

Guidance

RIIO-3 Business Plan Data Template (BPDT) Guidance for Network Asset Risk Metric (NARM) Tables – for Electricity Transmission, Gas Transmission, and Gas Distribution

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This document provides instructions and guidance to the electricity transmission¹, gas transmission², and gas distribution network³ licensees. Its purpose is to enable them to complete the Network Asset Risk Measure (NARM) Business Plan Data Template (BPDT), for the RIIO-3 price control. The guidance does not apply to electricity distribution licensees whose price control cycle is on a two-year lag and is due to commence on 1 April 2028.

This document is for people who are filling out the NARM Business Plan data templates and want to know general and specific guidance for reporting NARM Business Plan data. It explains the scope of the NARM Business Plan data templates, what to consider when completing them, and where to find more information.

¹ RIIO-ET3 – relates to the three electricity transmission owners (ETO): National Grid Electricity Transmission plc (NGET), SP Transmission plc (SPT), Scottish Hydro Electric Transmission plc (SHET)

² RIIO-GT3 – relates to the gas transmission owner (GTO): National Grid Gas Transmission (NGGT)

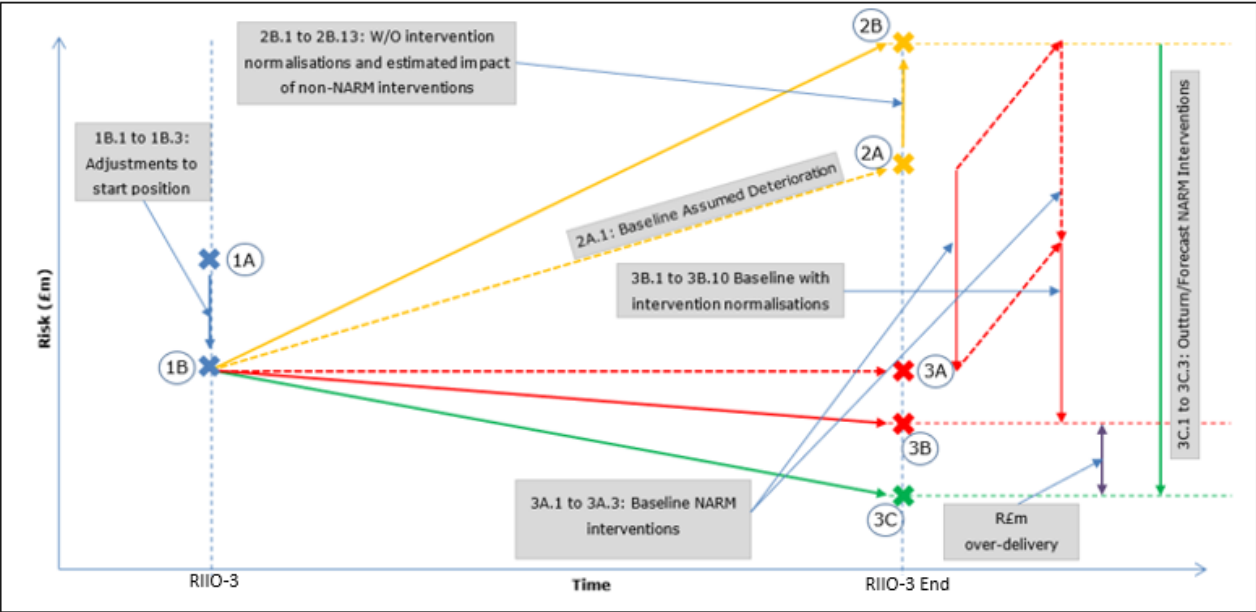
³ RIIO-GD3 – relates to the eight gas distribution network operators (GDN): Cadent – East of England (EoE), Cadent – London (Lon), Cadent – North West (NW), Cadent – West Midlands (WM), Northern Gas Networks (NGN), SGN - Scotland Gas Networks (Sc), SGN - Southern Gas Networks (So), Wales and West Utilities (WWU)

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1. Introduction

Background

- 1.1. RIIO-3 is the third iteration of price controls to be set using the RIIO (Revenue = Incentives + Innovation + Outputs) model. This applies to electricity and gas transmission network companies and to gas distribution companies from 1 April 2026 to 31 March 2031.⁴
- 1.2. The Network Asset Risk Metric (NARM) is an evolution from RIIO-1 Network Output Measures (NOMs) and relates to the risk of asset failure (derived from the probabilities and expected consequences of asset failure). Through their asset management activities, such as replacement or refurbishment, network companies should ensure that the risk to consumers of asset failure is maintained within reasonable bounds. This is an important part of the price controls, because it contributes to a significant proportion of the network companies' totex and consumers could suffer significant detriment if the pursuit of short-term profit leads to unmanageable levels of degradation in the condition of network assets and ultimately to unacceptable levels of network asset failures.
- 1.3. NARM sets network companies clearly defined outputs that require and encourage them to take a longer-term view of their network asset risk.
- 1.4. As part of our regulatory oversight of the network companies, we collect a wide variety of both qualitative and quantitative information. In preparation for RIIO-3, companies submit business plans in advance of the period to enable us to understand the requirements of their networks and inform our decisions on setting the economic and efficient allowances for the RIIO-3 period. The NARM BPDTs will help us to ensure we set appropriate outputs for the relevant activities and to hold network companies to account for their actual investment decisions in RIIO-3.
- 1.5. The Business Plan Data Templates (BPDTs) provide a framework which enables Ofgem to collect quantitative data from the network companies on their proposed operations and investment plans during the RIIO-3 period.
- 1.6. The BPDTs will ultimately form part of a more extensive regulatory reporting and monitoring pack, which will:
 - allow us to collect data on total expenditure (Totex) for use in the annual iteration process (AIP); and
 - provide a database of network company performance for us to draw on to set required outputs and allowed costs at subsequent review periods.
- 1.7. This document, the BPDT Guidance, sets out the instructions and guidance applicable to the relevant network companies for completing and submitting the NARM BPDT. It provides information on:
 - the systems, processes, procedures, recording and provision of the required data
 - reporting units
 - levels of accuracy (including rounding)
 - the methodology for calculating or deriving required numbers

⁴ RIIO-ED3 will commence on 1 April 2028 and will run until 31 March 2034.

- the provision of the data to the Ofgem (format, frequency etc.)
 - reasons for the data requirement
 - a glossary of terms used in the workbooks
- 1.8. These instructions are limited to ensuring clarity on reporting requirements for the NARM BPDTs. They do not set out the process for when drafts and final Business Plans should be submitted or provide guidance on the costs, outputs, or workloads etc. that should be included in Business Plans. These instructions should be read alongside the relevant sector RIIO-3 data templates and associated instructions and guidance as well as the RIIO-3 Business Plan Guidance Document and the Priorities and Work Plan of the RIIO-3 Challenge Group. In populating the NARM BPDTs licensees are required to comply with the relevant sector RIIO-3 Business Plan guidance unless explicitly stated otherwise in this document.
- 1.9. The instructions and guidance contained in this document do not change any definitions or obligations contained within the electricity transmission or gas transporter licences applicable to each network company, and in the event of any conflict, the licence conditions take precedence.

