios

Input: stores common inputs
Scenario selection functionality

InputSummary

Aggregates live-case model inputs

Actual debt tabs, mirroring the BPDT but with live-updated interest rates

MainInputs

Converts inputs into common price base

Totex

TIM

Depn

FuelPoor

Return&RAV

TaxPools

NonCore

SystemOperator

Finance&Tax

Revenue

Referred to as the '**price control revenue**' section.

Calculates revenue components on a notional company basis. Boxes with grey text indicate sector specific tabs

F7 – Data Validation

F6 – Debt Dataset

F5 – Inflation Linked Debt

F4 – Floating Rate Debt

F3 – Fixed Rate Debt

F2b – Financial Summary (YE)

F2a – Financial Summary (TWA)

F1 – Debt for BPFM

FinInput

Data aggregation & calcs required for financeability analysis

RevenueSummary

Finance&Tax (actual)

FinancialStatements

FinancialRatios

FinRatios RoRE Decomp

RatingSimulator

[BillImpact]

[RoREtables]

Referred to as the '**financeability**' section. Calculates impact of the price control on notional and actual company finances, to determine likely implications for company financeability.

ScenarioRun_ AllOutput Data

OutputData

PowerQuery

Saves key outputs for all companies & scenarios

1B. Final business plan submission summary

1.3   This section summarises the minimum requirements for completion and submission of the financial model and associated analysis.

1.4   The table below provides an overview of the required steps, with more details underneath.

1.5   Please note that for draft model submissions in Summer 2024, only the steps described in topics A and B need be taken. The model and any additional commentary (optional) should be submitted in accordance with topic E (steps 1 and 2).

Topic	Reference
A. Model updates	
A1. Implement BPDT changes from BPDT gitlab	All relevant changes are listed as gitlab issues (GD, GT, ET).
A2. Implement BPFM changes from PCFM gitlab / models updates log *If requested, Ofgem will check to verify that Licensee models are correctly updated*	All relevant changes are listed as gitlab issues.
B. Data input	
B1. Import BPDT mirror table to *Licensee Inputs* tab	Import process described in para 1.28. Min data requirements in data dictionary (section 2)
B2. Copy debt dataset inputs (tab *F6*) from BPDT into BPFM	Import process described in para 5.47
B3. Add in inputs for "RIIO3: other inputs"	Min data requirements in data dictionary (section 2)
B4. Update RIIO-2 inputs where required	Details in para 1.11
↖For draft model submissions, only topics A, B, E1&E2 are required.	
C. Model set-up	
C1. Check and, if needed, amend actual financeability settings for stress tests scenarios *Price control revenue and notional financeability settings should not be changed. Actual financeability settings for stress tests scenarios can be changed (see suggested settings in section 3).*	Pre-set scenarios (including suggested actual financeability settings) described in section 3.
C2. Create additional scenarios in *Scenario* tab where required	Pre-set scenarios (including suggested actual financeability settings) described in section 3.
C3. Add in additional scenario input data profiles where required	Details in para 1.14
D. Run macros	
D1. Run the Actual Debt Alignment macro (optional, recommended)	See section from para 5.41
D2. Run the Save All Scenarios macro	Details in para 1.16
E. BPFM-specific information to share with Ofgem	
E1. Licensee's populated copy of the BPFM (one model per Licensee or one model per group) *Where Licensees have made bespoke edits to the model or wish to submit alternative scenarios and/or inputs, provide two copies – one with the bespoke edits, and one 'clean' version which conforms to Ofgem's latest model iterations. The same*	Details in para 1.17

applies for BPDTs should Licensees wish to submit BPDTs reflecting alternative cases.	
E2. Where Licensees have made bespoke edits to the model, provide specific details of the changes made in a BPFM Commentary document. *Examples include edits to any formulas or inputs, or bespoke scenarios*	Details in para 1.18
E3. Within the model, complete *DBPOutputs* tab and paste tables into DBP Finance Annex as appendix tables	Details in para 1.19

1.6 A1. Implement BPDT changes from BPDT gitlab. Licensees should ensure that their copies of the BPDT are up to date with the latest versions of the template and/or with change instructions provided on the BPDT gitlab webpage (GD, GT, ET).

1.7 A2. Implement BPFM changes from PCFM gitlab / models updates log. Licensees should ensure that their copies of the BPFM are up to date with change instructions. The instructions are provided both on the PCFM gitlab issues page, and also in model change logs stored in the gitlab repository. Issues with change instructions will be marked with labels to indicate which reference copy of the PCFM reflects the change. Reference copies of the PCFM can be found in the gitlab repository.

1.8 B1. Import BPDT mirror table to the respective Licensee Inputs tab. See para 1.28 for details on copy/pasting the BPDT's mirror table. The data dictionary (section 2) provides details of which data items are essential for the model to function.

1.9 B2. Copy debt dataset inputs (tab F6) from BPDT into BPFM. See para 5.47 for details on copy/pasting the debt dataset.

1.10 B3. Add or modify inputs in the "RIIO3 inputs: other inputs" section of the inputs page. Not all of these inputs are required to run the pre-set scenarios. Details on the specific inputs for this dataset are provided in the data dictionary (section 2).

1.11 B4. Update RIIO-2 data in the bottom "RIIO2 Inputs" section of the inputs page. Licensees may overwrite any cells in this dataset to provide updated figures/forecasts; changes should be in line with anticipated AIP changes/corrections. Please indicate clearly where figures have been changed, adding contextual information where possible. Explanatory commentary on changes made can be provided either in the model itself, or in a separate commentary note (see para 1.18).

1.12 C1. We require that Licensees run and report on all of the pre-set scenarios. Each scenario is populated with settings for price control revenue, notional financeability and actual financeability. Settings for price control revenue and notional financeability should not be changed in any of the predefined scenarios. Settings for the actual company financeability scenarios may be changed with the exception of the "Base case" scenario which should be run on the pre-defined settings, as this ensures that the BPFM actual debt is aligned with the BPDT

submission. Details of the pre-set scenarios, including examples of financeability settings for use in the stress tests, are provided in section 3.

1.13   C2. Licensees may add additional scenarios for analysis purposes. Create additional scenarios in Scenario tab by populating spare columns BJ-BS.

1.14   C3. Add in additional scenario input data profiles where required. The data dictionary (section 2) identifies model inputs that have Scenarios as the source tab, for which additional custom inputs can be entered.

1.15   D1. Run the Actual Debt Alignment macro. The Actual Debt Alignment macro will adjust the model's calculated new debt requirement so that it aligns with that implied by the BPDT's reported new debt emissions. It should be run with the model set in base case. See section from para 5.41 for details.

1.16   D2. Run the Save All Scenarios macro. When ready to save the model results, use the Save All Scenarios macro to save outputs.

1.17   E1. Licensee's populated copy of the BPFM (one model per Licensee or one model per group). This model should be able to replicate the figures reported in the Final Business Plan. Where Licensees have made bespoke edits to the model or wish to submit alternative scenarios and/or inputs, they may provide two copies – one with the bespoke edits, and one 'clean' version which conforms to Ofgem's latest model iterations. This will be helpful for validating that the underlying models used by the Licensees match our models. The same applies for BPDTs should Licensees wish to submit BPDTs reflecting alternative cases.

1.18   E2. Where Licensees have made bespoke edits to the model they should provide specific details of the changes made in an optional "BPFM commentary" document. There is no set template for this document, licensees should provide these details in any suitable manner. Examples of details could include:

- Edits to any formulas. The exact formulas changed should be recorded, including the rationale for editing them and a brief description of the impact that this has.

- Bespoke scenarios. The rationale for bespoke scenarios should be recorded, including whether the Licensee wishes Ofgem to take its rationale or results into consideration.

- Updates to RIIO-2 values. The values that have been changed should be recorded, including the rationale for the change.

1.19   [E3. Within the model, complete the FBPOutputs tab. FBPOutputs contains two tables that Licensees should complete when submitting the model.

- The "BP Working Assumptions" table (rows 8-23) should be used to record instances where Licensees believe that key inputs should differ from the SSMD working assumptions that are pre-set in the model. It may be the case that Licensees wish to propose different key inputs only for some specific scenarios, and hence we have left a number of [Spare] columns in the table to allow Licensees to specify which scenarios these are.

- The "Credit Ratio Summary" table (rows 27-37) is automatically populated from the ScenarioRun_AllOutputData tab. This requires the "RunAllScenarios" macro to be run in order to save outputs from the model.] – *not in the Draft BPFM v4 used for submissions on 14th August 2024*.

1C. Setting up the model

1.20   Running the model relies on a number of key inputs and settings:

- Pre-set scenarios for stress testing

- Key input values common to all Licensees

- Data inputs for RIIO-2 and RIIO-3

Pre-set scenarios for stress testing

1.21   For final business plan submissions the model is issued to Licensees with all of the pre-set scenarios already entered in the Scenarios tab. The scenarios are provided in detail in section 3.

1.22   There are 15 pre-set scenarios for GD and GT and 16 for ET. Each scenario also includes settings for actual debt and financeability modelling. The RunAllScenarios macro (found on UserInterface and ScenarioRun_AllOutputData tabs) will save the outputs of all selected scenarios, which includes notional and actual company financeability results for each scenario.

1.23   Users may add in additional scenarios. This can be done in the spare scenario slots in columns BJ-BS.

Pre-set key input values common to all Licensees

1.24   Pre-set key input values refers to input values in both the *Scenarios* and *Annual Inflation* tabs which have been pre-populated and which should not be changed by Licensees unless clearly stated.

1.25   In the *Scenarios* tab these are stored at the bottom of the sheet in a section called "Scenario options section", row 100 onwards. This section allows for multiple different versions of key inputs to be selected using the scenario selection boxes at the top of the sheet.

1.26   Where there are spare slots in any of these input areas (yellow shaded cells), users may add in additional options. These can then be selected for the desired scenario using the drop-down boxes in the "Scenario definition" section.

1.27   The *Annual Inflation* and *Monthly Inflation* tabs store key inflation and interest rate inputs. These are pre-populated and updated by Ofgem.

Data inputs for RIIO-2 and RIIO-3

1.28   All Licensee-specific inputs are located either in the LicenseeInputs tabs or in the F6 - Debt Dataset tab. The LicenseeInputs tabs are split into three overall sections:

- **RIIO3 inputs: BPDT mirror table (£m23/24 price base)** (GD rows 6-781; GT rows 6-810 (TO) 6-308 (SO); ET rows 6-1010). Most RIIO-3 inputs come from the BPDT. Each *LicenseeInputs* tab contains an empty copy of the BPDT's mirror table for Licensees to paste BPDT data into. To copy the BPDT mirror table: in the BPDT's *BPFM Inputs* tab, first select the named range "Mirror_labels" and paste it into a spare BPDT dataset slot on the LicenseeInputs tab. The first cell of the mirror table should be placed in column E. Next, select the named range "Mirror_values" and paste it as values into the Licensee Inputs tab, with the first cell in column AJ of the same row that the labels were pasted into.

- **RIIO3 inputs: other inputs (£m23/24 price base)** (GD rows 783-966; GT rows 811-979 (TO) 390-436 (SO); ET rows 1011-1247). These inputs do not come from the BPDTs and instead are inputted directly (or pre-populated by us).

- **RIIO2 inputs (£m18/19 price base)** (GD rows 967-1446; GT rows 980-1485 (TO) 437-624 (SO); ET rows 1248-1929). These inputs are used to drive the RIIO-2 periods of the model. The model produces RIIO-2 figures mainly to contextualise RIIO-3 figures. However there are also a few key values that need to be brought over from the end of RIIO-2 into RIIO-3 such as RAV, tax pool balances and tax losses carried forwards. The layout of this section mimics the latest published RIIO-2 model. We will provide pre-populated values in this section based on the latest published RIIO-2 model, but Licensees may update values in this section if they wish (see para 1.11).

1.29   For modelling actual debt and financeability, the F6 – Debt Dataset tab needs to be populated with the same data as is in the BPDT's F6 tab. This is the only additional input needed for the actual debt tabs, as other relevant inputs, such as annual new debt emissions profile, dividends, equity issuance and gearing are already included in the BPDT mirror table. For more detail on the actual debt aspects of the model, see section 5.

Model outputs

1.30   Depending on the information which the model user is interested in there are a number of possible places to look for model outputs.

1.31   The *Revenue* tab displays the buildup of notional company revenue allowances.

1.32   The FinancialStatements, FinancialRatios, FinRatiosRoRE Decomp, RatingSimulator, [Bill Impact] and RoREtables tabs all show live outputs of key financeability analysis outputs, for both the notional and the actual company modelling.

1D. Running scenarios

1.33   There are 15 pre-set scenarios for GD and GT and 16 for ET. Each scenario also includes settings for actual debt and financeability modelling.

1.34   There are three suggested combinations of settings for actual company financeability: "BPDT" for use in the base case scenario, and "% dividends" and "cash flow dividends" for the stress test scenarios depending on the preferred approach to modelling actual dividends and equity issuance. A fourth combination of settings, named "User defined", can be used to further customise the options for actual company modelling. These suggested combinations are pre-entered in scenario slots 16, 17, 18 and 19 (see Scenarios BE64:BH93).]

1.35   Details of the pre-set scenarios are provided in section 3.

Financeability scenario functionality

1.36   There are specific settings and inputs required to model notional and actual company financeability for all pre-set scenarios.

1.37   Notional company financeability makes use of a number of switches to define options around revenue and cost assumptions for financeability assessment.

1.38   Actual company financeability uses similar option switches, as well as additional switches to define inputs and assumptions for modelling actual debt in the Finance&Tax (actual) tab.

1.39   To help clarify which inputs go with which switches, the list of scenario settings below is ordered around the notional and actual financeability switches. The underlined option indicates the default switch setting for the "Base case" scenario. For more detail on the actual debt aspects of the model, see section 5.

1.40   Key notional financeability settings options:

Financeability functionality: totex option (fast/slow vs opex/capex)

- This switch has no associated inputs. It switches between two methods of calculating capex and opex expenditure. Under fast/slow, actual capex and opex is calculated by applying capitalisation rate to pre-TIM allowances. Under opex/capex, the totex categories are used to identify actual capex and opex. For notional financeability this switch is set to fast/slow in all scenarios.

Financeability functionality: apply RIIO-2 lagged revenue adjustment? (Apply lag vs <u>Lag not applied</u>)

- This functionality does not require additional inputs. If "Apply lag" is selected, it delays outperformance and incentives and other revenues by two years compared with the price control revenue modelling. For notional financeability "Lag not applied" is used by default.

Financeability functionality: include excluded services net revenue? (include vs <u>exclude</u>)

- This functionality does not require additional inputs. It allows DRS net position to be included or excluded from financeability analysis.

[Financeability functionality: include RIIO-2 lagged revenue adjustments? (include vs <u>exclude</u>)

- This functionality allows forecast RIIO-2 lagged revenue adjustments (LAR) to be included in financeability analysis. The LAR inputs may be added in in the custom FBP inputs (£m real). – this functionality will not be provided in the RIIO-3 models, unless requested by Licensees]

Financeability functionality: depreciation option (<u>regulatory</u> vs statutory)

- The regulatory option uses model-calculated depreciation. For actual scenarios statutory depreciation inputs (£m real) are brought in from the *Licensee Inputs* tab, from the BPDT mirror table.

1.41   Key actual financeability settings options:

Financeability functionality: totex option (fast/slow vs <u>opex/capex</u>)

- Actual financeability uses the "opex/capex" setting.

Financeability functionality: rating simulator apply excess fast money adjustment (<u>True</u> vs False)

- The rating simulator tab nets excess fast money from FFO, with excess fast money calculated as the difference between the notional fast money component of revenue and opex (as determined by the opex-related totex subcategories). This adjustment is defined in Moody's credit rating methodology. By default the adjustment is switched on.

Financeability functionality: apply RIIO-2 lagged revenue adjustment? (Apply lag vs Lag not applied)

- Actual financeability uses the "Apply lag" setting, so that incentive revenues are reflected in financeability with a two years' net present value (NPV) neutral lag.

Financeability functionality: include excluded services net revenue? (non-functional)

- Actual company financeability automatically uses the same setting as notional financeability.

[Financeability functionality: include RIIO-2 lagged revenue adjustments? (include vs exclude)

- LAR adjustments are included in revenue for actual financeability. The LAR inputs may be added in the custom FBP inputs (£m real) – this functionality will not be provided in the RIIO-3 models, unless requested by Licensees]

Financeability functionality: depreciation option (regulatory vs statutory)

- Actual financeability should always use statutory depreciation inputs (£m real) brought in from the *Licensee Inputs* tab, from the BPDT mirror table.

