|  |
| --- |
|  |
| RIIO-ET2 Electricity Transmission Price Control –Regulatory Instructions and Guidance on Data Templates: Version 1.9 |
| **Publication date:** | 21 February 2025 | **Contact:** | Aminat Raheem |
| **Team:** | Price Control Operations |
|  |  | **Tel:** | 020 3603 9800 |
| **Email:** | Aminat.Raheem@ofgem.gov.uk |

This document provides instructions and guidance to the three electricity transmission owners - National Grid Electricity Transmission plc, SP Transmission Ltd and Scottish Hydro Electric Transmission plc - to enable them to complete the annual reporting requirements associated with the RIIO-ET2 transmission price control from 1 April 2021 to 31 March 2026.

This document is for people who are filling out the “Costs & Volume” Regulatory Reporting Process (C&V RRP) data templates and want to know general and specific guidance for reporting data. It explains the scope of the data templates, what to consider when completing them, and where to find more information.

© Crown copyright 2025

The text of this document may be reproduced (excluding logos) under and in accordance with the terms of the [**Open Government Licence**](http://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/).

Without prejudice to the generality of the terms of the Open Government Licence the material that is reproduced must be acknowledged as Crown copyright and the document title of this document must be specified in that acknowledgement.

Any enquiries related to the text of this publication should be sent to Ofgem at:

10 South Colonnade, Canary Wharf, London, E14 4PU. Alternatively, please call Ofgem on 0207 901 7000.

This publication is available at [**www.ofgem.gov.uk**](http://www.ofgem.gov.uk). Any enquiries regarding the use and re-use of this information resource should be sent to: psi@nationalarchives.gsi.gov.uk

**Contents**

[Foreword 5](#_Toc127794758)

[1. Introduction 7](#_Toc127794759)

[**Context and related publications** 18](#_Toc127794760)

[**Publication** 19](#_Toc127794761)

[2. General Instructions for completing the data template 21](#_Toc127794762)

[**Section summary** 21](#_Toc127794763)

[**Introduction** 21](#_Toc127794764)

[**Contents** 28](#_Toc127794765)

[**User Guide** 28](#_Toc127794766)

**[Data Flow](#_Toc127794767)** [29](#_Toc127794767)

[**Change Log** 29](#_Toc127794768)

[**Universal Data** 29](#_Toc127794769)

[**Control** 29](#_Toc127794770)

[**Asset possibilities / Look up tables** 29](#_Toc127794771)

[**Checks sheet** 30](#_Toc127794772)

**[Revenue worksheets](#_Toc127794773)** [30](#_Toc127794773)

[3. Instructions for completing the data template 32](#_Toc127794774)

[**Section summary** 32](#_Toc127794775)

[**Introduction** 32](#_Toc127794776)

[**A1.1 Totex AP** 34](#_Toc127794777)

[**A2.1 Cost matrix (all)** 34](#_Toc127794778)

[**A2.1 Cost Matrix (by year)** 34](#_Toc127794779)

**[A7 Asset movements (by year)](#_Toc127794780)** [36](#_Toc127794780)

**[E1.1 Business Carbon Footprint (BCF) reporting](#_Toc127794781)** [37](#_Toc127794781)

[**E1.2 Environmental scorecard** 39](#_Toc127794782)

[**E1.3 Energy Not Supplied** 42](#_Toc127794783)

[**E1.4 IIG Incentive** 43](#_Toc127794784)

**[E1.5 Quality of connections satisfaction survey output delivery incentive](#_Toc127794785)** [45](#_Toc127794785)

**[E1.6 System Characteristics](#_Toc127794787)** [46](#_Toc127794787)

**[E1.8 Timely connections](#_Toc127794788)** [50](#_Toc127794788)

**[E1.9 TPD & TPG (NGET only)](#_Toc127794789)** [50](#_Toc127794789)

**[E1.10 Net Zero / UIOLI](#_Toc127794790)** [51](#_Toc127794790)

**[D4.8 Directly Renumerated Services (DRS)](#_Toc127794791)** [59](#_Toc127794791)

**[D4.9 Pass Through](#_Toc127794792)** [60](#_Toc127794792)

**[D4.13-16 Innovation](#_Toc127794793)** [60](#_Toc127794793)

[4. Instructions for completing the data template 67](#_Toc127794794)