Use of the NARM BPDTs

- 1.10. The NARM BPDTs are one of a suite of BPDT templates (in MS Office Excel format) for each sector. The BPDTs will be completed by network companies and used to report their business plan data. They are one element of the wider suite of information provided to Ofgem to enable informed price control allowances to be set. Other elements include:
- instructions and guidance on how to complete the associated workbooks and report the data.
 - templates for providing commentaries against the data
 - an engineering justification template, which should provide a technical and stakeholder justification for the work proposed to be undertaken (on a project level)
 - a Cost Benefit Analysis (CBA) template, which should provide the quantitative economic data underpinning each proposed project.
- 1.11. The NARM BPDTs will be used in conjunction with the cost and workload data provided in other BPDTs to help us set allowances and outputs for each network company and will also form the basis of the templates that will be developed for ongoing regulatory reporting in RIIO-3.
- 1.12. The NARM BPDTs are not intended to contain any financial 'cost'.

Form of submission and submission deadlines

- 1.13. Licensees should submit their NARM BPDT in accordance with instructions given from Ofgem on the overall business plan and business plan data templates.

General instructions and guidance

- 1.14. The NARM BPDTs have been designed to act as a means of recording the basis of the RIIO-3 price controls and enabling their subsequent monitoring and reporting. Their content has built on the learning from the Regulatory Instructions and Guidance (RIGs) used to monitor the regulatory settlement throughout RIIO-2 period and on the Network Output Measures (NOMs) developments that has taken place across all sectors over RIIO-2.

1.15. These guidance relate to the NARM BPDT versions listed below and to any subsequent version of the NARM BPDTs unless superseded by subsequent guidance:

- BPDT_N_NARM_3.0

1.16. The key points to note in completing the BPDT are listed below. These apply unless otherwise stated on a specific table or in the guidance below:

1. The licensee must take all reasonable steps to ensure the quality of its data. Quality data must in all material respects be accurate, complete, and fairly presented.
2. Where a table contains multiple years of data (historical and/or forecast) that was reported in a previous template, the licensee should report, unless otherwise stated in the specific table guidance, data for all years that is to the best of its knowledge up to date and accurate. Licensees are required to explain any material data revisions of previously-submitted data in the accompanying narrative.
3. The licensee must, as soon as is reasonably practicable, notify Ofgem of the likelihood of any significant revisions to improve data quality.
4. The NARM BPDT tables are colour coded to reflect the action required. The colour key is as below:

Colour Key	
Non-editable cell	abc
Ofgem input cell	
Company input cell	12.3
Calculation cell (sub-total)	12.3
Calculation cell (total)	12.3
Link from other sheet in workbook	12.3
Link from other workbook	12.3
Input not relevant	

5. Licensees must enter or amend data only in 'Company input cells' and must not insert, delete, merge, or otherwise amend rows, columns or cells unless otherwise indicated as permitted on a specific table or in the guidance below, or unless otherwise agreed with Ofgem.
6. Workload units and outputs should be reported commensurate with the purpose for which such data is intended, taking into consideration the appropriate allocations that are necessary to complete the tables. Workload and outputs should be entered in the unit of measurement set out in this guidance or in the template.
7. Unless otherwise indicated in this guidance or templates, financial values should be input as positive values.
8. Where a reportable value is zero or is not applicable to a licensee, then a zero character must be input rather than the cell being left blank.
9. Unless a licensee has an explicit agreement to the contrary with Ofgem, risk values are to be derived in accordance with the licensee's most recently approved NARM Methodology. Where such an explicit agreement exists then the licensee should provide an explanation of the agreed methodology in its associated narrative document.
10. Monetised Risk values should be entered in millions (£m) and shown to three decimal places.

11. Probabilities should be entered to a minimum of three significant figures (e.g. 0.00000123 or 0.123).
12. Workload and asset population volumes should be entered to one decimal place.
- 1.17. The NARM BPDts will be used in conjunction with the cost and workload data provided in other BPDts to help us set allowances and outputs for each network company and will also form the basis of the templates that will be developed for ongoing regulatory reporting in RIIIO-3.
- 1.18. While every effort has been made to ensure that this guidance is as comprehensive as possible, where a network company is unsure how to interpret aspects of it, it should seek clarification from Ofgem.

Instructions and guidance

- 1.19. The purpose of this document is to provide instructions and guidance to enable the licensees to complete the associated workbooks. This document provides information on:
 - the systems, processes, procedures, recording and provision of the required data
 - reporting units
 - levels of accuracy (including rounding)
 - the methodology for calculating or deriving required numbers
 - the provision of the data to the Ofgem (format, frequency etc.)
 - reasons for the data requirement
 - a glossary of terms used in the workbooks.

Provision of Monetised Risk data

- 1.20. All Monetised Risk values and consequences of failure should be reported in 2023/24 prices.
- 1.21. Forecasts of Monetised Risk and asset and intervention volumes should represent the licensee's best views. The licensee should use its best endeavours to take account of all relevant internal and external factors when forming these views.
- 1.22. Unless it is stated that lifetime or longer term risk values to be reported, then all risks to be reported are single year snapshot values and should be derived in accordance with the licensee's NARM Methodology. Long term risks should be reported in accordance with the licensee's NARM Methodology or, if the NARM Methodology does not yet cover long term risk, then in accordance with the methodology agreed with Ofgem for RIIIO-3 Business Plans. The licensee's accompanying narrative document should state the basis on which long term monetised risk values have been derived.

Publication

- 1.23. Ofgem is bound by the requirements of section 105 of the Utilities Act 2000 relating to the disclosure of information.
- 1.24. Ofgem recognises the value of improving transparency of information in regulating natural monopolies and we intend to continue to review to what extent to publish further disaggregated data and analysis alongside the Business Plans.

2. N0 Administrative Worksheets

Purpose or reporting requirements

- 2.1. These worksheets contain general administrative information including details of the licensee making the submission, the template and submission version, and details of the relationship of the NARM BPDT to other BPDTs submitted by the licensee.