1.42   Options selection for actual debt modelling inputs in *Finance&Tax (actual)* sheet:

Financeability functionality: RIIO-2 closing gearing (BPDT input vs user defined)

- Actual scenarios require a gearing target that may differ from the notional case. This can either be drawn from the BPDT (forecast actual gearing), or custom user defined.

- If the BPDT option is selected, either the BPDT mirror table's fixed value is used, or the dynamic gearing output from the debt sheets is used. Note that the dynamic gearing from the debt sheets should be the same as the BPDT fixed value when the Base case is selected. The Base case uses "Debt sheets", so that this can be verified by comparing rows 94 and 96 in Fininput tab. The stress tests use "Mirror table" to ensure gearing target is held constant at the Base case value (by using the hardcoded input from the BPDT mirror table).

- If the user defined option is selected, custom inputs in the Scenarios tab rows 232-234 can be selected.

Financeability functionality: equity issuance (BPDT vs model calculation)

- Actual scenarios require equity issuance inputs that differ from the notional case, either fixed actual inputs from the BPDT (actual equity issuance volume (£m nominal) and equity issuance cost (£m nominal)), or live model calculations in Finance&Tax (actual).

The Base case uses equity issuance amounts and transaction costs sourced directly from the BPDT mirror table.

- If the model calculation option is selected, equity issuance can be calculated either on the basis of the previous year's closing gearing alongside a minimum issuance threshold (Scenarios custom inputs in rows 244-246), or by user definition of issuance % target (Scenarios custom inputs in rows 237-241) and issuance cost (Scenario definition row 88).

Financeability functionality: dividends (BPDT vs model calculation)

- Actual scenarios require dividend inputs that differ from the notional case, either fixed actual inputs from the BPDT (£m nominal), or live model calculations in Finance&Tax (actual). The Base case uses fixed amounts as reported in the submitted BPDT and imported from there into the mirror table.

- If the model calculation option is selected, dividends can either be calculated based on cashflow (where a % cap to annual dividends can be defined in row 92), or based on a custom defined dividend as % of equity (rows 252-254).

1E. Cost of debt and equity, and CAPM calculator

1.43   There are two different options for providing cost of debt and equity inputs to the model. These are:

- 'Headline level' annual real % cost of debt / equity, input as single-line profiles (*Scenarios* tab rows 129-123 and 136-140)

- CAPM calculator using inputs from *LicenseeInputs* RIIO-3 Other Inputs section (GD rows 853-863, GT rows 876-884 (TO) 357-365 (SO), ET rows 1093-1103)

1.44   Users can switch between these two options on the *Scenarios* tab (rows 37 and 39) with "Scenario Input" as the default option for all pre-set scenarios.

1.45   The key allowed return on debt and equity inputs that are used in the model are in rows 366-367 (GD), 338-339 (GT), 410-411 (ET) of *MainInputs*. The figures that populate these cells are drawn from different places depending on the option chosen.

2. Data Dictionary

2.1   There are a number of different data sources that provide inputs to the model, and the list of data sources will grow and change over the course of the RIIO-GD/T3 price control.

2.2   The data dictionary in this section provides detailed information on the data required for the model, the source of the data, and the location where it is input into the model. The data dictionary is currently tailored to the draft business plan data requirements and will be updated as the model and associated data sources are further developed in the run-up to final business plan submissions.

2.3   The data dictionary is arranged by general categories, so may not exactly match the ordering of items in the input sheets.

2.4   We have provided copies of the data dictionary for each sector.

2.5   Note that all values currently input in RIIO-3 periods should be treated as dummy values and do not represent SSMD positions.

2A. GD data dictionary

GD3	Units	RIIO-3						Price control revenue & notional financeability requirement	Actual financeability requirement	RIIO-2	
		Default value	Source tab	Rows	Source dataset	Provided by	Comments (source link, update procedures, etc)			Source tab	Source dataset
Expenditure inputs											
Totex expenditure											
Non-variant allowances	£m real		LicenseeInputs	12-16	BPDT	Licensee		✔	✔	LicenseeInputs	RIIO-2 PCFM
Variant allowances	£m real		LicenseeInputs	21-110	BPDT	Licensee		✔	✔	LicenseeInputs	RIIO-2 PCFM
Variant allowances: attributes	mixed		LicenseeInputs	158-207	BPDT	Licensee		✔	✔	LicenseeInputs	RIIO-2 PCFM
Variant allowances: totex allocations	%		LicenseeInputs	245-694	BPDT	Licensee		✔	✔	LicenseeInputs	RIIO-2 PCFM
Actual totex	£m real		LicenseeInputs	788-799	No source	Licensee	Split into actuals for capitalisation rate allocations 1 & 2. Not required for submission	✘	✘	LicenseeInputs	RIIO-2 PCFM
Non-totex expenditure											
Pass-through costs aka non-controllable opex	£m real & £m nominal		LicenseeInputs	214-224	BPDT	Licensee		✔	✔	LicenseeInputs	RIIO-2 PCFM
Directly remunerated services	£m real		LicenseeInputs	228-231	BPDT	Licensee		✔	✔	LicenseeInputs	RIIO-2 PCFM
Disposals net proceeds	£m real		LicenseeInputs	241	BPDT	Licensee		✔	✔	LicenseeInputs	RIIO-2 PCFM
BPI reward/penalty	£m real		LicenseeInputs	803	-	Ofgem	Not required for business plan submissions	✘	✘	LicenseeInputs	RIIO-2 PCFM
ODIs	£m real		LicenseeInputs	805-810	-	Ofgem	Not required for business plan submissions	✘	✘	LicenseeInputs	RIIO-2 PCFM
Other revenue allowances' costs	£m real		LicenseeInputs	814-819	BPDT	Licensee		✔	✔	LicenseeInputs	RIIO-2 PCFM
Other revenue allowances' cost multipliers	%		LicenseeInputs	824-829	BPDT	Licensee	Current model structure assumes same cost multipliers as in RIIO-2 hence not a requirement	✘	✘	LicenseeInputs	RIIO-2 PCFM
SIU cross-subsidy adjustment	£m real		LicenseeInputs	963	-	Licensee		✔	✔	LicenseeInputs	RIIO-2 PCFM
Finance inputs											
CAPM calculator											
iBoxx trailing average	annual real %	Annual profile	LicenseeInputs	875	WACC model	Ofgem	Dummy figures prior to SSMD publication	✔	✔	LicenseeInputs	RIIO-2 PCFM
Uplift on iBoxx trailing average	annual real %	0	LicenseeInputs	855	WACC model	Ofgem	Dummy figures prior to SSMD publication	✔	✔	LicenseeInputs	RIIO-2 PCFM
Risk-free rate	%	Annual profile	LicenseeInputs	876	WACC model	Ofgem	Dummy figures prior to SSMD publication	✔	✔	LicenseeInputs	RIIO-2 PCFM
Equity Beta	%		LicenseeInputs	857	SSMD	Ofgem	Dummy figures prior to SSMD publication	✔	✔	LicenseeInputs	RIIO-2 PCFM

GD3	Units	RIIO-3						Price control revenue & notional financeability requirement	Actual financeability requirement	RIIO-2	
		Default value	Source tab	Rows	Source dataset	Provided by	Comments (source link, update procedures, etc)			Source tab	Source dataset
Total Market Return	%		LicenseeInputs	858	SSMD	Ofgem	Dummy figures prior to SSMD publication	✔	✔	LicenseeInputs	RIIO-2 PCFM
Benchmark gearing (60%)	%		LicenseeInputs	859	SSMD	Ofgem	Dummy figures prior to SSMD publication	✔	✔	LicenseeInputs	RIIO-2 PCFM
Other finance inputs											
'Headline' cost of equity and debt profiles	%	Annual profile	Scenarios	129-140	SSMD	Ofgem	Dummy figures prior to SSMD publication	✔	✔	-	-
Notional gearing	%	60%	Scenarios	41	SSMD	Ofgem		✔	✔	LicenseeInputs	RIIO-2 PCFM
Splice index	%	Annual profile	Annual Inflation	39	OBR	Ofgem		✔	✔	-	-
Near-term RPI&CPIH inflation forecast	%	Annual profile	Scenarios	144-155	OBR	Ofgem	Alternate scenario profiles can be used	✔	✔	LicenseeInputs	RIIO-2 PCFM
Long-term CPIH inflation forecast	%	2%	Annual Inflation	41	SSMD	Ofgem	Not to be changed	✔	✔	-	-
Minimum equity issuance threshold, issuance cost, dividends as % of equity, gearing target	%	5%; 5%; 3%; 60%	Scenarios	46-49	SSMD	Ofgem	Alternate scenario profiles can be used	✔	✔	LicenseeInputs	RIIO-2 PCFM
CPIH index linked debt as % of net debt	%	0%; 25%	Scenarios	50	SSMD	Ofgem	Alternate scenario profiles can be used	✔	✔	LicenseeInputs	RIIO-2 PCFM
RPE annual growth	%	Annual profile	LicenseeInputs	879	Ofgem modelling	Ofgem	Dummy figures at business plan stages	✔	✔	LicenseeInputs	RIIO-2 PCFM
TIM & capitalisation											
Capitalisation rate	%		LicenseeInputs	235-237	BPDT	Licensee	Cap rates for variant & non-variant collected in separate tables within BPDT	✔	✔	LicenseeInputs	RIIO-2 PCFM
TIM incentive strength	%		Scenarios	19	DDs	Ofgem	Dummy figures at business plan stages	✔	✔	LicenseeInputs	RIIO-2 PCFM
RAV & Assets											
Pre-vesting assets											
Pre-vesting asset life	years		Scenarios	34	-	Licensee	This input acts as an override for the "years of pre-vesting depreciation remaining" input, in the event that depreciation terminate option is selected	✔	✔	LicenseeInputs	RIIO-2 PCFM
Pre-vesting RAV disposals	£m real		LicenseeInputs	935	-	Licensee	RAV adjustments in the event of any forecast disposals of pre-vesting RAV assets	✔	✔	LicenseeInputs	RIIO-2 PCFM
Years of pre-vesting depreciation remaining	years		LicenseeInputs	936	-	Ofgem		✔	✔	LicenseeInputs	RIIO-2 PCFM
Post-vesting assets											
Post-vesting asset life (pre-RIIO-3)	years	45years	Scenarios	31	-	Licensee	This input acts as an override for the RIIO-2 PCFM's asset life input, in the event that depreciation accelerate or terminate options are selected	✔	✔	LicenseeInputs	RIIO-2 PCFM

GD3	Units	RIIO-3						Price control revenue & notional financeability requirement	Actual financeability requirement	RIIO-2	
		Default value	Source tab	Rows	Source dataset	Provided by	Comments (source link, update procedures, etc)			Source tab	Source dataset
GD smoothing profile for recovery of backlog depreciation	years	0	LicenseeInputs	942	-	Ofgem		✔	✔	LicenseeInputs	RIIO-2 PCFM
RIIO post-vesting RAV additions	£m real	0	LicenseeInputs	946	-	Licensee	RAV adjustments in the event of any forecast additions of post-vesting assets	✔	✔	LicenseeInputs	RIIO-2 PCFM
RIIO post-vesting RAV disposals	£m real	0	LicenseeInputs	947	-	Licensee	RAV adjustments in the event of any forecast disposals of post-vesting assets	✔	✔	LicenseeInputs	RIIO-2 PCFM
Fuel Poor											
NPV of future transportation revenue	£m real	0	LicenseeInputs	956	-	Ofgem		✔	✔	LicenseeInputs	RIIO-2 PCFM
Community based schemes actual capex spend	£m real	0	LicenseeInputs	957	-	Ofgem		✔	✔	LicenseeInputs	RIIO-2 PCFM
One off schemes actual capex spend	£m real	0	LicenseeInputs	959	-	Ofgem		✔	✔	LicenseeInputs	RIIO-2 PCFM
Tax											
Notional tax											
Corporation tax rate	%	Annual profile	Scenarios	55	-	Ofgem		✔	✔	LicenseeInputs	RIIO-2 PCFM
General & General FYA, Special Rates & Special Rates FYA, Structures & Buildings, Deferred Revenue capital allowance rates	%	Annual profile	LicenseeInputs	900-906	-	Ofgem		✔	✔	LicenseeInputs	RIIO-2 PCFM
Capital allowance pools balances brought forwards & legacy adjustments	£m nominal	-	-	892-897	-	-	Not used, since the model calculates RIIO-2 in full and flows pool balances on to RIIO-3	✘	✘	LicenseeInputs	RIIO-2 PCFM
General & Special Rates pool opening balance revisions	£m nominal	-	LicenseeInputs	886-887	-	Licensees		✔	✔	LicenseeInputs	RIIO-2 PCFM
Tax pool allocations	%		LicenseeInputs	698-707	BPDT	Licensee		✔	✔	LicenseeInputs	RIIO-2 PCFM
Tax trigger and clawback											
Projected/actual adjusted debt & net interest cost	£m real		-	881-882	-	-	Not used for BPFM	✘	✘	LicenseeInputs	RIIO-2 PCFM
Tax allowance adjustment & tax trigger events	£m real		-	883-884	-	-	Not used for BPFM	✘	✘	LicenseeInputs	RIIO-2 PCFM
Notional gearing for tax clawback gearing test	%		-	889	-	-	Not used for BPFM	✘	✘	LicenseeInputs	RIIO-2 PCFM
Tax trigger deadbands	£m real		-	890	-	-	Not used for BPFM	✘	✘	LicenseeInputs	RIIO-2 PCFM
Financeability											
Actuals											

GD3	Units	RIIO-3						Price control revenue & notional financeability requirement	Actual financeability requirement	RIIO-2	
		Default value	Source tab	Rows	Source dataset	Provided by	Comments (source link, update procedures, etc)			Source tab	Source dataset
Statutory depreciation	£m real		LicenseeInputs	713	BPDT	Licensee		✘	✔	LicenseeInputs	BPDT
BPDT capex input	£m real		LicenseeInputs	714	BPDT	Licensee		✘	✔	LicenseeInputs	BPDT
Additional borrowing cost assumption (for actual company debt)	£m real		LicenseeInputs	714	BPDT	Licensee		✘	✔	LicenseeInputs	BPDT
Summary inputs	mixed		LicenseeInputs	720-726	BPDT	Licensee		✘	✔	LicenseeInputs	BPDT
Debt sheets yellow inputs: New debt issuance profile	mixed		LicenseeInputs	729-739	BPDT	Licensee		✘	✔	LicenseeInputs	BPDT
Debt sheets yellow inputs: Adjustments for conversion to Regulatory (RIIO-1) Definition of Net Debt (Time Weighted Average)	£m nominal		LicenseeInputs	742-748	BPDT	Licensee		✘	✔	LicenseeInputs	BPDT
Debt sheets yellow inputs: Adjustments for conversion to Regulatory (RIIO-1) Definition of Net Interest	£m nominal		LicenseeInputs	751-760	BPDT	Licensee		✘	✔	LicenseeInputs	BPDT
Debt sheets yellow inputs: Costs excluded from Regulatory (RIIO-1) Definition of Net Interest	£m nominal		LicenseeInputs	763-772	BPDT	Licensee		✘	✔	LicenseeInputs	BPDT
Debt sheets yellow inputs: Conversion to Regulatory (RIIO-1) Definition of Net Debt (Financial Year End)	£m nominal		LicenseeInputs	775-781	BPDT	Licensee		✘	✔	LicenseeInputs	BPDT