**[Section summary](#_Toc127794795)** [67](#_Toc127794795)

**[Introduction](#_Toc127794796)** [67](#_Toc127794796)

[**4.2a Physical security capex** 116](#_Toc127794797)

**[4.2b Physical security opex](#_Toc127794798)** [117](#_Toc127794798)

**[D4.6a TO Cyber Security Resilience OT](#_Toc127794799)** [139](#_Toc127794799)

**[D4.6b TO Cyber Security Resilience IT](#_Toc127794800)** [140](#_Toc127794800)

**[D4.7 Uncertain costs](#_Toc127794801)** [140](#_Toc127794801)

[Appendices 145](#_Toc127794802)

**[Introduction](#_Toc127794803)** [157](#_Toc127794803)

**[Definition of totex](#_Toc127794804)** [157](#_Toc127794804)

**[Other RAV requirements](#_Toc127794805)** [158](#_Toc127794805)

#

# Foreword

This document contains the electricity transmission price control cost, outputs, financial Regulatory Instructions and Guidance (RIGs). This guidance applies to reporting during the RIIO-ET2 period from 1 April 2021 until 31 March 2026.

The purpose of this document is to provide a framework to allow Ofgem to collect accurate and consistent cost, volume, allowed expenditure and output delivery information from the three onshore electricity transmission owners (TOs) - National Grid Electricity Transmission plc (NGET), SP Transmission Ltd (SPTL) and Scottish Hydro Electric Transmission plc (SHE Transmission). The framework also enables TOs to complete the reporting requirements associated with updating various variable values and performance data in the Price Control Financial Model (PCFM) during the Annual Iteration Process (AIP) which in turn drives Allowed Revenue for the forthcoming Regulatory Year.

A number of licence conditions require the three electricity TOs to provide us with this information. The main licence condition for the purposes of this document is Standard Condition B15: Regulatory Instructions and Guidance.

The template has been designed to be consistent with our RIIO-ET2 Final Determinations and will enable us to collect the information we need to assess TO’s performance.

1. **Introduction**
	1. This chapter sets out the purpose and structure of the Regulatory Instructions and Guidance (RIGs) which will apply to the electricity transmission owners for RIIO-ET2. It also sets out guidance on the process for reporting under the RIGs and our audit requirements.

**Background**

* 1. RIIO-ET2 is the second iteration of electricity transmission price control to be conducted under the RIIO (Revenue = Incentives + Innovation + Outputs) model. This will apply to electricity transmission network companies from 1 April 2021 to 31 March 2026.
	2. As part of our regulatory oversight of the electricity transmission network companies, we collect a wide variety of both qualitative and quantitative information.
	3. The Regulatory Instructions and Guidance (RIGs) provide a framework which enables Ofgem to collect data from the transmission owners (TOs) during the RIIO-ET2 period. We collect data to enable us to administer the Special Conditions of the TOs’ licences (the conditions which relate to the price control) and our price control Final Determination for each TO. For example, the RIGs allow us to monitor TOs’ performance against the outputs that they are required to deliver, to calculate any rewards or penalties associated with incentive mechanisms, and to determine adjustments to allowances determined within period, i.e. costs determined through uncertainty mechanisms.
	4. The RIGs inform TOs about the information we plan to collect, guide them on how to provide this information and enable licensees to put systems in place to collect the data to the detail we require.
	5. The RIGs framework also:
* allows us to collect data on provisional total expenditure (Totex)[[1]](#footnote-2) for use in the annual iteration process (AIP); and
* provides a database of licensee performance which we draw on to set cost proposals at subsequent review periods.
	1. For instructions and guidance on the completion of the triennial Pension Pack, please see the Pension Regulatory Instructions and Guidance supplement[[2]](#footnote-3).

**Legal framework**

* 1. The RIIO-ET2 reporting requirements are contained in a single licence condition: Standard Condition B15: Regulatory Instructions and Guidance (‘the RIGs Licence Condition’).
	2. The RIGs Licence Condition sets out the scope and governance arrangements for the RIGs.
	3. These instructions do not change any definitions or obligations contained within the electricity transmission licence applicable to and in the event of any conflict, the licence conditions will always take precedence.