N0.1 Details

Purpose and use by Ofgem	This worksheet helps facilitate version control and efficient analysis of data.
General guidance on completing this worksheet	<p>Licensee must select the following from the dropdown menus:</p> <ul style="list-style-type: none"> Company (licensee) name <p>Licensees must enter the following information in the relevant cells:</p> <ul style="list-style-type: none"> Submission deadline Submission version number Submitted date <p>Licensees are required to assign a unique submission version number for each submission and re-submission.</p> <p>Submitted files must be given the filename indicated in the 'File Name' cell and be saved as a Excel Binary Workbook (.xlsb).</p>
Sector-specific guidance	
Electricity Transmission	N/A
Gas Transmission	N/A
Gas Distribution	N/A
Specific definitions for this worksheet	
None	

N0.2 Contents

Purpose and use by Ofgem	Lists all worksheets in workbook. Checks for Error flags on individual worksheets.
General guidance on completing this worksheet	<p>Licensees are required to provide the name, phone number and email address for the principle contact.</p> <p>Licensees should ensure that Data Error Check column does not return 'Error' flag for any worksheets before submission.</p>
Sector specific guidance	
Electricity Transmission	N/A
Gas Transmission	N/A
Gas Distribution	N/A
Specific definitions for this worksheet	
None	

N0.3 Submission Version History

Purpose and use by Ofgem	Will be used to help track changes between a licensee's submissions and/or any resubmissions.
General guidance on completing this worksheet	<p>Licensees are required to provide as much detail as is practical on changes between submission versions.</p> <p>Details of the overall submission should be entered in the green cells, with table specific detail entered in yellow cells. Licensees may add or insert as many green or yellow rows as required.</p>
Sector specific guidance	
Electricity Transmission	N/A
Gas Transmission	N/A
Gas Distribution	N/A
Specific definitions for this worksheet	
None	

N0.4 Template Version History

Purpose and use by Ofgem	Contains details of changes to the template.
General guidance on completing this worksheet	Licensees should not make changes to the template and therefore licensees are not required to input this table unless instructed to make changes by Ofgem.
Sector specific guidance	
Electricity Transmission	N/A
Gas Transmission	N/A
Gas Distribution	N/A
Specific definitions for this worksheet	
None	

N0.5 Related Files

Purpose and use by Ofgem	For licensees to provide relevant details of related or supporting files. This worksheet will help correct referencing across related files/documents.
General guidance on completing this worksheet	<p>The licensee must enter details of the corresponding Cost and Volumes BPDTs, i.e. the Cost and Volumes BPDT volumes aligned through the NARM Interface sheet (in the Cost and Volumes BPDT) and N1.1_NARM_Summary tab, and contain associated cost data.</p> <p>Licensee may also provide details of any supporting files or documents (e.g. narrative document).</p>
Sector specific guidance	
Electricity Transmission	N/A
Gas Transmission	N/A
Gas Distribution	N/A
Specific definitions for this worksheet	
None	

N0.6 Data Constants

Purpose and use by Ofgem	This table gives details of any material constants used by licensee in populating the template. This will be used where appropriate to check sector consistency and monitor any potential future amendments (e.g. that may require a methodology change).
General guidance on completing this worksheet	Licensees should enter details of data constants used in deriving the data contained in the NARM BPDT submission. Unless updated for the purpose of the BPDT then, data constants with values set by the NARM Methodology do not need to be recorded on this worksheet.
Sector specific guidance	
Electricity Transmission	N/A
Gas Transmission	N/A
Gas Distribution	N/A
Specific definitions for this worksheet	
None	

N0.7 Lookup References

Purpose and use by Ofgem	Contains data for use in dropdown menus and other lookup values used in the template.
General guidance on completing this worksheet	Asset categories are a full list of asset categories agreed between Licensees and Ofgem's cost assessment teams. Licensee must receive explicit consent from Ofgem to change any of the data on this worksheet.
Sector specific guidance	
Electricity Transmission	N/A
Gas Transmission	N/A
Gas Distribution	N/A
Specific definitions for this worksheet	
None	

3. N1 Output Delivery Worksheets

Purpose of reporting requirements

- 3.1. These worksheets provide relevant detail on the type of interventions and intervention options for Monetised Risk Output delivery, as well as details of projects or schemes for delivering outputs.

N1.1 Intervention Summary

Purpose and use by Ofgem	<p>Provides summary of the intervention volumes and monetised risk for NARM asset categories. The summary tab also operates as an interface sheet with the sector specific Cost and Volumes BPDT.</p> <p>The data reported through the Cost and Volumes BPDT must reconcile with data reported through the NARM BPDT. This worksheet and counterpart NARM_Interface worksheet in the Cost and Volumes BPDTs will help confirm alignment between the NARM output delivery (reported through the NARM BPDT) with the associated forecast costs of delivering those outputs (reported through the Cost and Volumes BPDTs).</p> <p>This worksheet aggregates the intervention volumes and outputs for each NARM Asset Category. NARM_Interface worksheet contained in the Cost and Volumes BPDTs provides intervention volumes and costs by NARM Asset Category. Intervention volumes reported in the Cost and Volumes BPDTs and NARM BPDT must align for each NARM Asset Category.</p>
General guidance on completing this worksheet	<p>This worksheet is auto-populated from the N1.3_Project_Listing worksheet.</p> <p>The licensee is required to ensure that the NARM intervention volumes reported through the NARM BPDT and those reported in the Cost and Volumes BPDT are aligned. Should any misalignment occur due to a resubmission of either BPDT, then the other BPDT must</p>

	also be resubmitted with input data updated to bring the two submissions back into alignment.
Sector specific guidance	
Electricity Transmission	N/A
Gas Transmission	N/A
Gas Distribution	N/A
Specific definitions for this worksheet	
None	

N1.2 Intervention Listing

Purpose and use by Ofgem	<p>Provides details on interventions by asset category, the expected longevity of interventions.</p> <p>This table is intended to enable Ofgem to understand the characteristics of interventions.</p>
General guidance on completing this worksheet	<p>Licensees are required to provide details of all interventions that could potentially impact Monetised Risk.</p> <p>'Intervention Type ID', is an identifier unique to each line item line item. Licensees may insert additional rows above the 'End' row. If doing so it must ensure that sequential numbering of 'Intervention Type ID' is maintained.</p> <p>Licensees must ensure consistency in referencing across regulatory years. We may consider locking in some data on this sheet in future years.</p> <p>Licencees must populate the following fields for every reported line item:</p> <ol style="list-style-type: none"> Intervention Type ID: The unique identifier for each line item. A sequential numbering of 'Intervention Type ID' must be implemented and maintained. NARM Asset Category: populated using dropdown menu. The dropdown menu is populated from worksheet N0.7_Lookup_References.