2B. GT data dictionary

GT3 TO	Units	RIIO-3						Price control revenue & notional financeability requirement	Actual financeability requirement	RIIO-2	
		Default value	Source tab	Rows	Source dataset	Provided by	Comments (source link, update procedures, etc)			Source tab	Source dataset
Expenditure inputs											
Totex expenditure											
Non-variant allowances	£m real		LicenseeInputs	12-17	BPDT	Licensee		✔	✔	LicenseeInputs	RIIO-2 PCFM
Variant allowances	£m real		LicenseeInputs	22-107	BPDT	Licensee		✔	✔	LicenseeInputs	RIIO-2 PCFM
Variant allowances: attributes	mixed		LicenseeInputs	112-194	BPDT	Licensee		✔	✔	LicenseeInputs	RIIO-2 PCFM
Variant allowances: totex allocations	%		LicenseeInputs	226-723	BPDT	Licensee		✔	✔	LicenseeInputs	RIIO-2 PCFM
Actual totex	£m real		LicenseeInputs	816-829	No source	Licensee	Split into actuals for capitalisation rate allocations 1 & 2. Not required for submission	✘	✘	LicenseeInputs	RIIO-2 PCFM
Non-totex expenditure											
Pass-through costs aka non-controllable opex	£m real & £m nominal		LicenseeInputs	201-208	BPDT	Licensee		✔	✔	LicenseeInputs	RIIO-2 PCFM
Directly remunerated services	£m real		LicenseeInputs	212-213	BPDT	Licensee		✔	✔	LicenseeInputs	RIIO-2 PCFM
Disposals net proceeds	£m real		LicenseeInputs	222	BPDT	Licensee		✔	✔	LicenseeInputs	RIIO-2 PCFM
BPI reward/penalty	£m real		LicenseeInputs	833	-	Ofgem	Not required for business plan submissions	✘	✘	LicenseeInputs	RIIO-2 PCFM
ODIs	£m real		LicenseeInputs	835-836	-	Ofgem	Not required for business plan submissions	✘	✘	LicenseeInputs	RIIO-2 PCFM
Other revenue allowances' costs	£m real		LicenseeInputs	840-845	BPDT	Licensee		✔	✔	LicenseeInputs	RIIO-2 PCFM
Other revenue allowances' cost multipliers	%		LicenseeInputs	850-855	BPDT	Licensee	Current model structure assumes same cost multipliers as in RIIO-2 hence not a requirement	✘	✘	LicenseeInputs	RIIO-2 PCFM
Finance inputs											
CAPM calculator											
iBoxx trailing average	annual real %	Annual profile	LicenseeInputs	896	WACC model	Ofgem	Dummy figures prior to SSMD publication	✔	✔	LicenseeInputs	RIIO-2 PCFM
Uplift on iBoxx trailing average	annual real %	0	LicenseeInputs	876	WACC model	Ofgem	Dummy figures prior to SSMD publication	✔	✔	LicenseeInputs	RIIO-2 PCFM
Risk-free rate	%	Annual profile	LicenseeInputs	897	WACC model	Ofgem	Dummy figures prior to SSMD publication	✔	✔	LicenseeInputs	RIIO-2 PCFM
Equity Beta	%		LicenseeInputs	878	SSMD	Ofgem	Dummy figures prior to SSMD publication	✔	✔	LicenseeInputs	RIIO-2 PCFM
Total Market Return	%		LicenseeInputs	879	SSMD	Ofgem	Dummy figures prior to SSMD publication	✔	✔	LicenseeInputs	RIIO-2 PCFM
Benchmark gearing (60%)	%		LicenseeInputs	880	SSMD	Ofgem	Dummy figures prior to SSMD publication	✔	✔	LicenseeInputs	RIIO-2 PCFM
Other finance inputs											

GT3 TO	Units	RIIO-3						Price control revenue & notional financeability requirement	Actual financeability requirement	RIIO-2	
		Default value	Source tab	Rows	Source dataset	Provided by	Comments (source link, update procedures, etc)			Source tab	Source dataset
'Headline' cost of equity and debt profiles	%	Annual profile	Scenarios	129-140	SSMD	Ofgem	Dummy figures prior to SSMD publication	✔	✔	-	-
Notional gearing	%	60%	Scenarios	41	SSMD	Ofgem		✔	✔	LicenseeInputs	RIIO-2 PCFM
Splice index	%	Annual profile	Annual Inflation	39	OBR	Ofgem		✔	✔	-	-
Near-term RPI&CPIH inflation forecast	%	Annual profile	Scenarios	144-155	OBR	Ofgem	Alternate scenario profiles can be used	✔	✔	LicenseeInputs	RIIO-2 PCFM
Long-term CPIH inflation forecast	%	2%	Annual Inflation	41	SSMD	Ofgem	Not to be changed	✔	✔	-	-
Minimum equity issuance threshold, issuance cost, dividends as % of equity, gearing target	%	5%; 5%; 3%; 60%	Scenarios	46-49	SSMD	Ofgem	Alternate scenario profiles can be used	✔	✔	LicenseeInputs	RIIO-2 PCFM
CPIH index linked debt as % of net debt	%	0%; 25%	Scenarios	50	SSMD	Ofgem	Alternate scenario profiles can be used	✔	✔	LicenseeInputs	RIIO-2 PCFM
RPE annual growth	%	Annual profile	LicenseeInputs	879	Ofgem modelling	Ofgem	Dummy figures at business plan stages	✔	✔	LicenseeInputs	RIIO-2 PCFM
TIM & capitalisation											
Capitalisation rate	%		LicenseeInputs	217-218	BPDT	Licensee	Cap rates for variant & non-variant collected in separate tables within BPDT	✔	✔	LicenseeInputs	RIIO-2 PCFM
TIM incentive strength	%		Scenarios	19	DDs	Ofgem	Dummy figures at business plan stages	✔	✔	LicenseeInputs	RIIO-2 PCFM
RAV & Assets											
Pre-vesting assets											
Pre-vesting asset life	years		Scenarios	34	-	Licensee	This input acts as an override for the "years of pre-vesting depreciation remaining" input, in the event that depreciation terminate option is selected	✔	✔	LicenseeInputs	RIIO-2 PCFM
Pre-vesting RAV disposals	£m real		LicenseeInputs	956	-	Licensee	RAV adjustments in the event of any forecast disposals of pre-vesting RAV assets	✔	✔	LicenseeInputs	RIIO-2 PCFM
Years of pre-vesting depreciation remaining	years		LicenseeInputs	957	-	Ofgem		✔	✔	LicenseeInputs	RIIO-2 PCFM
Post-vesting assets											
Post-vesting asset life, straight line (non-core)	years	45years	LicenseeInputs	962	-	Licensee		✔	✔	LicenseeInputs	RIIO-2 PCFM
RIIO post-vesting RAV additions	£m real	0	LicenseeInputs	972	-	Licensee	RAV adjustments in the event of any forecast additions of post-vesting assets	✔	✔	LicenseeInputs	RIIO-2 PCFM
Tax											
Notional tax											
Corporation tax rate	%	Annual profile	Scenarios	55	-	Ofgem		✔	✔	LicenseeInputs	RIIO-2 PCFM
General & General FYA, Special Rates & Special	%	Annual profile	LicenseeInputs	921-927	-	Ofgem		✔	✔	LicenseeInputs	RIIO-2 PCFM

GT3 TO	Units	RIIO-3						Price control revenue & notional financeability requirement	Actual financeability requirement	RIIO-2	
		Default value	Source tab	Rows	Source dataset	Provided by	Comments (source link, update procedures, etc)			Source tab	Source dataset
Rates FYA, Structures & Buildings, Deferred Revenue capital allowance rates											
Capital allowance pools balances brought forwards & legacy adjustments	£m nominal	-	-	913-918	-	-	Not used, since the model calculates RIIO-2 in full and flows pool balances on to RIIO-3	✘	✘	LicenseeInputs	RIIO-2 PCFM
General & Special Rates pool opening balance revisions	£m nominal	-	LicenseeInputs	907-908	-	Licensees		✔	✔	LicenseeInputs	RIIO-2 PCFM
Tax pool allocations	%		LicenseeInputs	726-735	BPDT	Licensee		✔	✔	LicenseeInputs	RIIO-2 PCFM
Tax trigger and clawback											
Projected/actual adjusted debt & net interest cost	£m real		-	902-903	-	-	Not used for BPFM	✘	✘	LicenseeInputs	RIIO-2 PCFM
Tax allowance adjustment & tax trigger events	£m real		-	904-905	-	-	Not used for BPFM	✘	✘	LicenseeInputs	RIIO-2 PCFM
Notional gearing for tax clawback gearing test	%		-	910	-	-	Not used for BPFM	✘	✘	LicenseeInputs	RIIO-2 PCFM
Tax trigger deadbands	£m real		-	911	-	-	Not used for BPFM	✘	✘	LicenseeInputs	RIIO-2 PCFM
Financeability											
Actuals											
Statutory depreciation	£m real		LicenseeInputs	741	BPDT	Licensee		✘	✔	LicenseeInputs	BPDT
BPDT capex input	£m real		LicenseeInputs	742	BPDT	Licensee		✘	✔	LicenseeInputs	BPDT
Additional borrowing cost assumption (for actual company debt)	£m real		LicenseeInputs	743	BPDT	Licensee		✘	✔	LicenseeInputs	BPDT
Summary inputs	mixed		LicenseeInputs	748-754	BPDT	Licensee		✘	✔	LicenseeInputs	BPDT
Debt sheets yellow inputs: New debt issuance profile	mixed		LicenseeInputs	757-767	BPDT	Licensee		✘	✔	LicenseeInputs	BPDT
Debt sheets yellow inputs: Adjustments for conversion to Regulatory (RIIO-1) Definition of Net Debt (Time Weighted Average)	£m nominal		LicenseeInputs	770-776	BPDT	Licensee		✘	✔	LicenseeInputs	BPDT
Debt sheets yellow inputs: Adjustments for conversion to Regulatory (RIIO-1) Definition of Net Interest	£m nominal		LicenseeInputs	779-788	BPDT	Licensee		✘	✔	LicenseeInputs	BPDT
Debt sheets yellow inputs: Costs excluded from	£m nominal		LicenseeInputs	791-800	BPDT	Licensee		✘	✔	LicenseeInputs	BPDT

GT3 TO	Units	RIIO-3						Price control revenue & notional financeability requirement	Actual financeability requirement	RIIO-2	
		Default value	Source tab	Rows	Source dataset	Provided by	Comments (source link, update procedures, etc)			Source tab	Source dataset
Regulatory (RIIO-1) Definition of Net Interest											
Debt sheets yellow inputs: Conversion to Regulatory (RIIO-1) Definition of Net Debt (Financial Year End)	£m nominal		LicenseeInputs	803-809	BPDT	Licensee		✖	✔	LicenseeInputs	BPDT

GT3 SO	Units	RIIO-3						Price control revenue & notional financeability requirement	Actual financeability requirement	RIIO-2	
		Default value	Source tab	Rows	Source dataset	Provided by	Comments (source link, update procedures, etc)			Source tab	Source dataset
Expenditure inputs											
Totex expenditure											
Non-variant allowances	£m real		LicenseeInputs	12-13	BPDT	Licensee		✔	✔	LicenseeInputs	RIIO-2 PCFM
Variant allowances	£m real		LicenseeInputs	18-81	BPDT	Licensee		✔	✔	LicenseeInputs	RIIO-2 PCFM
Variant allowances: attributes	mixed		LicenseeInputs	88-151	BPDT	Licensee		✔	✔	LicenseeInputs	RIIO-2 PCFM
Variant allowances: totex allocations	%		LicenseeInputs	171-298	BPDT	Licensee		✔	✔	LicenseeInputs	RIIO-2 PCFM
Actual totex	£m real		LicenseeInputs	317-318	No source	Licensee	Split into actuals for capitalisation rate allocations 1 & 2. Not required for submission	✖	✖	LicenseeInputs	RIIO-2 PCFM
Non-totex expenditure											
Pass-through costs aka non-controllable opex	£m real & £m nominal		LicenseeInputs	158-159	BPDT	Licensee		✔	✔	LicenseeInputs	RIIO-2 PCFM
~~Directly remunerated services~~											
~~Disposals net proceeds~~											
~~BPI reward/penalty~~											
~~ODIs~~											
Other revenue allowances' costs	£m real		LicenseeInputs	322-332	BPDT	Licensee		✔	✔	LicenseeInputs	RIIO-2 PCFM

GT3 SO	Units	RIIO-3						Price control revenue & notional financeability requirement	Actual financeability requirement	RIIO-2	
		Default value	Source tab	Rows	Source dataset	Provided by	Comments (source link, update procedures, etc)			Source tab	Source dataset
Other revenue allowances' cost multipliers	%		LicenseeInputs	850-855	BPDT	Licensee	Current model structure assumes same cost multipliers as in RIIO-2 hence not a requirement	✘	✘	LicenseeInputs	RIIO-2 PCFM
Finance inputs											
CAPM calculator											
iBoxx trailing average	annual real %	Annual profile	LicenseeInputs	384	WACC model	Ofgem	Dummy figures prior to SSMD publication	✔	✔	LicenseeInputs	RIIO-2 PCFM
Uplift on iBoxx trailing average	annual real %	0	LicenseeInputs	364	WACC model	Ofgem	Dummy figures prior to SSMD publication	✔	✔	LicenseeInputs	RIIO-2 PCFM
Risk-free rate	%	Annual profile	LicenseeInputs	385	WACC model	Ofgem	Dummy figures prior to SSMD publication	✔	✔	LicenseeInputs	RIIO-2 PCFM
Equity Beta	%		LicenseeInputs	366	SSMD	Ofgem	Dummy figures prior to SSMD publication	✔	✔	LicenseeInputs	RIIO-2 PCFM
Total Market Return	%		LicenseeInputs	367	SSMD	Ofgem	Dummy figures prior to SSMD publication	✔	✔	LicenseeInputs	RIIO-2 PCFM
Benchmark gearing (60%)	%		LicenseeInputs	368	SSMD	Ofgem	Dummy figures prior to SSMD publication	✔	✔	LicenseeInputs	RIIO-2 PCFM
Other finance inputs											
'Headline' cost of equity and debt profiles	%	Annual profile	Scenarios	129-140	SSMD	Ofgem	Dummy figures prior to SSMD publication	✔	✔	-	-
Notional gearing	%	60%	Scenarios	41	SSMD	Ofgem		✔	✔	LicenseeInputs	RIIO-2 PCFM
Splice index	%	Annual profile	Annual Inflation	39	OBR	Ofgem		✔	✔	-	-
Near-term RPI&CPIH inflation forecast	%	Annual profile	Scenarios	144-155	OBR	Ofgem	Alternate scenario profiles can be used	✔	✔	LicenseeInputs	RIIO-2 PCFM
Long-term CPIH inflation forecast	%	2%	Annual Inflation	41	SSMD	Ofgem	Not to be changed	✔	✔	-	-
Minimum equity issuance threshold, issuance cost, dividends as % of equity, gearing target	%	5%; 5%; 3%; 60%	Scenarios	46-49	SSMD	Ofgem	Alternate scenario profiles can be used	✔	✔	LicenseeInputs	RIIO-2 PCFM
CPIH index linked debt as % of net debt	%	0%; 25%	Scenarios	50	SSMD	Ofgem	Alternate scenario profiles can be used	✔	✔	LicenseeInputs	RIIO-2 PCFM
RPE annual growth	%	Annual profile	LicenseeInputs	388	Ofgem modelling	Ofgem	Dummy figures at business plan stages	✔	✔	LicenseeInputs	RIIO-2 PCFM
TIM & capitalisation											
Capitalisation rate	%		LicenseeInputs	165	BPDT	Licensee	Cap rates for variant & non-variant collected in separate tables within BPDT	✔	✔	LicenseeInputs	RIIO-2 PCFM
TIM incentive strength	%		Scenarios	19	DDs	Ofgem	Dummy figures at business plan stages	✔	✔	LicenseeInputs	RIIO-2 PCFM
RAV & Assets											
Pre-vesting assets											
Pre-vesting asset life	years		Scenarios	34	-	Licensee	This input acts as an override for the "years of pre-vesting depreciation remaining" input,	✔	✔	LicenseeInputs	RIIO-2 PCFM