**Components of the RIGs**

* 1. The RIGs comprise a set of templates (in MS Office Excel format) for reporting data. They are one element of the wider suite of information provided to Ofgem on an annual basis to enable effective monitoring of TOs’ performance against the outputs that they are required to deliver, in relation to the allowances set as part of RIIO-ET2 settlement and against previous year’s submitted actuals and forecasts.
	2. Other elements include instructions and guidance on how to complete the associated workbooks and report the data (this document) and the PCFM Guidance, which contains instructions and guidance on how to complete the revenue worksheets in the template.

**RIGs templates**

* 1. The data templates have been designed to act as a means of recording the basis of the RIIO-ET2 price control Final Determination. Their content has built on the learning from the Regulatory Instructions and Guidance (RIGs) used to monitor the regulatory settlement throughout RIIO-ET1 period and the reporting requirements developed as part of the RIIO-ET2 Business Plan Data Template (BPDT) submission.
	2. Information provided by each TO will be subject to annual review and confirmation by Ofgem.
	3. The key points to note in completing the RIGs templates are:
* The Licensee must take all reasonable steps to ensure the quality of its RIGs data. Quality data will in all material respects be accurate, complete and fairly presented.
* Where a table contains multiple years of data (actual and/or forecast) that was reported in a previous RIGs template, the licensees 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 in their accompanying narrative.
* The Licensee must notify Ofgem of the possibility of any significant revisions to improve data quality. This notification must be issued to Ofgem as soon as it becomes evident to the Licensee that a reasonable likelihood exists of significant inaccuracies in any of its previously submitted data.
* Workbooks in these RIGs may link to other workbooks. These links must be retained by the TOs in the version submitted to Ofgem. Failure to do so will be considered non-compliant with the RIGs.
* The RIGs tables are colour coded to reflect the action required.
	+ Yellow cells represent editable input fields.
	+ Green is used to denote cells containing a formula or dropdown lists.
	+ Light blue cells are auto populated from elsewhere in the template (and not editable)
	+ The model also contains several “check” cells. These can be mainly found coloured red.
	+ White & Grey pattern cells are used where cells do not need to be completed.
* The ET2 PCFM works in a constant 2018/19 price base except in respect of some calculations internal to the model that use nominal prices, e.g., tax and legacy calculations. Values that feed into the PCFM are therefore either required to be stated in 2018-19 prices or are converted into 2018/19 prices.
* Unless otherwise stated, all financial values in the C&V RRP will be input in 2018/19 prices, i.e. 2024/25 data should be in 2018/19 prices.
* Unless otherwise indicated in the guidance document or templates, actual financial values should be provided in £ million to a minimum of three decimal places, and displayed at one decimal place, with financial values reconciling with the audited regulatory accounts. However, TOs are required to provide all actual financial data to the highest reasonable level of accuracy available from their source systems, and commensurate with the purpose for which such data is intended taking into consideration the appropriate allocations that are necessary to complete the tables.
* Workload units and outputs should be reported at the highest level of accuracy from the source systems and commensurate with the purpose for which such data is intended taking into consideration the appropriate allocations that are necessary to complete the tables. Unless stated in the licence or elsewhere in this document. Workload and outputs should be entered in the unit of measurement set out in this guidance or in the template.
* Where a reportable value is zero or not applicable to the TO then a zero must be input rather than the cell being left blank.
* Where a table clearly states that data is to be filled in by another TO other than the licensee, the licensee does not need to populate the data.

**Instructions and guidance**

* 1. 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 forecast data
	1. Licensees are required to provide forecast expenditure profiles, where applicable, for all years of the RIIO-ET2 price control. Forecasts represent the licensees best view following its best endeavours to take account of all relevant internal and external factors.

**Form of submission**

* 1. Instructions for the electronic submission of the workbooks will be circulated to each licensee’s regulation manager in advance of each submission deadline. However, if there is any doubt about the method of submission, the licensee must contact Ofgem.
	2. The submission must be accompanied by a letter signed by a director on behalf of the TO confirming that the data is accurate and has been provided in accordance with the RIGs.