	<p>c. C&V Asset Category: populated using dropdown menu. The dropdown menu is populated from worksheet N0.7_Lookup_References. This field entry is only applicable for the GD sector, as for ET and GT this will be the same as the NARM Asset Category.</p> <p>d. Intervention Category: populated using dropdown menu. The dropdown menu is populated from worksheet N0.7_Lookup_References.</p> <p>e. Expected Life of Intervention: free entry cells. The licensee should enter the average expected life of the intervention in years or as a range or years.</p> <p>f. Description (including general description of expected effect on monetised risk): free entry cells – explanation of the nature of the intervention and effect expected to have in general cases on monetised risk.</p> <p>Licensees must populate the following fields where relevant to a line item:</p> <p>g. Item/sub-component: free entry cells – licensee to enter name of sub-component sub-category of a NARM Asset Category where it is necessary, e.g. replacing the tap changer on a 132kV Transformer might be classified as a 132kV Transformer Refurbishment. The licensee should enter 'Tap Changer' in this field. Licensees should use consistent terminology and syntax across 'Item/sub-component' entries.</p> <p>h. Distinguisher: This field is to be used to distinguish between interventions with the same 'NARM Asset Category', 'Intervention Category', and 'Item/Sub-component'.</p> <p>The following field is auto-populated dependant on the data entered for a. to e. above for each line item:</p>
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	<p>i. Intervention Type: this field is auto-generated by combining the entries in fields b, d, e, and b. Licensees must ensure that each line item value is unique and must utilise the 'Distinguisher' field to distinguish between interventions with the same 'NARM Asset Category', 'Intervention Category', and 'Item/Sub-component'.</p>
Sector specific guidance	
Electricity Transmission	N/A
Gas Transmission	N/A
Gas Distribution	Completion of the C&V Asset Category field.
Specific definitions for this worksheet	
NARM Asset Category	The asset grouping as agreed between Ofgem and the licensee(s) in a given sector as suitable for NARM reporting purposes. Agreed NARM Asset Categories for each sector are entered by Ofgem on N0.7_Lookup_References worksheet.
C&V Asset Category	The asset grouping as agreed between Ofgem and the licensee(s) in a given sector as suitable for NARM reporting purposes and aligns with the asset category cost level in the C&V BPDT. NARM Asset Categories for each sector are entered by Ofgem on N0.7_Lookup_References worksheet.
Item/sub-component	<p>Where known the specific asset component(s) replaced or refurbished or otherwise intervened on through a given intervention, if not the complete asset.</p> <p>Examples:</p> <p>Transformer – [Main Tank*][Selector*][Tap Changer*][Divertor*][Selector*][Bushing*][Ancillary Plant*]</p> <p>Circuit Breaker – [Drive Mech*][Pressure Vessel*][Main Tank*][Bushing*][Ancillary Plant*]</p>

	*please provide/ignore as required
Intervention Type	A unique descriptor of the listed intervention associated with an Intervention Type ID.
Expected Life of Intervention (yrs)	This is a free text field. Licensees are required to provide explanation of number of years they expect, on average, from the date of a given intervention type before a subsequent intervention will be required in order to address the failure modes that the original intervention was planned to address. This may be given as a range of years to reflect uncertainty and the distribution across an asset population.

N1.3 Project Listing

Purpose and use by Ofgem	To understand the delivery of a licensee's Monetised Risk Outputs through its proposed intervention work programme. This data will be used to establish the licensee's Baseline Network Risk Outputs (BNRO).
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<p>General guidance on completing this worksheet</p>	<p>Licensees are required to report schemes/projects/generic work programmes as set out in the sector specific guidance below.</p> <p>Project/Scheme Reference – Should be reported where relevant.</p> <p>Assets can be classed into two high level categories:</p> <ul style="list-style-type: none"> A. NARM Assets – assets where, by applying the relevant sector/company NARMs Methodology, the Monetised Risk of the asset can be estimated. B. Non NARM Assets – assets where the monetised risk cannot currently be estimated by applying the relevant sector/company NARMs Methodology. <p>For Category A (NARM Assets), some will be subject to NARM funding and incentive mechanisms and others may not be. Category A assets can therefore be further assigned to three sub-categories:</p> <ul style="list-style-type: none"> • A1 – NARM Funding Mechanism • A2 – Funding Under Separate Mechanism • A3 – Ring-fenced Project/Activity <p>Licensees are required to indicate in the 'Proposed Funding Category' column the category (A1, A2, or A3) that they propose the project, scheme, or generic work programme should fall in to.</p> <p>For long term benefit output calculation:</p> <ol style="list-style-type: none"> 1. Benefits shall be calculated by applying the assumption that all interventions take place at the end of RIIO-3. 2. Only the benefits of the interventions proposed for delivery in RIIO-3 are to be included for the purpose of calculating RIIO-3 outputs. The benefit of any subsequent interventions assumed for other
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	<p>purposes, such as for CBA, shall be discounted for this purpose. Each sector shall agree the precise methodologies to be applied for determining the time-horizon over which RIIO-3 outputs shall be calculated. Outputs should be discounted using the same discount factors as per CBA guidance, unless otherwise agreed with Ofgem in advance of submission.</p> <p>Licencees must populate the following fields for every reported line item:</p> <ol style="list-style-type: none">Project/Scheme Reference: The Project/Scheme reference should be consistent and align with the referencing used for the Cost and Volumes BPDs. Licensees should agree any referencing convention with Ofgem ahead of submission. Where a project/scheme delivers Monetised Risk Outputs in multiple Asset Categories, then each Asset Category should be recorded as a separate line item with unique reference number. The licensee is required to enter the Project/Scheme Reference associated with each line item.Project/Scheme Category Description: The licensee is required to enter a meaningful description associated with each 'Project/Scheme Category Reference'.Proposed Funding Category: Licensees are required to indicate in the 'Proposed Funding Category' column the category (A1, A2, or A3) that they propose the project, scheme, or generic work programme should fall in to.Risk Sub- Cat: Licensees are required to indicate in the risk sub-category that the project, scheme, or generic work programme falls in to.Intervention Type: selected from dropdown menu. Dropdown menu is populated from worksheet N1.2. The licensee is required to enter a minimum of one new line item for each 'Intervention Type' associated with a 'Project/Scheme Reference'.
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	<p>f. Forecast Delivery Year: The licensee is required to enter the 'Forecast Delivery Year' associated with each line item if this is known. If delivery of an 'Intervention Type' for a given Scheme/Asset Category Reference is spread across multiple Delivery Years then each Delivery Year must be entered as a separate line item. If the forecast delivery year is unknown, then the end of the price control (2031) can be used.</p> <p>g. 'Replace Addition', 'Replace Disposal', 'Refurb and other': For replacement interventions then asset volumes must be entered into the 'Replace Addition' and/or 'Replace Disposal' field. For like-for-like replacement (e.g. 3 no. 132kV Transformers replaced with 4 no. 132 kV Transformers) then volumes should be entered in both fields. For non-like-for-like replacements (e.g. 3 no. 132kV Transformers replaced with 2 no. 400kV Transformers) each should be entered as separate line items with zero values entered in the relevant 'Replace Addition' and addressed in the submission commentary For Refurbishments and any other reportable interventions then the intervention volumes should be entered under 'Refurb and other'. All values are to be entered as positive numbers.</p> <p>h. Pre-Intervention Risk (R£m), Post Intervention Risk (R£m), and Long Term Benefit (R£m); values to be entered for each line item.</p> <p>i. Asset volume before intervention (# or km), Asset volume after intervention (# or km): licensees to enter the risk profile of assets of asset volume related to each line item.</p>
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	<p>The following fields are autopopulated dependant on other entries for a given line item:</p> <ul style="list-style-type: none"> a. NARM Asset Category, b. NARM C&V Category, c. Intervention Type ID, d. Intervention Category, e. Volume of Interventions f. Units, g. Single year benefit
Sector specific guidance	
Electricity Transmission	N/A
Gas Transmission	N/A
Gas Distribution	For RIIO-3, GDNs are required to report Long Term Risk Benefit, where in previous price controls there had not been a requirement to do so.
Specific definitions for this worksheet	
Forecast Delivery Year	Forecast Delivery Year is the regulatory year in which interventions are forecast to be delivered. Licensees must enter the Delivery Year in four digit format (YYYY), e.g. 2027 for the regulatory year 2026/27.
Volume of Interventions (#)	Means the number of intervention activities forecast to be delivered in a given Delivery Year. In the case of refurbishment, each refurbishment activity counts as one