GT3 SO	Units	RIIO-3						Price control revenue & notional financeability requirement	Actual financeability requirement	RIIO-2	
		Default value	Source tab	Rows	Source dataset	Provided by	Comments (source link, update procedures, etc)			Source tab	Source dataset
							in the event that depreciation accelerate or terminate options are selected				
Pre-vesting RAV disposals	£m real		LicenseeInputs	433	-	Licensee	RAV adjustments in the event of any forecast disposals of pre-vesting RAV assets	✔	✔	LicenseeInputs	RIIO-2 PCFM
Years of pre-vesting depreciation remaining	years		LicenseeInputs	434	-	Ofgem		✔	✔	LicenseeInputs	RIIO-2 PCFM
Post-vesting assets											
~~Post-vesting asset life, straight line (non-core)~~											
~~RIIO post-vesting RAV additions~~											
Tax											
Notional tax											
Corporation tax rate	%	Annual profile	Scenarios	55	SSMD	Ofgem		✔	✔	LicenseeInputs	RIIO-2 PCFM
General & General FYA, Special Rates & Special Rates FYA, Structures & Buildings, Deferred Revenue capital allowance rates	%	Annual profile	LicenseeInputs	409-415	-	Ofgem		✔	✔	LicenseeInputs	RIIO-2 PCFM
Capital allowance pools balances brought forwards & legacy adjustments	£m nominal	-	-	401-406	-	-	Not used, since the model calculates RIIO-2 in full and flows pool balances on to RIIO-3	✘	✘	LicenseeInputs	RIIO-2 PCFM
General & Special Rates pool opening balance revisions	£m nominal	-	LicenseeInputs	395-396	-	Licensees		✔	✔	LicenseeInputs	RIIO-2 PCFM
Tax pool allocations	%		LicenseeInputs	302-311	BPDT	Licensee		✔	✔	LicenseeInputs	RIIO-2 PCFM
Tax trigger and clawback											
Projected/actual adjusted debt & net interest cost	£m real		-	390-391	-	-	Not used for BPFM	✘	✘	LicenseeInputs	RIIO-2 PCFM
Tax allowance adjustment & tax trigger events	£m real		-	392-393	-	-	Not used for BPFM	✘	✘	LicenseeInputs	RIIO-2 PCFM
Notional gearing for tax clawback gearing test	%		-	398	-	-	Not used for BPFM	✘	✘	LicenseeInputs	RIIO-2 PCFM
Tax trigger deadbands	£m real		-	399	-	-	Not used for BPFM	✘	✘	LicenseeInputs	RIIO-2 PCFM
Financeability											
Actuals											
~~Statutory depreciation~~											
~~BPDT capex input~~											

GT3 SO	Units	RIIO-3						Price control revenue & notional financeability requirement	Actual financeability requirement	RIIO-2	
		Default value	Source tab	Rows	Source dataset	Provided by	Comments (source link, update procedures, etc)			Source tab	Source dataset
~~Additional borrowing cost assumption (for actual company debt)~~											
~~Summary inputs~~											
~~Debt sheets yellow inputs: New debt issuance profile~~											
~~Debt sheets yellow inputs: Adjustments for conversion to Regulatory (RIIO-1) Definition of Net Debt (Time Weighted Average)~~											
~~Debt sheets yellow inputs: Adjustments for conversion to Regulatory (RIIO-1) Definition of Net Interest~~											
~~Debt sheets yellow inputs: Costs excluded from Regulatory (RIIO-1) Definition of Net Interest~~											
~~Debt sheets yellow inputs: Conversion to Regulatory (RIIO-1) Definition of Net Debt (Financial Year End)~~											

2C. ET data dictionary

ET3	Units	RIIO-3						Price control revenue & notional financeability requirement	Actual financeability requirement	RIIO-2	
		Default value	Source tab	Rows	Source dataset	Provided by	Comments (source link, update procedures, etc)			Source tab	Source dataset
Expenditure inputs											
Totex expenditure											
Non-variant allowances	£m real		LicenseeInputs	12-17	BPDT	Licensee		✔	✔	LicenseeInputs	RIIO-2 PCFM
Variant allowances	£m real		LicenseeInputs	22-129	BPDT	Licensee		✔	✔	LicenseeInputs	RIIO-2 PCFM
Variant allowances: attributes	mixed		LicenseeInputs	137-244	BPDT	Licensee		✔	✔	LicenseeInputs	RIIO-2 PCFM
Variant allowances: totex allocations	%		LicenseeInputs	274-921	BPDT	Licensee		✔	✔	LicenseeInputs	RIIO-2 PCFM
Actual totex	£m real		LicenseeInputs	1016-1029	No source	Licensee	Split into actuals for capitalisation rate allocations 1 & 2. Not required for submission	✖	✖	LicenseeInputs	RIIO-2 PCFM
Non-totex expenditure											
Pass-through costs aka non-controllable opex	£m real & £m nominal		LicenseeInputs	251-254	BPDT	Licensee		✔	✔	LicenseeInputs	RIIO-2 PCFM
Directly remunerated services	£m real		LicenseeInputs	258-261	BPDT	Licensee		✔	✔	LicenseeInputs	RIIO-2 PCFM
Disposals net proceeds	£m real		LicenseeInputs	270	BPDT	Licensee		✔	✔	LicenseeInputs	RIIO-2 PCFM
BPI reward/penalty	£m real		LicenseeInputs	1033	-	Ofgem	Not required for submissions	✖	✖	LicenseeInputs	RIIO-2 PCFM
ODIs	£m real		LicenseeInputs	1035-1040	-	Ofgem	Not required for submissions	✖	✖	LicenseeInputs	RIIO-2 PCFM
Other revenue allowances' costs	£m real		LicenseeInputs	1044-1053	BPDT	Licensee		✔	✔	LicenseeInputs	RIIO-2 PCFM
Other revenue allowances' cost multipliers	%		LicenseeInputs	1058-1067	BPDT	Licensee	Current model structure assumes same cost multipliers as in RIIO-2 hence not a requirement	✖	✖	LicenseeInputs	RIIO-2 PCFM
Finance inputs											
CAPM calculator											
iBoxx trailing average	annual real %	Annual profile	LicenseeInputs	1113	WACC model	Ofgem	Dummy figures prior to SSMD publication	✔	✔	LicenseeInputs	RIIO-2 PCFM
Uplift on iBoxx trailing average	annual real %	0	LicenseeInputs	1093	WACC model	Ofgem	Dummy figures prior to SSMD publication	✔	✔	LicenseeInputs	RIIO-2 PCFM
Risk-free rate	%	Annual profile	LicenseeInputs	1114	WACC model	Ofgem	Dummy figures prior to SSMD publication	✔	✔	LicenseeInputs	RIIO-2 PCFM
Equity Beta	%		LicenseeInputs	1095	SSMD	Ofgem	Dummy figures prior to SSMD publication	✔	✔	LicenseeInputs	RIIO-2 PCFM
Total Market Return	%		LicenseeInputs	1096	SSMD	Ofgem	Dummy figures prior to SSMD publication	✔	✔	LicenseeInputs	RIIO-2 PCFM
Benchmark gearing (60%)	%		LicenseeInputs	1097	SSMD	Ofgem	Dummy figures prior to SSMD publication	✔	✔	LicenseeInputs	RIIO-2 PCFM
Other finance inputs											

ET3	Units	RIIO-3						Price control revenue & notional financeability requirement	Actual financeability requirement	RIIO-2	
		Default value	Source tab	Rows	Source dataset	Provided by	Comments (source link, update procedures, etc)			Source tab	Source dataset
'Headline' cost of equity and debt profiles	%	Annual profile	Scenarios	129-140	SSMD	Ofgem	Dummy figures prior to SSMD publication	✔	✔	-	-
Notional gearing	%	60%	Scenarios	41	SSMD	Ofgem		✔	✔	LicenseeInputs	RIIO-2 PCFM
Splice index	%	Annual profile	Annual Inflation	39	OBR	Ofgem		✔	✔	-	-
Near-term RPI&CPIH inflation forecast	%	Annual profile	Scenarios	144-155	OBR	Ofgem	Alternate scenario profiles can be used	✔	✔	LicenseeInputs	RIIO-2 PCFM
Long-term CPIH inflation forecast	%	2%	Annual Inflation	41	SSMD	Ofgem	Not to be changed	✔	✔	-	-
Minimum equity issuance threshold, issuance cost, dividends as % of equity, gearing target	%	5%; 5%; 3%; 60%	Scenarios	46-49	SSMD	Ofgem	Alternate scenario profiles can be used	✔	✔	LicenseeInputs	RIIO-2 PCFM
CPIH index linked debt as % of net debt	%	0%; 25%	Scenarios	50	SSMD	Ofgem	Alternate scenario profiles can be used	✔	✔	LicenseeInputs	RIIO-2 PCFM
RPE annual growth	%	Annual profile	LicenseeInputs	879	Ofgem modelling	Ofgem	Dummy figures at business plan stages	✔	✔	LicenseeInputs	RIIO-2 PCFM
TIM & capitalisation											
Capitalisation rate	%		LicenseeInputs	265-266	BPDT	Licensee	Cap rates for variant & non-variant collected in separate tables within BPDT	✔	✔	LicenseeInputs	RIIO-2 PCFM
TIM incentive strength	%		Scenarios	19	DDs	Ofgem	Dummy figures at business plan stages	✔	✔	LicenseeInputs	RIIO-2 PCFM
RAV & Assets											
Pre-vesting assets											
Pre-vesting asset life	years		Scenarios	34	-	Licensee	This input acts as an override for the "years of pre-vesting depreciation remaining" input, in the event that depreciation accelerate or terminate options are selected	✔	✔	LicenseeInputs	RIIO-2 PCFM
~~Pre-vesting RAV disposals~~											
Years of pre-vesting depreciation remaining	years		LicenseeInputs	1171	-	Ofgem		✔	✔	LicenseeInputs	RIIO-2 PCFM
Post-vesting assets											
Post-vesting asset life (pre-RIIO-3)	years	45years	LicenseeInputs	1176	-	Licensee		✔	✔	LicenseeInputs	RIIO-2 PCFM
Accelerated post-vesting asset life	years	45years	LicenseeInputs	1177	-	Licensee		✔	✔	LicenseeInputs	RIIO-2 PCFM
Project assets (except TIRG)											
PLUGS asset life	years	18years	LicenseeInputs	1189	-	Ofgem		✔	✔	LicenseeInputs	RIIO-2 PCFM
England-Scotland interconnector asset life applied	years	17.5years	LicenseeInputs	1196	-	Ofgem		✔	✔	LicenseeInputs	RIIO-2 PCFM

ET3	Units	RIIO-3						Price control revenue & notional financeability requirement	Actual financeability requirement	RIIO-2	
		Default value	Source tab	Rows	Source dataset	Provided by	Comments (source link, update procedures, etc)			Source tab	Source dataset
TIRG											
TIRG allocation to "General" pool	%	10.75%	LicenseeInputs	1215	-	Ofgem		✔	✔	LicenseeInputs	RIIO-2 PCFM
TIRG allocation to "Special Rate" pool	%	71.84%	LicenseeInputs	1216	-	Ofgem		✔	✔	LicenseeInputs	RIIO-2 PCFM
Tax											
Notional tax											
Corporation tax rate	%	Annual profile	Scenarios	55	SSMD	Ofgem		✔	✔	LicenseeInputs	RIIO-2 PCFM
General & General FYA, Special Rates & Special Rates FYA, Structures & Buildings, Deferred Revenue capital allowance rates	%	Annual profile	LicenseeInputs	1138-1144	-	Ofgem		✔	✔	LicenseeInputs	RIIO-2 PCFM
Capital allowance pools balances brought forwards & legacy adjustments	£m nominal	-	-	1130-1135	-	-	Not used, since the model calculates RIIO-2 in full and flows pool balances on to RIIO-3	✖	✖	LicenseeInputs	RIIO-2 PCFM
General & Special Rates pool opening balance revisions	£m nominal	-	LicenseeInputs	1124-1125	-	Licensees		✔	✔	LicenseeInputs	RIIO-2 PCFM
Tax pool allocations	%		LicenseeInputs	925-934	BPDT	Licensee		✔	✔	LicenseeInputs	RIIO-2 PCFM
Tax trigger and clawback											
Projected/actual adjusted debt & net interest cost	£m real		-	1119-1120	-	-	Not used for BPFM	✖	✖	LicenseeInputs	RIIO-2 PCFM
Tax allowance adjustment & tax trigger events	£m real		-	1121-1122	-	-	Not used for BPFM	✖	✖	LicenseeInputs	RIIO-2 PCFM
Notional gearing for tax clawback gearing test	%		-	1127	-	-	Not used for BPFM	✖	✖	LicenseeInputs	RIIO-2 PCFM
Tax trigger deadbands	£m real		-	1128	-	-	Not used for BPFM	✖	✖	LicenseeInputs	RIIO-2 PCFM
Financeability											
Actuals											
Statutory depreciation	£m real		LicenseeInputs	940	BPDT	Licensee		✖	✔	LicenseeInputs	BPDT
BPDT capex input	£m real		LicenseeInputs	941	BPDT	Licensee		✖	✔	LicenseeInputs	BPDT
Additional borrowing cost assumption (for actual company debt)	£m real		LicenseeInputs	942	BPDT	Licensee		✖	✔	LicenseeInputs	BPDT
Summary inputs	mixed		LicenseeInputs	947-953	BPDT	Licensee		✖	✔	LicenseeInputs	BPDT
Debt sheets yellow inputs: New debt issuance profile	mixed		LicenseeInputs	956-966	BPDT	Licensee		✖	✔	LicenseeInputs	BPDT

ET3	Units	RIIO-3						Price control revenue & notional financeability requirement	Actual financeability requirement	RIIO-2	
		Default value	Source tab	Rows	Source dataset	Provided by	Comments (source link, update procedures, etc)			Source tab	Source dataset
Debt sheets yellow inputs: Adjustments for conversion to Regulatory (RIIO-1) Definition of Net Debt (Time Weighted Average)	£m nominal		LicenseeInputs	969-975	BPDT	Licensee		✘	✔	LicenseeInputs	BPDT
Debt sheets yellow inputs: Adjustments for conversion to Regulatory (RIIO-1) Definition of Net Interest	£m nominal		LicenseeInputs	978-987	BPDT	Licensee		✘	✔	LicenseeInputs	BPDT
Debt sheets yellow inputs: Costs excluded from Regulatory (RIIO-1) Definition of Net Interest	£m nominal		LicenseeInputs	990-999	BPDT	Licensee		✘	✔	LicenseeInputs	BPDT
Debt sheets yellow inputs: Conversion to Regulatory (RIIO-1) Definition of Net Debt (Financial Year End)	£m nominal		LicenseeInputs	1002-1008	BPDT	Licensee		✘	✔	LicenseeInputs	BPDT

3. Details of pre-set scenarios

3.1   In the table below, for the Base case scenario each scenario setting is described. For subsequent scenarios only the items which differ from the base case are described.