**Commentary**

* 1. Alongside the submission of its templates, each TO must complete a commentary. A strategic commentary is required in order to:
* Provide a useful executive summary, focusing attention on distilling key messages of the drivers of performance and presenting clear strategic insights at this point in the price control period.
* Give Ofgem an understanding of the key drivers of business performance in terms of expenditure, workload and outputs and the materiality of each driver.
* Provide a summary of the key outputs the network company has delivered during the year and set them in the context of the delivery of the overall RIIO-ET2 price control outputs.
* Provide a summary explanation of the forecast, including outputs, deliverables, costs and workload.
* Provide an understanding of material variances against previous year’s actuals, forecasts and against the opening baseline allowances established by the RIIO-ET2 Final Determinations.
* To inform Ofgem of any organisational changes / performance improvements, including modification/enhancements to allocation methodology and/or data capture e.g. systems.
* It should also provide details of the approach to delivering whole system outcomes.
* TO’s should utilise the data and analysis presented in the “Analysis” section of the RRP to form the basis of the narrative submission. As a minimum, TO’s should ensure that the narrative covers and adequately explains the cost and volume actuals/forecast versus allowance for both current year and the total Price Control contained in each of the analysis tabs now included in the RRP.
* Additional narrative and supporting evidence, where appropriate, may include the justification and rationale on how the current reporting year actuals (e.g. outturn of 2024/25) has changed from the previous forecast provided in July 2024 RRP (2024/25 forecast). Also, an explanation of how prior years’ view on drivers of 5 Year Price Control totex performance have changed e.g. prior year reporting estimated Price Control performance to be driven by Load PCDs (projects A, B…) and expected re-openers (projects C&D), whereas current reporting year estimated Price Control performance reflects a PCD programme that has dropped/delayed and performance drivers shifted to non-load program and uncertainty mechanisms etc.

**Reporting under the ET RIGs**

**Timescales for reporting**

* 1. The reporting year for the provision of information under the RIGs is from 1 April to 31 March in the following calendar year. The excel templates for reporting on summary costs, workload and outputs should include forecasts for each of the remaining years of the RIIO-ET2 price control period.
	2. Except where otherwise stated, the TOs must provide the required information on an annual basis. The information is required under the RIGs as soon as reasonably practicable and in any event not later than 31 July following the end of the reporting year to which such information relates (unless Ofgem has previously consented to a request received from a TO in writing to follow alternative submission timescales).

**Resubmissions**

* 1. TOs are required to seek the agreement of Ofgem or person nominated by Ofgem before resubmitting any information provided in accordance with these RIGs.
	2. In any such instance the report concerned must be resubmitted in full (unless agreed otherwise). The resubmission must only be accompanied by a letter signed by a director where significant changes have been made and where Ofgem and/or the TO decide such a letter is required. The volume of supporting information the licensee will be required to submit to support any resubmission will be dependent on the nature of any required resubmission.
	3. For each resubmission a detailed explanation must be provided in the changes log in the RIGs listing every cell that has been amended. The explanation must include sufficient commentary to explain the reasons for the resubmission.
	4. In relation to the detailed return required as part of revenue reporting, this must only be resubmitted where a restatement is necessary in the opinion of the appropriate auditor.

**Review**

* 1. Once the TOs have submitted the information to Ofgem, Ofgem or a person nominated by it (‘a reviewer’) will undertake a detailed review of the information. A review may include a visit to each TO for discussion of the information submitted. Such visits will be agreed with the TOs in advance.
	2. Where a reviewer has been nominated, the reviewer will enter into an agreement with the licensee to maintain confidentiality on reasonable terms.

**Appointing an examiner**

* 1. In accordance with the RIGs Licence Condition the TO must permit a person nominated by Ofgem to examine:
* the systems, processes and procedures for measuring the specified information
* the specified information collected by the licensee
* the extent to which the systems, process and procedures and the specified information complies with the RIGs; and
* any further information relevant to the RRP submissions

**Audit requirements in relation to revenue reporting**

* 1. In accordance with the RIGs Licence Condition, Ofgem will identify the specified information, which is to be subject to audit, the terms on which an auditor is to be appointed by the licensee for that purpose and the nature of the audit to be carried out by that person. We will issue an Agreed Upon Audit Procedures (AUP) for use by an appropriate auditor by 31 March of the year of submission.