	intervention. In the case of replacement activities, each addition or disposal counts as half an intervention. A full like for like replacement will therefore equal one intervention (0.5 x addition + 0.5 x disposal).
Pre Intervention Risk (R£m)	Pre Intervention is the forecasted monetised risk position without intervention, with the assumption applied that the asset has deteriorated to the End of 20230/31 for associated asset category under reported project/scheme.
Post Intervention Risk (R£m)	Post Intervention is the forecasted monetised risk position with intervention, with the assumption applied that the intervention takes place at the End of 2030/31 for associated asset category under reported project/scheme.
Long Term Benefit (R£m)	<p>The long term benefit resulting from replacements and refurbishments forecast to be delivered over RIIO-3.</p> <p>For long term benefit output calculation:</p> <ol style="list-style-type: none"> 1. Benefits shall be calculated by applying the assumption that all interventions take place at the end of RIIO-3. 2. Only the benefits of the interventions proposed for delivery in RIIO-3 are to be included for the purpose of calculating RIIO-3 outputs. The benefit of any subsequent interventions assumed for other purposes, such as for CBA, shall be discounted for this purpose. <p>Outputs should be discounted using the same discount factors as per those for Business Plan submissions, unless otherwise agreed with Ofgem in advance of submission.</p>

4. N2 Network Risk Worksheets

Purpose of reporting requirements

- 4.1. The purpose of these worksheets is to enable understanding of the total monetised risk on the network at both the start and end of RIIO-3, including the distribution of Monetised Risk, and impact on risk and risk movements of individual asset categories, risk factor components, and interventions.

N2.1 Network Risk Summary

General guidance on completing this worksheet	This worksheet is auto populated and requires no input from licensees.
Sector specific guidance	
Electricity Transmission	N/A
Gas Transmission	N/A
Gas Distribution	N/A
Specific definitions for this worksheet	
None	

N2.2 Risk Banding

Purpose and use by Ofgem	Defines the risk banding that each licensee will utilise for reporting purposes.
General guidance on completing this worksheet	<p>Licensees are required to report the minimum and maximum points of the Risk and Probability of Failure (PoF) bands that will be utilised for reporting throughout RIIO-3. A licensee may utilise an alternative Health Indicator measure as a proxy for PoF provided it receives Ofgem's prior agreement to do so. Licensees should explain in their accompanying commentary documents the PoF/Health Indicator measure that has been used.</p> <p>Licensees may use different banding values for different asset categories. However, the approach to determining the</p>

	<p>banding approach should be consistent for all Asset Categories.</p> <p>In defining bands licensees should ensure that the bands:</p> <ol style="list-style-type: none"> 1. sufficiently differentiate asset populations, 2. are not skewed by outliers in the population, 3. will be enduring – the intention is that the same bandings will be used throughout RIIO-3 implementation. Therefore, licensees should take account of the expected deterioration of assets and risk of any new assets likely to be installed on the network. <p>Licensees within the same company group should utilise the same bandings.</p> <p>For linear assets, the banding should be based on the per kilometre risk, e.g. a 10km pipeline with total risk of R£10m should be assigned to the same risk band as a 1km pipeline with a total risk of R£1m.</p> <p>For non-linear assets the banding should be based on the individual asset risk.</p> <p>Licensees should explain in their supporting narratives the approach that the banding approach they have applied.</p>
Sector specific guidance	
Electricity Transmission	N/A
Gas Transmission	N/A
Gas Distribution	N/A
Specific definitions for this worksheet	
None	

N2.3 – RIIO-3 Risk and Volumes

<p>Purpose and use by Ofgem</p>	<p>Provides a detailed view, for each Asset Category, of the factors forecast to contribute to the risk movements over two time steps (i.e. Closeout of RIIO-2 and the five years of RIIO-3). It also provides a summary view of the risk distribution profile of Monetised Risk, asset population and Probability of Failure (PoF)/Health on a network at start and end of RIIO-3 disaggregated by Asset Category.</p> <p>Please see 'Appendix 2 –Worksheet Illustration of Risk Positions and Risk Changes', which provides a chart to help understanding of the relationship between the items contained on these worksheets.</p>
<p>General guidance on completing this worksheet</p>	<p>Licensees are required to report the impact on monetised risk and the distribution of asset populations in Risk and PoF bands.</p> <p>For Risk, this is the licensee's risk banded view of total risk for each NARM asset category.</p> <p>For Asset Population, this is the licensee's risk banded view of total asset population each NARM asset category.</p> <p>For Probability of Failure (PoF)/ Health, this is the licensee's PoF banded view of total asset population each NARM asset category.</p> <p>Licencees are also required to report the effect of relevant factors forecast to contribute to risk or population movements.</p> <p>The worksheets are autopopulated with the relevant NARM Asset Category names depending on the licensee name</p>