Scenario name	Description	Notional modelling settings	Financeability settings

1. Base case	Ofgem base case.	**Totex, TIM and capitalisation**
		• User multiplier for allowed totex: 100%
		• User multiplier for actual totex: 100%
		• TIM incentive rate: 50%
		• RIIO-3 cap rates from *Scenarios* or *LicenseeInputs?:* LicenseeInputs
		  o If *Scenarios*, Bucket 1 cap rate: 50%
		  o If *Scenarios*, Bucket 2 cap rate: 70%
		  o If *Scenarios*, Repex cap rate: 100%
		Depreciation
		• RIIO-3 treatment: asset life input or custom profile?: Asset life input
		  o If asset life input: base case, accelerate or terminate?: Base case
		• RIIO-3 additions asset life: 45
		• RIIO-2 additions accelerated asset life (inactive): 45
		  o If terminate, input year of final depreciation: 2050
		Allowed cost of capital
		• Allowed cost of Debt input: scenario input or Licensee input?: Scenario input
		  o If scenario input, CoD figures to use: Base
		• Allowed cost of equity input: scenario input or Licensee input?: Scenario input
		  o If scenario input, CoE figures to use: Base
		• Notional gearing: 60%
		Finance
		• Forecast near-term RPI debt inflation: Jun'24 BPDT
		• Forecast near-term CPIH debt inflation: Jun'24 BPDT
		• Minimum equity issuance threshold: RIIO-2
		• Equity issuance costs: 5.0%
		• Assumed dividends as % of equity: 3.0%
		• Equity issuance gearing target: 60%
		• Annual interest rate inputs for actual debt: Base case
		• SSMC cost of debt inflation approach: Status quo
		Tax
		• Corporation tax rate: 25%
		• Include tax clawback revenue impact?: Exclude
		ODIs and incentives
		• Incentive reward/penalty as a % of RoRE: 0%
			Notional company parameters
			• Totex option: Fast/Slow
			• Apply lagged revenue adjustment?: FALSE
			• Include RIIO-2 AIP revenue adjustments?: FALSE
			• Include DRS net revenue?: TRUE
			• Use regulatory or statutory depreciation in financial statements?: Regulatory
			Actual company parameters
			• Totex option: Capex/Opex
			• Rating simulator apply excess fast money adjustment: TRUE
			• Apply lagged revenue adjustment?: FALSE
			• Include RIIO-2 AIP revenue adjustments?: FALSE
			• Include DRS net revenue?: [uses the value selected for notional]
			• Use regulatory or statutory depreciation in financial statements?: Statutory
			• RIIO-2 closing gearing target: BPDT or user defined?: BPDT
			  o If BPDT, calculated from debt sheets or fixed from mirror table?: Debt sheets
			  o If user defined, select closing gearing target: User defined #1
			• Equity issuance: BPDT actual or model calculation?: BPDT actual
			  o If modelled, based on previous year closing gearing or user defined?: Closing gearing
			    ▪ If user defined, select equity issuance % target: Equal to notional gearing
			    ▪ If user defined, select equity issuance cost: 3.0%
			  o If modelled, select min. issuance threshold: Equity issuance base: 5%
			• Dividends: BPDT actual or model calculation: BPDT actual
			  o If modelled, based on cashflow or user defined?: User defined %
			    ▪ If based on cashflow, select dividend cap %: 5.0%
			    ▪ If user defined, select dividends as % of equity: 3.0%

2. High interest rate	Compared to the base case, assumed 2% increase in the interest rates, feeding through the CoD and Cost of Equity (CoE) forecast.	• <u>Cost of debt:</u> "CoD High Int. Rate" • <u>Cost of equity:</u> "CoE High Int. Rate"	• <u>RIIO-2 closing gearing target: BPDT or user defined?:</u> BPDT o <u>If BPDT, calculated from debt sheets or fixed from mirror table?:</u> Mirror table • <u>Equity issuance: BPDT actual or model calculation?:</u> Model calculation <u>Dividends: BPDT actual or model calculation:</u> Model calculation
3. Low interest rate	Compared to the base case, assumed 2% decrease in the interest rates, feeding through the CoD and Cost of Equity (CoE) forecast.	• <u>Cost of debt:</u> "CoD Low Int. Rate" • <u>Cost of equity:</u> "CoE Low Int. Rate"	Same as Scenario 2. High interest rate
4. High inflation	Compared to the base case, assumed 2% increase in both RPI and CPIH inflation rates.	• <u>Forecast RPI:</u> "RPI High Infl." • <u>Forecast CPIH:</u> "CPIH High Infl."	Same as Scenario 2. High interest rate
5. Low inflation	Compared to the base case, assumed 2% decrease in both RPI and CPIH inflation rates.	• <u>Forecast RPI:</u> "RPI Low Infl." • <u>Forecast CPIH:</u> "CPIH Low Infl."	Same as Scenario 2. High interest rate
6. High CPIH inflation divergence	Compared to the base case, assumed 0.5% increase in the differential between RPI and CPIH inflation rates. Assuming constant RPI, this corresponds to a 0.5% decrease in CPIH inflation rate.	<u>Forecast CPIH:</u> "CPIH High Diverg."	Same as Scenario 2. High interest rate
7. Low CPIH inflation divergence	Compared to the base case, assumed 0.5% decrease in the differential between RPI and CPIH inflation rates. Assuming constant RPI, this corresponds to a 0.5% increase in CPIH inflation rate.	<u>Forecast CPIH:</u> "CPIH Low Diverg."	Same as Scenario 2. High interest rate
8. High RPI inflation divergence	Compared to the base case, assumed 0.5% increase in the differential between RPI and CPIH inflation rates. Assuming constant CPIH, this corresponds to a 0.5% increase in RPI inflation rate.	<u>Forecast RPI:</u> "RPI High Diverg."	Same as Scenario 2. High interest rate
9. Low RPI inflation divergence	Compared to the base case, assumed 0.5% decrease in the differential between RPI and CPIH inflation rates. Assuming constant CPIH, this corresponds to a 0.5% decrease in RPI inflation rate.	<u>Forecast RPI:</u> "RPI Low Diverg."	Same as Scenario 2. High interest rate
10. Totex outperformance	Assumed 10% totex underspend in each year.	<u>Totex performance:</u> "Totex outperf."	Same as Scenario 2. High interest rate
11. Totex underperformance	Assumed 10% totex overspend in each year.	<u>Totex performance:</u> "Totex underperform."	Same as Scenario 2. High interest rate
12. High RoRE	Compared to the base case, increase in outperformance revenue equal to 2% RoRE.	<u>Expected outperformance:</u> "RoRE outperf. High"	Same as Scenario 2. High interest rate
13. Low RoRE	Compared to the base case, decrease in outperformance revenue equal to 2% RoRE .	<u>Expected outperformance:</u> "RoRE outperf. Low"	Same as Scenario 2. High interest rate

14. High index-linked debt	Compared to the base case, 10% increase in the proportion of inflation index linked debt (resulting in 35% CPIH ILD).	Index-linked debt as a percentage of net debt: "CPIH ILD High"	Same as Scenario 2. High interest rate
15. Low index-linked debt	Compared to the base case, 10% decrease in the proportion of inflation index linked debt (resulting in 15% CPIH ILD).	Index-linked debt as a percentage of net debt: "CPIH ILD Low"	Same as Scenario 2. High interest rate
16. Distribution reduction (ET only)	Assumed dividends as a % of equity = 1.5%	Assumed dividends as % of equity: 1.5%	Same as Scenario 2. High interest rate

3.2   Recommended scenario settings for actual company stress tests

Actual debt settings				
	BPDT (must be used for base case scenario)	% dividend	Cash flow dividend	User defined
RIIO-2 closing gearing target	BPDT	BPDT	BPDT	User defined
If BPDT, debt sheets calc or mirror table fixed input	Debt sheets	Mirror table	Mirror table	NA
If user defined, closing gearing target	NA	NA	NA	User defined #1
Equity issuance	BPDT	Model calculation	Model calculation	Model calculation
If modelled, based on previous yr closing gearing, or user defined	NA	Closing gearing	Closing gearing	User defined
If user defined, equity issuance % target	NA	NA	NA	User defined #1
If user defined, equity issuance cost	NA	NA	NA	User defined #1
If modelled, min. issuance threshold	NA	Base: 5%	Base: 5%	Base: 5%
Dividends	BPDT	Model calculation	Model calculation	Model calculation
If modelled, cashflow based or user defined %	NA	User defined %	Cash flow	User defined %
If cashflow, dividend cap %	NA	NA	Cap 1	NA
If user defined, dividends as % of equity	NA	User defined #1	NA	User defined #1

3.3   The cells shown as "NA" in the table above identify inputs that, although populated in the model, are not active in the actual debt calculations under the suggested settings.

3.4   These "NA" inputs should still be left populated in the model, to prevent errors in the Scenarios tab and subsequent calculations.

4. Specific assumptions and unused model features

4.1   This section provides details on some of the specific assumptions and unused features that are baked-in to the model. It is important to keep these in mind when using the model.

4.2   We are happy to discuss any aspects of these limitations, and to consider revising the model structure where appropriate for future iterations.

Issue	Tab	Current status
Key fixed assumptions		
RIIO-3 fixed rate debt (notional)	*Finance&Tax*	We have tied the inflation of fixed rate debt to CPIH long-term forecast. There is no option to change this.
2-year revenue lag	*FinInput*	The model has a hard-coded assumption that for financeability assessment a lag of 2 years is applied to ODI and expected outperformance revenue on an NPV-neutral basis (*FinInput* cell I134).
Statutory depreciation asset life	*FinancialStatements*	The model links asset life for statutory depreciation calculations (*FinancialStatements* cell GD I288, GT I295, ET I292) to the default post-vesting asset life assumption.
Not-connected features		
Legacy adjustments	*LicenseeInputs*	For business plan submissions, we do not intend to model legacy adjustments from RIIO-2 which would affect years 1 and 2 of RIIO-3. Hence these input sections in the RIIO-3 inputs have been greyed out and are not linked up.
AR_t	*LicenseeInputs, AR, LiveResults, SavedResults*	For business plan submissions, we do not intend to model true-ups as part of the Annual Iteration Process. Hence these sections of the model have not been reviewed.
Bill calculation	*RIIO-1*	For draft business plan submissions, we have not incorporated an estimation of bill impacts in the BPFM. We will develop this in time for the final business plan BPFM.

5. "Actual debt modelling" structure in the model

5A. Overview

5.1 The model can derive debt and financeability results for the base case and stress tests, for both the notional company and the actual company. This is achieved with the interaction of a number of worksheets, as exemplified in the diagram above. Some of these worksheets are solely used for this purpose and therefore can be considered as stand-alone with respect to other parts of the model (namely, the "main" PCFM sheets for notional revenue calculations). These are the "BPDT debt sheets", a copy of the BPDT finance sheets that are included and integrated with the rest of the BPFM, with the aim of replicating the actual base case financial submission as per BPDT, as well as for the dynamic modelling of actual stress test scenarios.

5.2 The modelling of actual debt and financeability in the BPFM can be summarised in the following steps in (Figure 1: Flowchart 1):

a) Information from the embedded debt instruments dataset (F6) is exported into calculation sheets where annual embedded debt balances and interest payments are calculated for each of the instrument, categorised alternatively as "Fixed Rate Debt" (F3), "Floating Rate Debt" (F4) or "Inflation Linked Debt" (F5).

b) Embedded debt volumes and interest payments by instrument are summarised on a time-weighted average basis. Information on forecasted new debt issuance is added in to derive total historic and forecasted debt volumes and interest payments. Equity issuance and dividend payments are also included (F2a).

Embedded and new debt balances are also calculated for the start and end of each year (F2b).

c) Embedded and new debt volumes and interest payments are recalculated to derive average debt volumes and interest payments by debt type under the regulatory definition and consistently with the methodology used in the Finance&Tax (actual) sheet (where the dynamic actual debt derivation takes place). In particular, this requires calculating average debt volumes as the simple average of "Opening debt (after equity issuance)" and "Closing debt (before interest, tax and dividends)". This recalculation is also used to derive, on the same basis, the average cost of new debt by type and the assumed proportion of new debt issuance by type (F1).

d) All inputs for actual financeability modelling are collated so that the live financeability scenario can be built (FinInput). These inputs can be categorised as follows:

• BPDT dynamic inputs (scenario dependent): these are sourced from the "BPDT debt sheets", are derived from live calculations and therefore their values can change in different scenarios. These inputs are used in all scenarios.

- BPDT fixed inputs: these are sourced from the "BPDT mirror table" in the "Licensee input" tabs. These are hardcoded inputs as per submitted BPDT and as such represent inputs for use in the base case only, or inputs held constant across all scenarios at the value from the BPDT submission.

- User defined parameters: sourced from Scenarios tab, these are customised and additional to the BPDT inputs and can be used to define alternative settings for use in stress test scenarios.

e) Actual debt is calculated in the Finance&Tax (actual) tab using the appropriate inputs from the FinInput tab. This actual debt calculation also sources information from the notional PCFM sheets (for example, for RAV, revenue and operational costs).

f) Actual financial information from Finance&Tax (actual) is used to calculate financial statements, financial ratios and estimated credit rating for the actual company in the selected scenario (FinancialStatements, FinancialRatios and RatingSimulator).

Figure 1: Flowchart 1

ED2 LiMo DEBT SHEETS DIAGRAM:
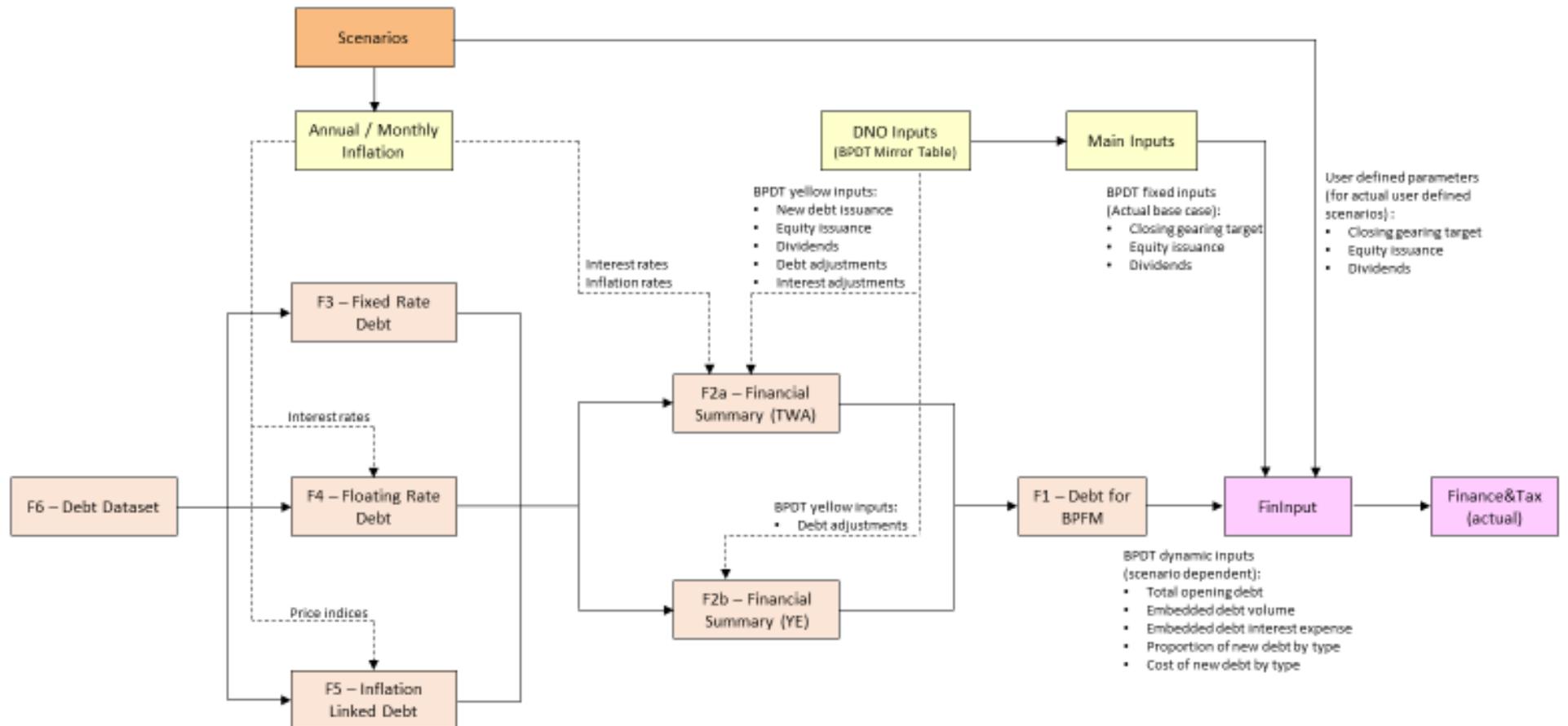
5.3   Note that:

- The interest rates and inflation inputs for the "BPDT debt sheets" are sourced from the Scenarios tab. This means that the actual company inputs for embedded and new debt (namely, embedded debt volumes and interest payments, cost of new debt and proportion of new debt issuance by type) are dynamically recalculated to reflect the interest rates and inflation assumptions in the selected scenario and are consistent with the assumptions used for the "notional" revenue calculation in the PCFM sheets.

- The BPDT "Financial Summary" tabs (F2a and F2b) are re-built in the model by sourcing the "yellow input" cells from the "BPDT mirror table" in the Licensee input tabs. These yellow inputs mainly relate to new debt issuance amounts and adjustments to derive debt and interest payments under the regulatory definitions.

5B. Pre-set actual debt setting

5.4   The objective of the Finance&Tax (actual) tab is the derivation of actual debt balances for the base case, as well as stress test scenarios. This can be achieved by choosing between the four "actual debt settings" outlined in section 3.2 above.

5.5   We suggest using the "BPDT" settings for the Base case and one between "% dividend" and "cash flow dividend" for the stress test scenarios. The "user defined" scenario is another option available, allowing to customise most parameters from the Scenarios tab. These proposed settings do not prevent Licensees from defining alternative settings, as deemed appropriate to model their forecasted actual company financial structure, and use these for Base case and/or stress tests.

5.6   The proposed actual debt settings, their rationale and suggested use are briefly summarised below:

- "BPDT": the aim of this actual debt setting is to replicate in the BPFM the actual financial forecasts provided in the BPDT submission, so that the model can ascertain the associated financeability results. Most of the financial information is directly sourced from the BPDT mirror table in the Licensee input tabs. It is suggested to use this setting only in conjunction with the "Base case". However, the use of the "BPDT" settings is not sufficient to replicate the BPDT financial forecast if the new debt emissions in the submitted template are not consistent with the new debt requirement calculated endogenously in the BPFM. This mismatch can be mitigated by running the "AlignActualDebt" macro, a tool that derives an adjustment term to the BPFM actual debt requirement, thus aligning the BPFM actual company base case to the BPDT. Further details and instructions are provided in the below section 5H. Alignment of BPFM actual debt with BPDT submission.

- "Cashflow dividend": it is built for the purpose of modelling stress tests for the actual company. The difference with respect to "BPDT" is that dividends and equity issuance are not predetermined at the submitted BPDT values but are dynamically recalculated in the model. In particular, dividends are

dependent on the annual cash flow and are subjected to achieving a pre-determined closing gearing target.

- "% dividend": it can also be used for modelling stress tests for the actual company, as an alternative approach to the previous "Cashflow dividend". Similarly, dividends and equity issuance are dynamically recalculated, although dividends are calculated as a pre-determined percentage of equity RAV at the end of the year and do not depend on the closing gearing target. Equity (or debt) issuance can be triggered at the start of each year as a balancing amount (if any pre-determined issuance threshold is met), to ensure that, as a result, the previous year's closing gearing target is attained.

- "User defined": The purpose of this financeability scenario is to provide a further, more "customised" approach to actual debt modelling, as the user can pre-set all relevant parameters in the Scenarios tab. The methodology implemented in Finance&Tax (actual) is closer to the notional approach in the Finance&Tax sheet, as dividends are driven by a pre-defined percentage of closing equity RAV and equity issuance is determined using an "equity issuance gearing target", so that equity issuance is not directly linked to the previous year's dividends and closing gearing target. An "equity issuance threshold" can also apply.

5C. Actual debt determination in "Finance&Tax (actual)"

5.7   Flowchart 2 accompanies this section.

5.8   In the Finance&Tax (actual) tab, actual debt is modelled starting from year 2016 up until year 2028. The 2016-2021 period solely comprises embedded debt, whilst new debt forecasts are included only from year 2022 onwards.

5.9   The calculations in the tab are exemplified by the diagram below, which focuses on the 2022-2028 period but is also applicable to the 2016-2021 period, by setting "Average new debt" to zero (hence "Interest payments" only includes the "pink" embedded debt interest amounts).

5.10   Total opening net debt in 2016 is sourced from the BPDT debt sheets. In 2016-2021 equity issuance, associated transaction costs and dividends are directly sourced from the BPDT mirror table irrespective of scenario selection (therefore the "Actual (BPDT)" diagram further down below is applicable to all scenarios in the 2016-2021 period). Interest payments on embedded debt are sourced from the debt sheets and are not scenario dependant either[1].

5.11   The closing debt balance at the end of each year is therefore determined by the financial cash flows as sourced from the BPDT debt sheets and mirror table as applicable, together with the operational

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[1] Except for the values in 2021, as the stress test assumptions on inflation and interest rates apply starting from the end of January 2021. This is consistent with the start of the forecasting period in the SSMD version of the WACC allowance model.

cash flows from the "notional" PCFM sheets (with the exception of actual price control revenue, sourced from the "pink" RevenueSummary tab).

5.12   The modelling of actual new debt starts in year 2022 and is also exemplified in the diagram above. "Opening net debt" in year 2022 is re-set at the value provided in the BPDT debt sheets and, at that point, only includes embedded debt.

5.13   "Equity (debt) issuance" is determined according to the selected financeability settings (discussed in the following sections). The sum of "Opening net debt" and "Equity (debt)" issuance gives the value of "Opening net debt (after equity issuance)".

Figure 2: Flowchart 2
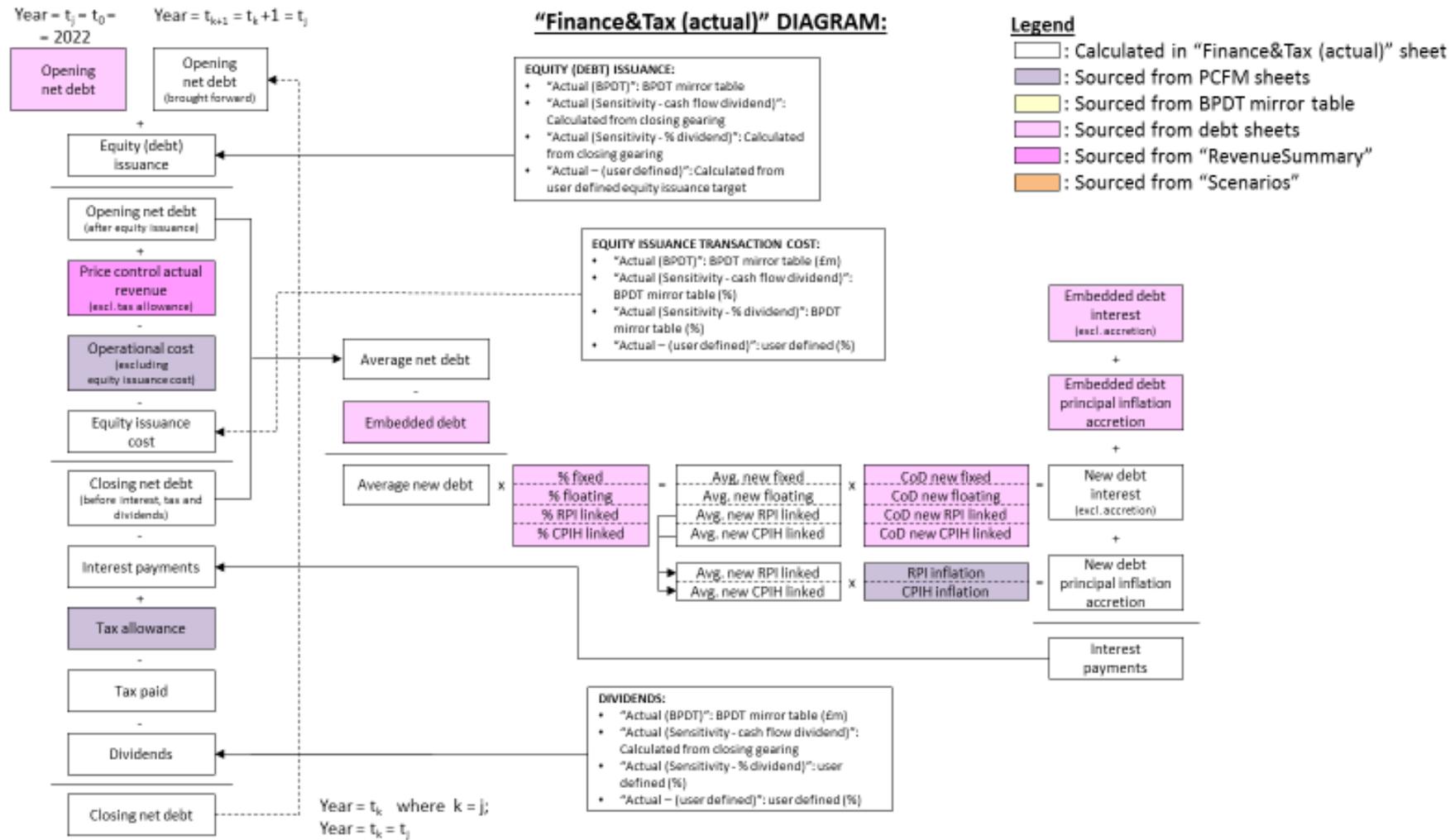
5.14   By adding the Price control actual revenue (excluding tax allowance) (from the RevenueSummary tab) and deducting operational costs (from the notional PCFM tabs) and equity issuance costs (also dependent on the selected financeability settings), the value of "Closing net debt (before interest, tax and dividends)" is determined.

5.15   At this point "Average net debt" can be calculated as the average of "Opening net debt after equity issuance" and "Closing net debt (before interest, tax and dividends)". This is used to determine interest payments on new debt as follows:

  a)   The "Average new debt" requirement is calculated by deducting from "Average net debt" the corresponding average "Embedded debt" value as sourced from the debt sheets.

  b)   The average new debt values for the four types of debt (fixed rate, floating rate, RPI linked and CPIH linked) are determined by multiplying the "Average new debt" requirement by the "proportion of new debt issuance by type" factors, sourced from the debt sheets.

  c)   Each new debt value is multiplied by the applicable cost of debt, thus providing the interest payments on types of new debt (excluding principal accretion).

  d)   Average RPI and CPIH linked debt values are multiplied by the applicable inflation rate, thus determining the principal inflation accretion on new debt.

5.16   "Interest payments" is therefore determined by aggregating total interest on new debt with total interest on embedded debt, as sourced from the debt sheets.

5.17   After "Interest payments" are calculated, tax and dividends are the only remaining components to obtain closing actual debt. The net tax impact on debt is "Tax allowance" minus "Tax paid". The former is sourced from the notional PCFM sheets, the latter is determined from the tax calculation included in this Finance&Tax (actual) sheet.

5.18   Finally, dividends are determined according to the methodology applied in the selected financeability setting (also detailed in the following sections).

5.19   1.77   The closing value of total actual debt is therefore "Closing net debt (before interest, tax and dividends)" minus "Interest payments", plus net taxes and minus "Dividends". This value is carried forward to the start of the next year, as the debt calculation process is iterated until the end of RIIO-2.

5D. "BPDT" actual debt settings

5.20   Flowchart 3 accompanies this section

5.21   Under the " BPDT" settings, the derivation of actual debt in Finance&Tax (actual) proceeds as described in the previous section, with "Equity (debt) issuance", "Equity issuance cost" and "Dividends" amounts directly sourced from the "BPDT mirror table" in the LicenseeInputs.

Figure 2: Flowchart 3
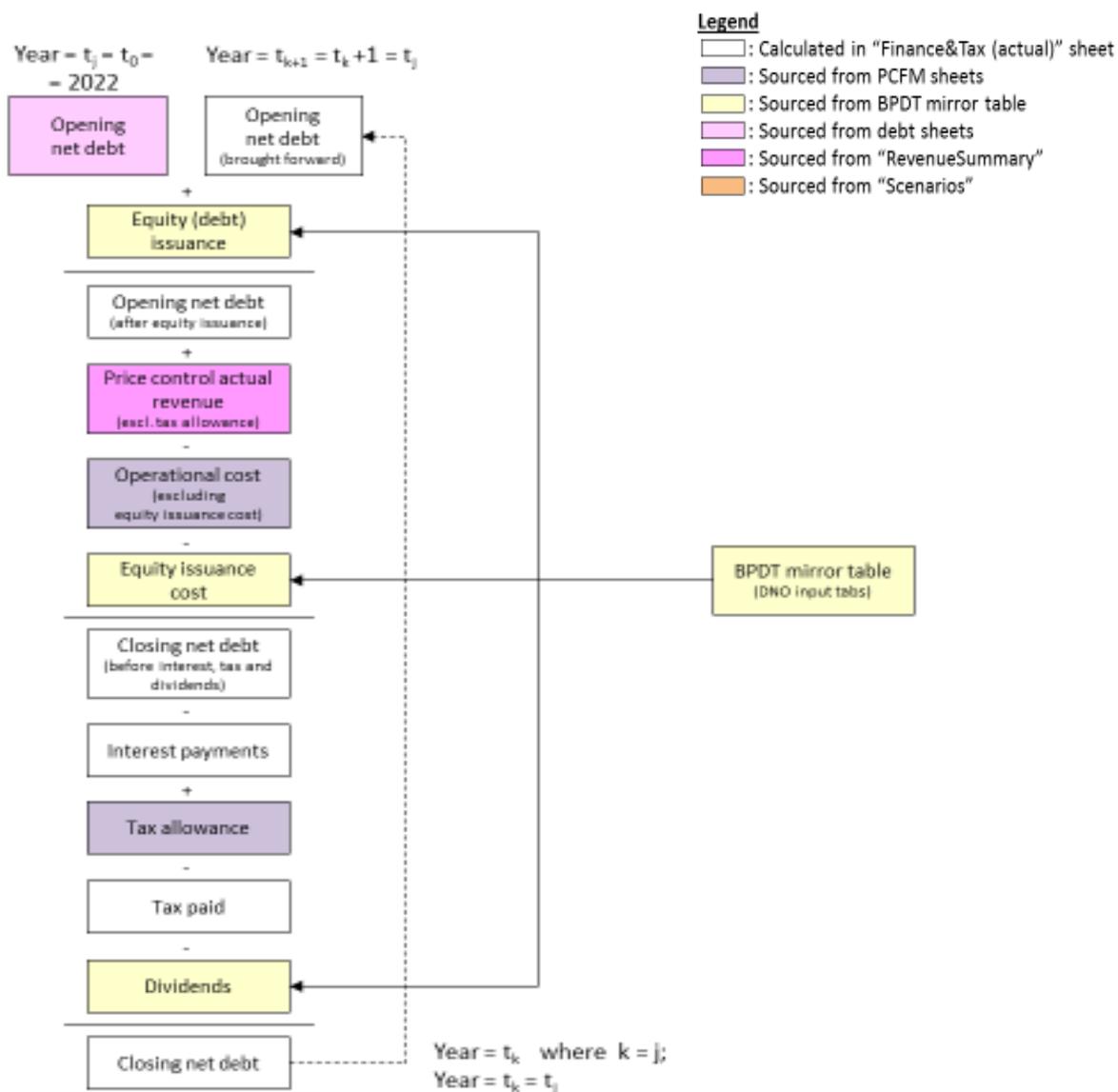
5E. "Cash flow dividend" actual debt settings

5.22   Flowchart 4 accompanies this section.

5.23   This financeability scenario differs from "BPDT" as equity issuance, the associated transaction cost and dividends are endogenously recalculated in the Finance&Tax (actual) tab, thus allowing to respond to changes in modelling assumptions in the stress tests. Note that there is no difference in how new debt requirement (or "Average new debt") and "Interest payments" are determined, as these are dynamically recalculated in all settings.

5.24   The key postulate of this methodology is that dividends at the end of each year and equity issuance at the start of the following year are determined to meet a "closing gearing target". This is sourced from the "BPDT mirror table", implying that equity issuance and dividends in the actual stress test will respond to changes in modelling assumptions, with the objective of keeping gearing at the same level of the base case.

<u>Dividends</u>

5.25   Dividends are determined by comparing "Closing net debt (before dividends)" with "Target closing debt", i.e. "Closing RAV" multiplied by "Closing gearing target". A dividend cap is also in place, so that in any year dividends cannot exceed a certain, pre-set percentage of equity RAV. The user can deactivate this cap by setting the percentage input to an arbitrarily high number.