	<p>selected on the N0.1 Submission Details worksheet and licensees are required to submit information for each NARM Asset category where applicable.</p> <p>Asset Category Movements Licensees are required to report risk or PoF banded values for the positions below. Please see Appendix 2 for an illustration of the relationship between these risk positions.</p> <p>Risk, Asset Population and Probability of Failure(PoF)/ Health Population:</p> <ol style="list-style-type: none"> 1. RIIO3 Start Position: This is the RIIO-3 start position (1 April 2026). It is equivalent to the RIIO-2 Closeout Position after it has been adjusted for any data cleanse and/or change in methodology between RIIO-2 and RIIO-3, which are to be recorded in the Normalisation table. Once set in the RIIO-3 BPDT, the values are expected to be fixed for subsequent years. These values should indicate a total risk or population profile. Once set in the RIIO-3 BPDT the values are expected to be fixed for subsequent years. 2. RIIO3 End Position Without Intervention - Normalised: This is the licensee's view of the risk/population position as at the end of RIIO-3 (31 March 2031) assuming no intervention and once the effect of normalisations have been accounted for.): It is derived by adding the expected deterioration (as assumed for the BNRO) to the RIIO-3 Start position. These values should indicate a total risk or population profile. The values reported may vary year-on-year as normalisation values are updated. 3. Movements due to A1 Asset Replacement, A1 Asset Refurbishment and A1 other: For each asset category licensees must report its forecast risk or
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	<p>PoF banded values of movements due to A1 interventions. These values should indicate a change in risk or population, if any, rather than indicate a total risk or population profile. Once set in the RIIO-3 BPDT the values are expected to be fixed for subsequent years.</p> <p>4. RIIO3 End Position With Intervention - Normalised: This is the licensee's view of its RIIO3 end position assuming intervention takes place and the effects of normalisations have been accounted for. These values should indicate a total risk or population profile. The values reported may vary year-on-year as normalisation values are updated.</p> <p>The following risk and population profiles are calculated based on the inputted data above:</p> <p>5. RIIO3 End Forecast Deterioration: Where relevant to an asset category then licensees must report its forecast risk or PoF banded values of asset deterioration assuming no intervention. These values are the difference of the end of RIIO-3 without intervention, and the start of RIIO-3 adjusted for any normalisations. These values should indicate a change in risk or population, if any, rather than indicate a total risk or population profile. Once set in the RIIO-3 BPDT the values are expected to be fixed for subsequent years.</p> <p>6. Non-NARM intervention Movements (with intervention): This is calculated as the difference between RIIO3 End Position With Intervention, RIIO3 End Position Without Intervention and</p>
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	<p>Movements due to A1 Asset Replacement, A1 Asset Refurbishment and A1 other. These values should indicate a change in risk or population as a result of Non-Intervention, if any, rather than indicate a total risk or population profile. A breakdown of Non-NARM Intervention movements are to be recorded in the relevant normalisation table.</p> <p>Totals</p> <p>Totals for all of the risk and population positions and movements.</p> <p>Normalisations</p> <p>Licensees are required to report the effect of relevant factors likely to contribute to risk or asset population movements for each NARM asset category.</p> <p>Where relevant to an asset category then licensees must report its estimates of impact of the factors listed (a to g) below on Risk, Asset Interventions and Asset Populations:</p> <ul style="list-style-type: none"> a. RIIO-2 Closeout : This is the RIIO-2 Closeout risk position. b. Data Cleansing – Impact of any data cleansing on risk between RIIO-2 Closeout and RIIO-3 Start. c. RIIO-2 to RIIO-3 NARM Methodology Change: Impact of any data methodology change between RIIO-2 Closeout and RIIO-3 Start. d. A2 Funding Category Replacements and Refurbishments – Impact of any A2 funding category replacements and refurbishments on risk in RIIO3. e. A3 Funding Category Replacements and Refurbishments - Impact of any A3 funding
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	<p>category replacements and refurbishments on risk in RIIO3.</p> <p>f. Asset Additions (not part of A1 interventions) - Impact of any asset additions not part of A1 interventions on risk in RIIO3.</p> <p>g. Asset Disposals (not part of A1 interventions): Impact of any asset disposals not part of A1 interventions on risk in RIIO3.</p> <p>Any factors which result in a risk or population change should align to those calculated for Non-NARM intervention Movements (with intervention).</p> <p>The licensee must explain the basis for its estimates of the above metrics within its accompanying commentary and provide detailed commentary on the impacts of RIIO-2 to RIIO-3 methodology changes.</p> <p>Please refer to the NARM Handbook for further guidance on the principles relating to the above factors.</p> <p>Order of derivation</p> <p>The estimated value of the above metrics may be partly dependant on the order in which they are derived. For consistency of reporting licensees should derive their estimated values in the order in which they are listed on the Normalisations table.</p> <p>Treatment to be applied in specific scenarios</p> <ul style="list-style-type: none"> Non-like-for-like replacements: please see instructions on worksheet N1.3.
Sector specific guidance	
Electricity Transmission	N/A
Gas Transmission	N/A
Gas Distribution	N/A

Specific definitions for this worksheet	
A2 Funding Category Replacements and Refurbishments	The replacement or refurbishment element of any activities funded, or expected to be funded, under NARM Funding Category A2. For example a project involving the construction of a new transmission circuit, including the replacement of certain existing assets at a substation: the licensee must report the risk and volumes associated with the replacement of the existing substation assets. However, risk and volumes associated with the new transmission circuit is not reported.
A3 Funding Category Replacements and Refurbishments	The replacement or refurbishment element of any activates funded, or expected to be funded, under NARM Funding Category A3. For example replacement of iron mains under the GDNs' Iron Mains Risk Reduction Programme (IMRRP), must be reported in this category.
Asset Additions (not part of A1 interventions)	<p>As per 'Addition' definition in Appendix 1</p> <p>Licensees should report their best view of new assets added through load related (or growth) project, taking account of the complexity and accuracy of any modelling involved in making these estimate. The licensee must explain the basis and accuracy of its estimates in its accompanying narratives. While we encourage licensees to provide a view, a zero entry is permissible in cases of extremely low accuracy.</p> <p>Where a load related (or growth) project contains an element of replacement or refurbishment, then the impact of the replacement or refurbishments must be reported as A2 Funding Category Replacements or Refurbishments or A3 Funding Category Replacement of Refurbishments.</p>
Asset Disposals (not part of A1 interventions)	<p>As per 'Addition' definition in Appendix 1</p> <p>Licensees should report their best view of assets removed through load related (or growth) or non-A1</p>

	<p>decommissioning project, taking account of the complexity and accuracy of any modelling involved in making these estimate. The licensee must explain the basis and accuracy of its estimates in its accompanying narratives. While we encourage licensees to provide a view, a zero entry is permissible in cases of extremely low accuracy.</p> <p>Where a load related (or growth) or non-A1 decommissioning project contains an element of replacement or refurbishment, then the impact of the replacement or refurbishments must be reported as A2 Funding Category Replacements or Refurbishments or A3 Funding Category Replacement of Refurbishments.</p>
Forecast Deterioration	The forecast deterioration over RIIO-3.
Data Cleanse	Changes in reported risk, asset populations or asset interventions due to correction of data errors detected during the year.