5.26   Three cases (also highlighted in Flowchart 3) can occur:

- Case 1:

$$Closing\ net\ debt\ (before\ dividends)_t \leq Target\ closing\ debt_t$$
$$\textbf{AND}$$
$$Target\ closing\ debt_t - Closing\ net\ debt\ (before\ dividends)_t \geq Dividend\ cap_t$$

In this case, "Closing net debt (before dividends)" is lower than the target and therefore dividends can be distributed to shareholders. Furthermore, the available amount is greater than the maximum dividend allowed by the cap in the present year. As a result, dividends will be equal to the cap and closing gearing will be lower than the target.

$$Dividends_t = Dividend\ cap_t$$
$$Closing\ gearing_t < Closing\ gearing\ target_t$$

Figure 3: Flowchart 4
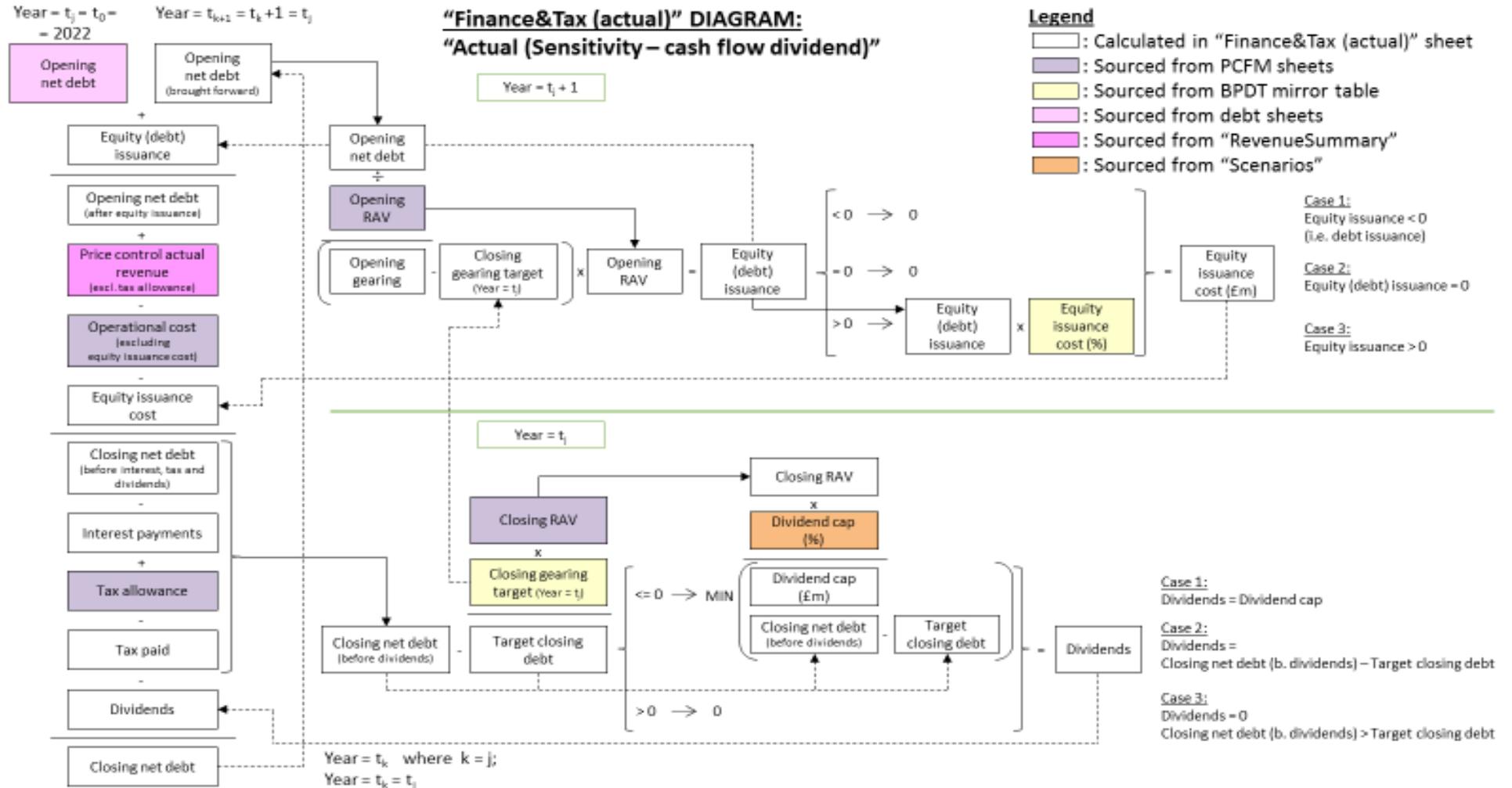
- Case 2:

$$Closing\ net\ debt\ (before\ dividends)_t \leq Target\ closing\ debt_t$$
$$\textbf{AND}$$
$$Target\ closing\ debt_t - Closing\ net\ debt\ (before\ dividends)_t <\ Dividend\ cap_t$$

In this instance, the dividend cap is not triggered and the entire sum available at the end of the year is distributed to shareholders as dividends. Closing gearing equals the target.

$$Dividends_t = Target\ closing\ debt_t - Closing\ net\ debt\ (before\ dividends)_t$$
$$Closing\ gearing_t = Closing\ gearing\ target_t$$

- Case 3:

$$Closing\ net\ debt\ (before\ dividends)_t > Target\ closing\ debt_t$$

In this third case, "Closing net debt (before dividends)" is higher than the associated target and therefore, at the end of the year, there is no residual amount available for dividend payments. Closing gearing is lower than the target.

$$Dividends_t = 0$$
$$Closing\ gearing_t < Closing\ gearing\ target_t$$

Equity issuance

5.27 Equity (or debt) issuance at the start of each year is determined as the debt variation required to attain the previous year's closing gearing target. As a result, it is closely related to the previous year's dividends, as described below in relation to the three aforementioned dividends cases:

- Case 1:

$$\frac{Opening\ net\ debt_{t+1}}{Opening\ RAV_{t+1}} = Opening\ gearing_{t+1} < Closing\ gearing\ target_t$$

In the case where dividends were limited by the cap, closing gearing was lower than the gearing target, so that closing debt volume was also lower than the associated debt target. At the start of the following year, the gearing target (as per the end of the previous year) is achieved by increasing opening debt with a negative equity issuance, i.e. by issuing debt.

$$Equity\ (debt)\ issuance_{t+1} =$$
$$= (Opening\ gearing_{t+1} - Closing\ gearing\ target_t) \cdot Opening\ RAV_{t+1} < 0$$
$$Equity\ (debt)\ issuance_{t+1} < 0 \qquad \text{i.e. debt issuance}$$
$$Equity\ issuance\ transaction\ cost_{t+1} = 0$$

as that the transaction cost is not calculated on debt issuance.

- Case 2:

$$\frac{Opening\ net\ debt_{t+1}}{Opening\ RAV_{t+1}} = Opening\ gearing_{t+1} = Closing\ gearing\ target_t$$

At the end of the previous year, dividends were paid to shareholders until closing debt equated the target. At the start of the current year, equity issuance is not triggered.

$$Equity\ (debt)\ issuance_{t+1} =$$
$$= (Opening\ gearing_{t+1} - Closing\ gearing\ target_t) \cdot Opening\ RAV_{t+1} = 0$$

$$Equity\ (debt)\ issuance_{t+1} = 0$$
$$Equity\ issuance\ transaction\ cost_{t+1} = 0$$

- Case 3:

$$\frac{Opening\ net\ debt_{t+1}}{Opening\ RAV_{t+1}} = Opening\ gearing_{t+1} > Closing\ gearing\ target_t$$

At the end of the previous year, no dividends were distributed as closing debt (before dividends) was above the target. In this case, equity issuance is required to bring gearing in line with the previous year's closing target.

$$Equity\ (debt)\ issuance_{t+1} =$$
$$= (Opening\ gearing_{t+1} - Closing\ gearing\ target_t) \cdot Opening\ RAV_{t+1} > 0$$

$$Equity\ (debt)\ issuance_{t+1} > 0 \qquad \text{i.e. equity issuance}$$
$$Equity\ issuance\ transaction\ cost_{t+1} =$$
$$= Equity\ (debt)\ issuance_{t+1} \cdot Equity\ issuance\ cost(\%)_{t+1}$$

The equity issuance transaction cost percentage is sourced from the "BPDT mirror table" and therefore is held constant across the stress tests at the same base case assumption from the BPDT submission.

5F. "% dividend" actual debt settings

5.28   Flowchart 5 accompanies this section.

5.29   Under this approach, dividends are calculated at the end of each year as a fixed percentage of closing equity RAV. This dividend percentage input is sourced and can be defined by the user in the Scenarios tab.

5.30   This means that closing gearing in each year is not constrained to a pre-set target. Nonetheless, the closing gearing target (sourced from the "BPDT mirror table") is still in place and can be attained at the start of the following year, as a result of the equity (or debt) issuance determination and subjected to any equity issuance threshold being met.

[Note: the following description assumes no equity issuance threshold in place. However, the current pre-defined settings for "% dividend" include a 5% equity issuance threshold".]

$$Dividends_t = Closing\ equity_t \cdot Dividends(\%)_t$$

5.31   1.89 For equity issuance, the same three cases of the "Actual (Sensitivity – cash flow dividend)" can occur:

- Case 1:

    $$Opening\ gearing_{t+1} < Closing\ gearing\ target_t$$

    $Equity\ (debt)\ issuance_{t+1} < 0$ i.e. debt issuance
    $Equity\ issuance\ transaction\ cost_{t+1} = 0$

- Case 2:

    $$Opening\ gearing_{t+1} = Closing\ gearing\ target_t$$

 $Equity\ (debt)\ issuance_{t+1} = 0$
    $Equity\ issuance\ transaction\ cost_{t+1} = 0$

- Case 3:

    $$Opening\ gearing_{t+1} > Closing\ gearing\ target_t$$

    $Equity\ (debt)\ issuance_{t+1} > 0$ i.e. equity issuance
    $Equity\ issuance\ transaction\ cost_{t+1} =$
    $\quad\quad = Equity\ (debt)\ issuance_{t+1} \cdot Equity\ issuance\ cost(\%)_{t+1}$

RIIO-GD/T3 BPFM Guidance

Figure 4: Flowchart 5

51
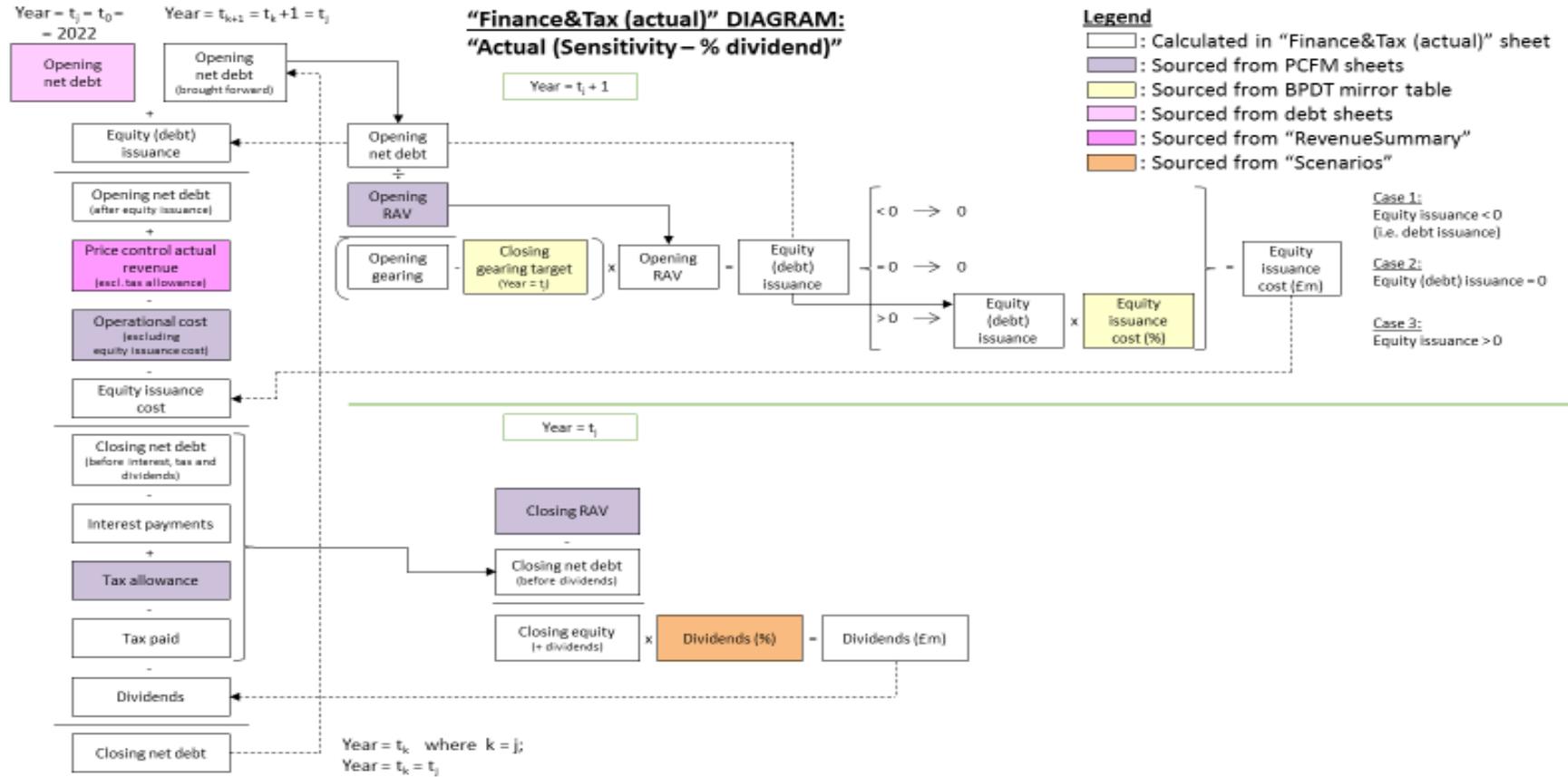
5G. "User defined" actual debt settings

5.32   Flowchart 6 accompanies this section.

5.33   This setting allows the user to create actual company forecasts alternative to the BPDT submission. All relevant parameters are pre-set in the Scenarios tab.

5.34   The user can also input a threshold value to trigger equity or debt issuance2. If the threshold value is greater than zero, the gearing target may not be met in all years.

5.35   Again, the specific features of this "user defined" scenario can be described in relation to dividends and equity issuance.

Dividends

5.36   The dividends calculation is the same as in " % dividend". Dividends are calculated as a pre-set percentage of closing equity RAV. The user can input this percentage in the Scenarios tab.

$$Dividends_t = Closing\ equity_t \cdot Dividends(\%)_t$$

Equity issuance

5.37   As in the notional Finance&Tax calculation, it is tested whether the deviation of "Opening gearing" from the "Equity issuance gearing target" exceeds, in absolute value, a pre-defined "Equity issuance threshold". In other words, the test is passed if the gearing deviation from the target is beyond the threshold, both on the upside as well as on the downside.

5.38   Note that:

- the "Equity issuance gearing target" is input by the user in the Scenarios tab and therefore can be different from the "BPDT mirror table" gearing target. It applies only to equity issuance at the start of the year, i.e. it is unrelated to the previous year's dividends;
- the "Equity issuance threshold" is also input by the user in the Scenarios tab.

Figure 5: Flowchart 6
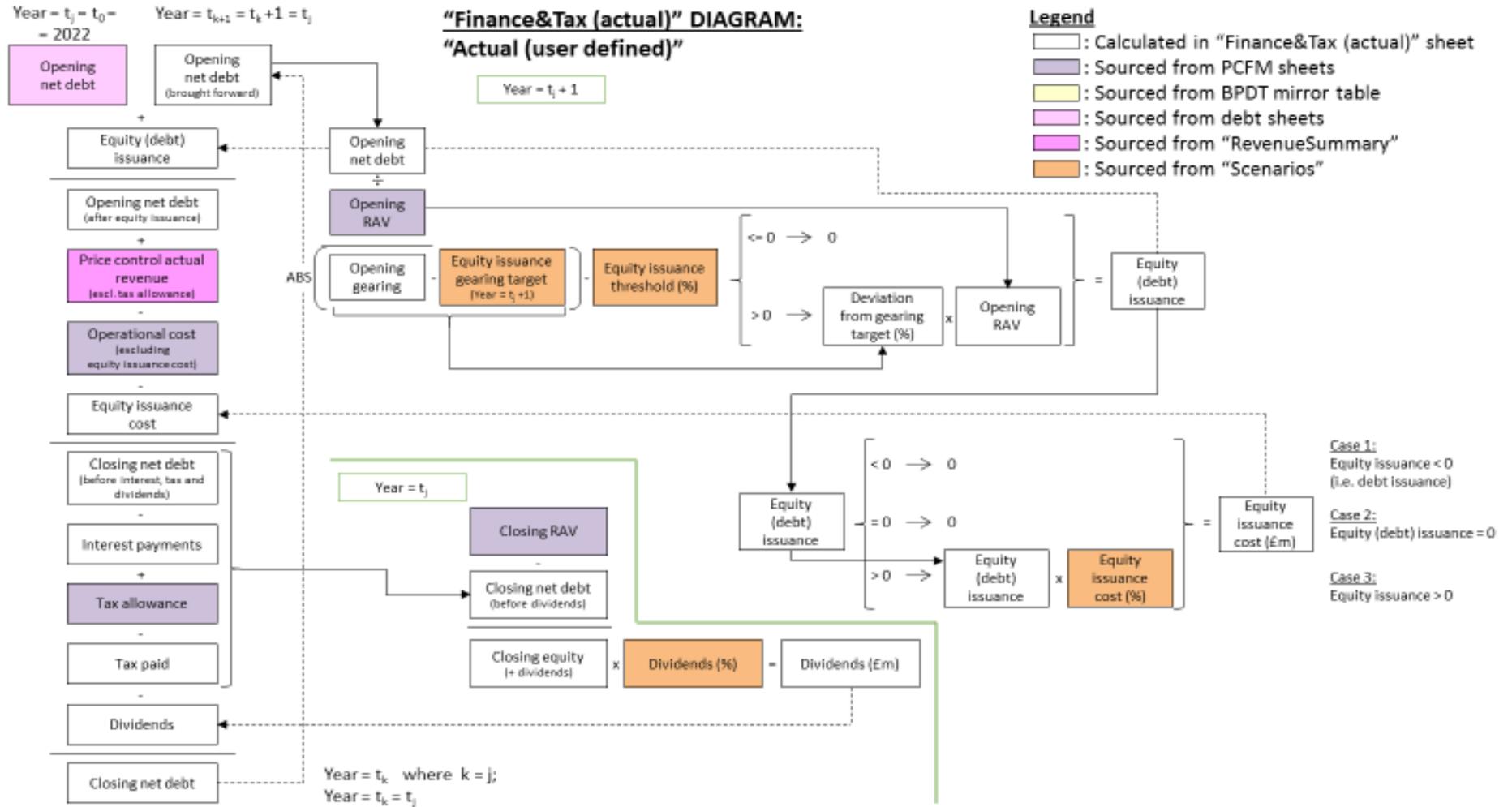
5.39 If the test is passed, equity is issued to meet the gearing target. For avoidance of doubt, the equity or debt issuance covers the deviation from the target in full. Note that, contrarily to the notional methodology in Finance&Tax, here negative equity issuance (i.e. debt issuance) is allowed.