N2.4 – Risk Component Worksheet

Purpose and use by Ofgem	Provides summary view of distribution profile of Monetised Risk on a network at start and end of RIIO-3 disaggregated by Asset Category and by component elements of risk (i.e. Environmental Risk, Safety Risk, System Risk, Financial Risk).
General guidance on completing this worksheet	<p>Licensees are required to report breakdown of Total Risk into Environment Risk, Safety Risk, System Risk, and Financial Risk for total population of each NARM Asset Category for three risk positions in their relevant sections. Licensees are required to provide their view on the following:</p> <ol style="list-style-type: none"> 1. RIIO3 Start Position - Total for population in band: data reported on this worksheet must reconcile with

	<p>the total risk and volume values reported on N2.3 worksheet.</p> <p>2. RIIIO3 End Position Without Intervention - Total for population in band: data reported on this worksheet must reconcile with the total risk and volume values reported on N2.3 worksheet.</p> <p>3. RIIIO3 End Position With Intervention - Total for population in band: this should be the licensee's view based on the interventions forecasted on tables N1.2 and N1.3 being delivered in RIIIO3. Data reported on this worksheet must reconcile with the total risk and volume values reported on N2.3 worksheet.</p> <p>Environmental, Safety, System, and Financial risks should be reported utilising the same banding as for Total Risk, i.e. each component risk value should sum up to the total risk values in each band.</p>
Sector specific guidance	
Electricity Transmission	N/A
Gas Transmission	N/A
Gas Distribution	N/A
Specific definitions for this worksheet	
None	

5. N3 Supporting Data Worksheets

Purpose of reporting requirements

- 5.1. Five blank worksheets are provided for the licensee to submit any data necessary to support its submission.

Instructions for using supporting data worksheets

- 5.2. The licensee should, where possible, format and order the data on supporting data worksheet in way that is consistent with the preceding worksheets. Where relevant, data definitions and terminology used on these worksheets should be consistent with the preceding worksheets and with this guidance document.
- 5.3. If a supporting data worksheet is used, then the licensee must:
1. Rename the tab with a meaningful name. When renaming, the numbering system, i.e. 4.1, 4.2, etc should be retained. The tab name should not contain any spaces. Underscore character should be used in place of spaces.
 2. Overwrite the relevant tab name on worksheet 0.1_Contents with the new tab name.
 3. Overwrite the relevant worksheet title on '0.1 Contents' worksheet with an appropriately descriptive title.
 4. Delete the instruction box on the supporting data worksheet.
- 5.4. If a supporting data worksheet is used to calculate values to input preceding worksheets, then the inputs should be entered as links directly to the supporting data worksheet.

6. Commentary requirements

- 6.1. Licensees are required to submit a supporting commentary document to provide understanding of the data contained in the BPDT as well as explanation or updates on any previously identified or emerging issues related to NARM and/or the licensee's delivery of its Forecast Network Risk Outputs (NRO).
- 6.2. The licensee must provide cross-reference to data values reported in the BPDT for all numerical values quoted in the supporting commentary. The licensee may use the N3 Supporting Data worksheets, including additional supporting data or derivation of values, where this is necessary. The licensee must also submit copy of any tables or charts contained in the supporting commentary through the N3 Supporting Data worksheets.
- 6.3. We are not requiring the licensee to use a proforma template for its narrative submissions. However, the narrative submissions should, as a minimum, include the sections set out below:
 1. Executive summary – short overview of the main points of the commentary document.
 2. Definitions and assumptions – explanation of any definitions or assumptions (not covered by this guidance) that the licensee has applied in order to comply with the reporting requirements including:
 - a. Asset definitions and intervention definitions – an explanation of the asset and intervention definitions the licensee has applied, as well as any assumptions that it has applied in order to report data in accordance with the definitions.
 - b. General assumptions – explanation, including limitations, of any assumptions not covered under the 'Asset and intervention definitions' section, that the licensee has found necessary to apply in order to populate the BPDT. Where possible these should be related to individual worksheets.
 3. RIIO-3 Forecast NRO Delivery – commentary on the licensee's expected delivery of its Forecast NRO, including:
 - a. Full RIIO-3 period expected delivery – explanation of licensee's expectation of its delivery of its Forecast NRO. This commentary must be aligned with the data reported on N1.3 and N2.3 worksheets. The licensee is required to provide individual commentary for each asset populated on the N2.3 worksheet, with reference to the relevant intervention and project data reported on the N1 worksheets.

The commentary in the section must cover both volumes and monetised risk, as well as the relationship between the two sets of metrics.

1. Network Risk – commentary on the data reported on N2 tabs
4. Non-NARM Intervention Risk and Population Changes – explanation of each of the Non-NARM intervention risk Changes (normalisations) reported on N2.3. Each Non-NARM intervention Risk Change should be addressed separately. This must include, as a minimum:
 - details of the methodological approach used to derive values,
 - rationale for choosing the derivation approach; and
 - explanation of any assumptions applied.
5. RIIO-3 True-up Risk and Population Changes: explanation of the RIIO-2 closeout position and any changes in risk or population that occur between

RIIO-2 closeout and RIIO-3 start. Each risk change should be addressed separately. This must include, as a minimum:

- details of the methodological approach used to derive values,
- rationale for choosing the derivation approach; and
- explanation of any assumptions applied.

Appendix 1 – Glossary and Definitions

A

Addition

The addition of an asset to the network of load related work, not including additions carried out as part of a replacement or refurbishment activity.

(NARM) Asset Category

See NARM Handbook. The NARM Asset Categories for each sector are set out in NARM RRP worksheet N0.7_Lookup_References.

Asset Family

A subdivision of an Asset Category where differentiation within an Asset Category is required due to differences in deterioration characteristics, expected asset life, or methodological approach to deriving Monetised Risk.

B

Baseline Network Risk Outputs (BNRO)

See NARM Handbook

C

Costs and Volumes (CV) BPDT

The RIIO-3 ET, GT or GD specific cost and volume business plan data template (BPDT). The BPDTs comprise a set of templates (in MS Office Excel format) for reporting business plan data which allow Ofgem to collect data from companies in a consistent manner. They consist of a number of data entry sheets together with various summaries and are one element of the wider suite of information required to be provided to Ofgem to enable informed price control allowances to be set.

D

Disposal

See removal

I

Indirect Intervention

Any intervention on a network asset, or other infrastructure asset, that modifies the probability of failure, or consequence of failure of another network asset.

This is an indirect intervention from Asset B's perspective, and it is designed for the specific purpose of reducing risk on specific assets, and indirect intervention can include, for example:

- a. installation or removal of physical infrastructure designed to prevent damage to adjacent assets in the event of an asset failure (e.g. installation of a blast wall).
 - in such a case the risk reduction impact on the protected adjacent assets should be entered as 'Indirect Intervention' risk
- b. addition or disposal that increases or decreases the resilience of a local or regional network and hence modifies the consequence of failure of other asset(s) in the locality or region.
 - the risk impact on the other network assets should be entered as 'Indirect Intervention' risk. The risk impact of the additions and disposals themselves are not included in this category.

L

Long-term Monetised Risk

See NARM Handbook

Long Term (Risk) Benefit

The benefit delivered by an asset intervention as measured by the Long-term Monetised Risk reduction.

M

Maintenance & Repair

Any activity required or assumed to be necessary to achieve the expected life of an asset. Therefore, Maintenance & Repair activities, if carried out as assumed to be necessary, do not impact the Monetised Risk of an asset. Failure to carry out Maintenance & Repair may, however, increase the Monetised Risk of an asset due to the increased likelihood of it failing to achieve its expected asset life.

Monetised Risk

See NARM Handbook

Monetised Risk Output

The risk benefit delivered or expected to be delivered by an asset intervention. The difference between without intervention and with intervention Monetised Risk. Can be measured over one year or over a longer period of time.

N

NARM Assets

See NARM Handbook

NARM Methodology

See NARM Handbook

O

Outturn Network Risk Outputs (ONRO)

See NARM Handbook

R

Refurbishment

A one-off activity undertaken on an asset that is deemed to be close to end of life or is otherwise requiring intervention that extends the life of that asset or restores its functionality. This activity does not result in the recording of a new or disposed asset in the Asset Register, but may improve the health indicator (or probability of failure) of the asset. Refurbishment can include the replacement or reconditioning of components of an asset.

Removal

The permanent removal of an asset from the network, not including removals carried out as part of a replacement or refurbishment activity.

Replacement

Asset replacement is an activity undertaken by a network company to remove an existing asset(s) and install a new asset. The asset replacement activity includes:

- the installation of replacement assets

- the dismantlement of existing assets where the dismantlement is undertaken as part of the asset replacement works.

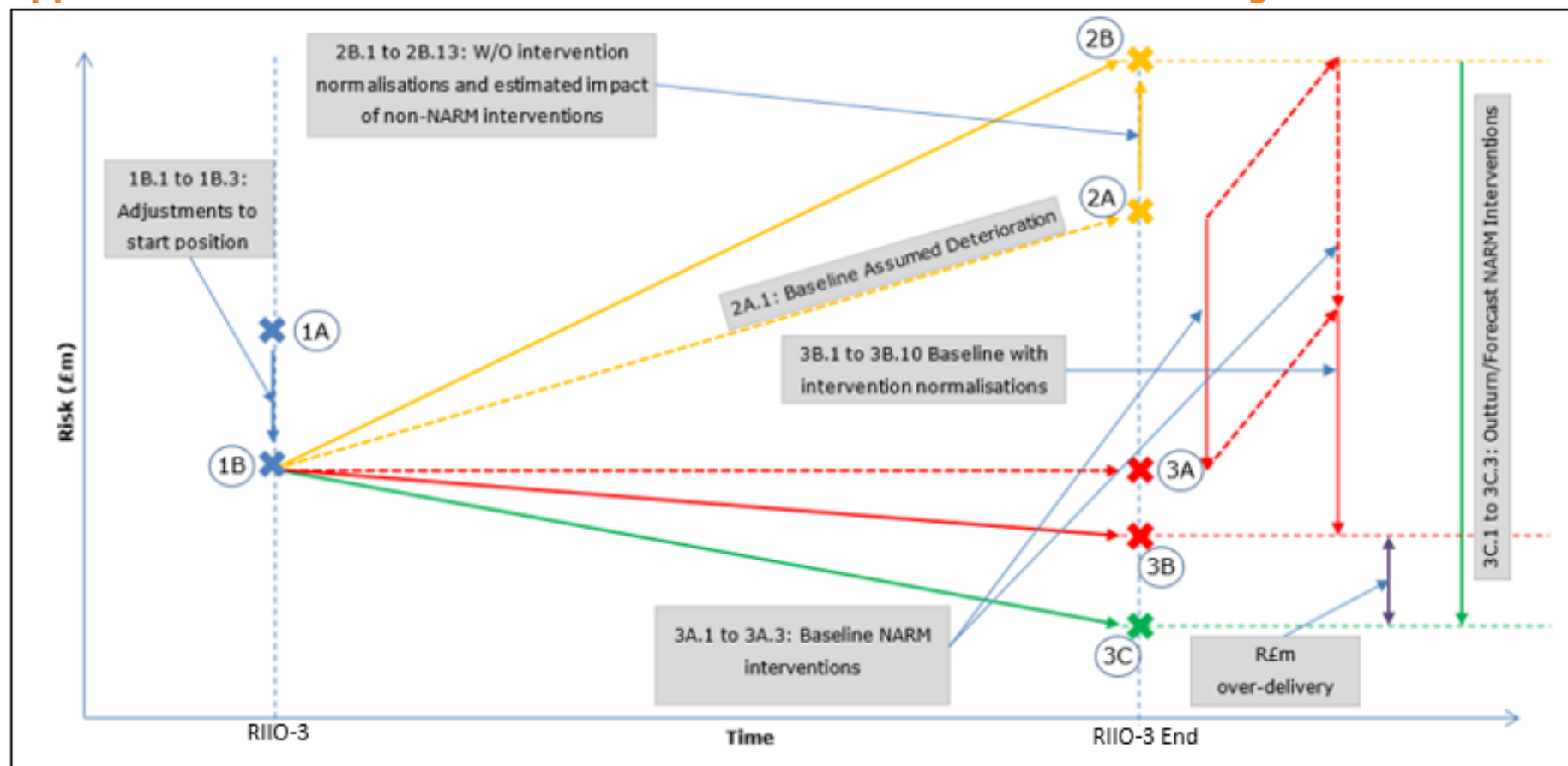
S

Single Year Risk/Single-Year Monetised Risk

See NARM Handbook

Guidance – RIIIO-3 Business Plan Data Template Guidance for Network Asset Risk Metric Tables

Appendix 2 – Worksheet Illustration of Risk Positions and Risk Changes



- 1A: RIIO-2 Closeout Position
- 1B: RIIO-3 Start
- 2A: RIIO-3 End – Without Intervention (Pre-Normalisation)
- 2B: RIIO-3 End – Without A1 Intervention (Normalised)
- 3A: Baseline RIIO-3 End – With A1 Intervention (Pre-Normalisation)
- 3B: Baseline RIIO-3 End – With A1 Intervention (Normalised)
- 3C: Outturn/Forecast RIIO-3 End – With A1 Intervention