5.40 Again, three cases can occur:

- Case 1:

$$ABS(Opening\ gearing\ _t - Equity\ issuance\ gearing\ target_t)$$
$$- Equity\ issuance\ threshold(\%)_t > 0$$
$$\textbf{AND}$$
$$\textbf{Opening}\ gearing_t < Equity\ issuance\ gearing\ target_t$$

In this instance, opening gearing is lower than the target and this deviation exceeds the threshold. Negative equity, or debt, is issued to increase gearing up to the target:

$$Equity\ (debt)\ issuance_t =$$
$$= (Opening\ gearing_t - Equity\ issuance\ gearging\ target_t) \cdot Opening\ RAV_t < 0$$

$$Equity\ (debt)\ issuance_t < 0 \qquad \text{i.e. debt issuance}$$
$$Equity\ issuance\ transaction\ cost_t = 0$$

- Case 2:

$$ABS(Opening\ gearing\ _t - Equity\ issuance\ gearing\ target_t)$$
$$- Equity\ issuance\ threshold(\%)_t \leq 0$$

In this instance the test is not passed, as the difference between opening gearing and the target is less (in absolute value) than the pre-defined threshold.

$$Equity\ (debt)\ issuance_t = 0$$
$$Equity\ issuance\ transaction\ cost_t = 0$$

Note that in this case the gearing level will typically differ from the equity issuance gearing target.

- Case 3:

$$ABS(Opening\ gearing\ _t - Equity\ issuance\ gearing\ target_t)$$
$$- Equity\ issuance\ threshold(\%)_t > 0$$
$$\textbf{AND}$$
$$Opening\ \textbf{gearing}_t > Equity\ issuance\ gearing\ target_t$$

Opening gearing is higher than the target in excess of the threshold. Equity is issued to de-gear up to the target:

$$Equity\ (debt)\ issuance_t =$$
$$= (Opening\ gearing_t - Equity\ issuance\ gearging\ target_t) \cdot Opening\ RAV_t > 0$$

$$Equity\ (debt)\ issuance_t > 0 \qquad \text{i.e. equity issuance}$$

$$Equity\ issuance\ transaction\ cost_t =$$
$$= Equity\ (debt)\ issuance_t \cdot Equity\ issuance\ cost(\%)_t$$

The equity issuance cost percentage input is sourced from the Scenarios tab and can be pre-set by the user to a different level from the "BPDT mirror table" fixed input.

5H. Alignment of BPFM actual debt with BPDT submission

5.41   Using the "BPDT" settings for the Base case may not be sufficient to adequately reflect the BPDT actual debt submission in the BPFM Finance&Tax (actual) tab. This is mainly due to differences in the actual new debt emission profile between submitted BPDT and BPFM's Base case.

5.42   In the BPDT, new debt emissions are directly inputted in sheet F2, under the "New Debt Composition & Expense" section. On the other hand, the BPFM calculates new debt emissions as the amount in addition to embedded debt (from BPDT sheets) to meet the total debt requirement calculated endogenously in the Finance&Tax (actual) tab. This new debt requirement is driven by the balance of price control revenue and operational costs and typically does not match the profile of new debt emissions from the BPDT, for example because, whilst the BPDT could be populated with "lumpy" tranches of debt amounts issued in the financial markets, the BPFM calculates a "theoretical", exact requirement for any given year.

5.43   To avoid potential distortion to modelled actual debt and related financeability results, and therefore ensure that the BPFM Base case is reflective of the company financial plan as submitted in the BPDT, the model features a functionality to calculate a debt adjustment term and achieve a better alignment to the BPFM. In a nutshell, the alignment functionality estimates an "Actual debt requirement adjustment" term in the BPFM actual debt calculation ([row 47] of the Finance&Tax (actual) tab), calibrated on the BPDT actual "Closing debt (before interest and dividends)" (see [row 95] in sheet F1 – Debt for BPFM).

5.44   The adjustment term ensures an exact alignment of "Closing debt (before interest, tax and dividends)" across BPDT and BPFM and therefore there will be no material differences in interest expense. Given that, under the "BPDT" settings for use in the Base case, BPFM dividend payments are directly sourced from the BPDT sheets, the only potential source of material differences between BPFM and BPDT "Closing debt (after interest, tax and dividends)" can be the net tax component (tax allowance minus calculated costs). For simplicity, this is set to zero in the BPDT debt reclassification in tab F1 ([row 99]), even though this is typically not the case in the BPFM actual debt calculation [(rows 51:52)]; nonetheless, the magnitude of the net taxes term in the BPFM does not appear sufficient to have a material impact on the results, and

therefore any residual discrepancy between BPFM and BPDT actual "Closing debt (after interest, tax and dividends)" can be accepted as a reasonable modelling approximation.

5.45　The supporting workings for calculating the "Actual debt requirement adjustment" term are featured in [row 218] and below of the Finance&Tax (actual) tab and the calculation process is automatically iterated by using the macro button "AlignActualDebt" in [row 21] of the UserInterface tab. [Rows 246] to 289 summarise and compare BPFM and BPDT actual debt, thus showing the outcome of the alignment process. This should demonstrate that any material differences in closing debt (after interest, dividends and tax are taken into account) are due to the net tax term.

5.46　Note that:

- The "Actual debt requirement adjustment" term can be switched off in the debt calculation, by hardcoding "0" ("zero") values in the table in cells [I231:I244].

- However, if an updated term needs recalculating, the flag must be reset to "1" ("one"), otherwise the calibrated adjustment term is not updated in the actual debt calculation and the process runs indefinitely. To prevent this, if the macro is run with the flag set to "0", the process is interrupted and a warning message prompt the user to set it back to "1".

- As the adjustment term is aimed at replicating the BPDT submission in the BPFM Base case, this scenario should always be selected prior to running the macro. If a difference scenario is in use, the process is suspended and the user is prompted to choose whether to stop the execution of the code, so that the Base case can be selected, or to continue regardless.

- The "Actual debt requirement adjustment" term is derived on the Base case but should be kept constant and used in all stress test scenarios. By this means, any stress test is "centred" on the BPDT-aligned Base case, with the BPFM dynamically calculating the incremental change on actual debt components, hence total debt and financeability output, resulting from changes in modelling assumptions.

- The supporting workings for calculating the "Actual debt requirement adjustment" term are featured in [row 218] and below of the Finance&Tax (actual) tab and the calculation process is automatically iterated by using the macro button "AlignActualDebt" in [row 21] of the UserInterface tab. [Rows 246] to 289 summarise and compare BPFM and BPDT actual debt, thus showing the outcome of the alignment process. This should demonstrate that any material differences in closing debt (after interest, dividends and tax are taken into account) are due to the net tax term.

5I. Key instructions for actual debt modelling

Embedded debt dataset

5.47   Populate tab F6 - Debt Dataset with the embedded debt data for all the Licensees used in the model (no particular order is required). It is sufficient to copy and paste as values the data from the corresponding tab F6 of the submitted versions of the BPDT versions submitted for all Licensees. The model will automatically identify the instruments relevant to the live Licensee and use these to populate tabs F3 to F5, which will then feed the rest of the model.

5.48   Data must be inputted into columns A:CI of tab F6, starting from row 3. No data must be inputted to the right of column CI.

BPDT Mirror table

5.49   Copy and paste as values the "BPDT mirror table" from the submitted versions of the BPDTs into the dedicated section of all relevant Licensee Input tabs [(rows 1804 to 2273)].

Actual debt settings

5.50   Define parameters for actual financeability and debt modelling in the "Actual company parameters" section of the Scenarios tab [(rows 96 to 116)], for the Base case and stress tests. Suggested settings are described in sections 5, "5A. Overview" above and "

5.51   5J. Summary of pre-set actual debt settings" below.

Checks on actual debt modelling inputs

5.52   Set the BPFM to the Base case and check the following inputs:

1. Proportion of new debt issuance by type: in FinInput tab [(rows 77 to 80)], verify that the sum of proportions is 100% in each year. If, as per new debt emissions profile submitted in sheet F2a, no new debt is raised in the first years, the proportion of new debt by type will be 0% for all types of debt in the same years.

2. Cost of new debt average rate by type: in FinInput tab [(rows 83 to 86)], check the average cost of debt values sourced from sheet F1. If no new debt is issued in the first years, similarly to point 1 above the average cost of debt will be zero across all types of new debt.

5.53   A suggested approach to address points 1 and 1 above is to insert indicative, small debt issuance values in the BPDT new debt emissions table for the first years. For example, input £m 0.000001 new fixed debt emission in cell K131 of tab F2a, with associated proportion of year input in cell K132. This will generate values for both proportion of new debt issuance and average cost of debt by type, for use in Finance&Tax (actual) calculations, without changing materially the BPDT debt balance. Note that, if points 1 and 1 above are not addressed, any actual new debt emission calculated by the model in the affected years will use 0% cost of debt and zero interest payments on new debt will result.

5.54   If the BPDT has been amended, copy and paste the updated mirror table into the Licensee Input tab as per para 5.49 above and verify that the issues have been resolved.

3. Closing gearing target: in FinInput tab, compare "BPDT derived closing gearing target" and "Actual closing gearing target (from BPDT mirror table)" [(rows 95 and 97)]. The former calculates gearing combining total closing debt from the BPFM debt sheet F2b with closing RAV from the "notional" sheets of the model, whilst the latter is the fixed input sourced from the Licensee Inputs tab mirror table.
The "mirror table" gearing should be the same as the "model calculated gearing" in the Base case, which is explicitly derived from the Base case modelled RAV. As the "mirror table" gearing target is used across all stress test scenarios, any difference with respect with to the "model calculated gearing" implies not compliance with the assumption of gearing target fixed across all scenarios to the Base case level.

5.55   To address point 3 above, copy the gearing numbers in row 95 and paste as values into row [403] of the BPDT sheet I3 - BPFM Inputs. Refresh the "mirror table" in the BPFM as per para 5.49 above and verify that the issue has been resolved.

Alignment of Base Case actual debt with BPDT actual debt

5.56   Make sure that the model is set to the Base case and the flag for the relevant Licensee in cells [I231:I244 of the Finance&Tax (actual) tab (in the "Derivation of actual debt requirement adjustment term" section) is set to "1".

5.57   Run the "AlignActualDebt" macro from row 21 of the UserInterface tab.

5J. Summary of pre-set actual debt settings

	Unit	BPDT	Cashflow dividend	% dividend	User defined
Embedded and new debt					
Opening actual net debt (year 2022)	£m nominal	BPDT dynamic input from "debt sheets" **'F2b - Financial Summary (YE)'!207:207**	BPDT dynamic input from "debt sheets" **'F2b - Financial Summary (YE)'!207:207**	BPDT dynamic input from "debt sheets" **'F2b - Financial Summary (YE)'!207:207**	BPDT dynamic input from "debt sheets" **'F2b - Financial Summary (YE)'!207:207**
Average embedded debt	£m nominal	BPDT dynamic input from "debt sheets" **'F1 - Debt for BPFM'!109:109**	BPDT dynamic input from "debt sheets" **'F1 - Debt for BPFM'!109:109**	BPDT dynamic input from "debt sheets" **'F1 - Debt for BPFM'!109:109**	BPDT dynamic input from "debt sheets" **'F1 - Debt for BPFM'!109:109**
Embedded debt interest expense	£m nominal	BPDT dynamic input from "debt sheets" **'F1 - Debt for BPFM'!21:22**	BPDT dynamic input from "debt sheets" **'F1 - Debt for BPFM'!21:22**	BPDT dynamic input from "debt sheets" **'F1 - Debt for BPFM'!21:22**	BPDT dynamic input from "debt sheets" **'F1 - Debt for BPFM'!21:22**
Proportion of new debt issuance by type	%	BPDT dynamic input from "debt sheets" **'F1 - Debt for BPFM'!126:129**	BPDT dynamic input from "debt sheets" **'F1 - Debt for BPFM'!126:129**	BPDT dynamic input from "debt sheets" **'F1 - Debt for BPFM'!126:129**	BPDT dynamic input from "debt sheets" **'F1 - Debt for BPFM'!126:129**
Cost of new debt average rate by type	Nominal annual %	BPDT dynamic input from "debt sheets" **'F1 - Debt for BPFM'!118:122**	BPDT dynamic input from "debt sheets" **'F1 - Debt for BPFM'!118:122**	BPDT dynamic input from "debt sheets" **'F1 - Debt for BPFM'!118:122**	BPDT dynamic input from "debt sheets" **'F1 - Debt for BPFM'!118:122**
Closing gearing target					
Closing gearing target	%	Live calculation, should correspond to BPDT fixed input from "mirror table" **GD: FinInput!94:94**	BPDT fixed input from "mirror table" *LicenseeInputs*! **GD: 726:726 GT: 754:754 ET: 953:953**	BPDT fixed input from "mirror table" *LicenseeInputs*! **GD: 726:726 GT: 754:754 ET: 953:953**	User input from *Scenarios* tab **Scenarios! GD: 84:84**
Equity issuance					
Equity issuance	£m nominal	BPDT fixed input from "mirror table" *LicenseeInputs*! **GD: 721:721 GT: 749:749 ET: 948:948**	Calculated in *Finance&Tax (actual)*	Calculated in *Finance&Tax (actual)*	Calculated in *Finance&Tax (actual)*
Equity issuance gearing target	%	NA	Equal to previous year's closing gearing target	Equal to previous year's closing gearing target	User input from *Scenarios* tab **Scenarios!84:84**
Equity issuance threshold	%	NA	Ofgem input from Scenarios tab (Equity issuance threshold = 5%) **Scenarios!87:87**	Ofgem input from Scenarios tab (Equity issuance threshold = 5%) **Scenarios!87:87**	Ofgem input from Scenarios tab (Equity issuance threshold = 5%) **Scenarios!87:87**

Equity issuance transaction cost	£m nominal	BPDT fixed input from "mirror table" *LicenseeInputs*! GD: 722:722 GT: 750:750 ET: 949:949	Calculated in *Finance&Tax (actual*	Calculated in *Finance&Tax (actual*	Calculated in *Finance&Tax (actual*
Equity issuance transaction cost	%	Calculated from BPDT mirror table fixed inputs (Equity issuance and associated transaction cost), should correspond to BPDT fixed input from "mirror table" **FinInput!114:114**	Calculated from BPDT mirror table fixed inputs (Equity issuance and associated transaction cost), should correspond to BPDT fixed input from "mirror table" **FinInput!114:114**	Calculated from BPDT mirror table fixed inputs (Equity issuance and associated transaction cost), should correspond to BPDT fixed input from "mirror table" **FinInput!114:114**	User input from *Scenarios* tab **Scenarios!88:88**
Dividends					
Dividends	£m nominal	BPDT fixed input from "mirror table" *LicenseeInputs*! GD: 725:725 GT: 753:753 ET: 952:952	Calculated in *Finance&Tax (actual) -* cash flow dividends from "closing gearing target"	Calculated in *Finance&Tax (actual) -* cash flow dividends from "closing gearing target"	Calculated in *Finance&Tax (actual) -* dividends as percentage of equity RAV
Dividends	% equity	Live calculation, back-solved **FinInput!122:122**	NA	NA	User input from *Scenarios* tab **Scenarios!93:93**
Dividend cap	% equity	NA	User input from *Scenarios* tab **Scenarios!92:92**	User input from *Scenarios* tab **Scenarios!92:92**	NA