**Publication and sharing of templates**

* 1. It is a requirement for TOs to publish an annual report, on their company website. The report should be published by the 30 September. The information published must align with the information provided to Ofgem. The report should cover the following as a minimum:
* Executive Summary
* Revenue Impact - actual revenue v allowances for reporting year and expected outturn across the price control period.
* Incentive – performance in the year against targets (with potential future highlights).
* Innovation – summary of innovation projects and funding.
* Outputs - performance in the year against targets, outputs forecast to be delivered during the price control period, and how these levels vary from last year’s information.
* Costs –
	+ performance in the year against targets for costs and workload where relevant, highlights of future performance, and expected outturn at the end of RIIO.
	+ identify the proportion of expenditure (actual and forecast) and forecast allowance related to projects that span RIIO-ET2 and RIIO-ET3 and the delivery of outputs in “T2+2” timescales (31 March 2028), where applicable.
	+ Uncertainties - a high-level commentary in relation to anticipated impact(s) of any uncertainty mechanism and how this has evolved from the expectations at the time of drafting the Business Plans. Comment on how these have affected forecast capex and output delivery.
* Strategic performance explanation to identify and explain the proportion of annual performance that each TO determine to be attributable to the following drivers:
	+ Efficiency / Inefficiency
	+ External factors outside the control of TOs’, and/or
	+ Assumptions made within the RIIO-ET2 settlement that have varied against the actual position[[3]](#footnote-4).
	1. Where possible, the narrative will provide a high-level summary of the five-year estimate of the totex under -/ over-spend across the RIIO-ET2 period.
	2. Additional appendices can be used to provide further detail on specific performance areas. Examples include a deeper explanation of any missed or deferred outputs, to provide an overview and timelines to mitigate any perceived delivery risks, or explanation of changes in data methodologies/organisation structure and the effect that this has on reporting.
	3. Tables that should be published with / in the report are:
* Totex, actuals against allowances and forecasts
* Cost type / Funding category (e.g. Load, Non-Load, Non-operational capex, NOCs), actuals against allowances and forecasts
* Output performance summary
	1. Ofgem may publish any further information contained in the templates but will notify TOs in advance of any intention to do so and will make any necessary redactions.
	2. The RRP template is intended to enable each company to give summary details on specific areas of expenditure/activity to aid Ofgem’s understanding of the data from a number of perspectives. In doing so, the data template will enable each company to:
* identify and explain the main drivers of forecast expenditure and volume profile across the RIIO-ET2 price control period,
* explain scenarios used for justifying the forecast workload volumes and costs across the RIIO-ET2 period, and
* assist Ofgem in the process of navigating the data submission and supporting documentation. This in turn should help to minimise the requirement for Ofgem to originate subsequent supplementary questions (SQs).

**Structure of this document**

* 1. This document is divided into sections reflecting the different component parts of the C&V RRPs workbooks. These are as follows:
* Chapter 2 provides general instructions and guidance for completing the C&V RRP data template worksheets.
* Chapter 3 provides instructions for the completion of the C&V RRP data template worksheets collating costs, volume, output and allowance information.
* Chapter 4 provides guidance for the completion of C&V RRP data template worksheets collating information on output delivery incentives (ODI), system activity and asset mapping (also worksheets that present overview information).

**Context and related publications**

* 1. The following list contains related publications which readers may find useful.

**Associated documents**

* RIIO-2 sector specific methodology consultation, 18 December 2018

<https://www.ofgem.gov.uk/publications-and-updates/riio-2-sector-specific-methodology-consultation>

* RIIO2 sector specific methodology decision, 24 May 2019

<https://www.ofgem.gov.uk/publications-and-updates/riio-2-sector-specific-methodology-decision>

* RIIO-2 Draft Determinations for Transmission, Gas Distribution and Electricity System Operator

<https://www.ofgem.gov.uk/publications/riio-2-draft-determinations-transmission-gas-distribution-and-electricity-system-operator>

* RIIO-2 Final Determinations for Transmission and Gas Distribution network companies and the Electricity System Operator

<https://www.ofgem.gov.uk/publications/riio-2-final-determinations-transmission-and-gas-distribution-network-companies-and-electricity-system-operator>

* RIIO-2 Informal licence drafting consultation for Transmission, Gas Distribution and Electricity System Operator licences

<https://www.ofgem.gov.uk/publications/riio-2-informal-licence-drafting-consultation-transmission-gas-distribution-and-electricity-system-operator-licences>

* Decision on the proposed modifications to the RIIO-2 Transmission, Gas Distribution and Electricity System Operator licence conditions

<https://www.ofgem.gov.uk/publications/decision-proposed-modifications-riio-2-transmission-gas-distribution-and-electricity-system-operator-licence-conditions>

**Publication**

* 1. Ofgem is bound by the requirements of section 105 of the Utilities Act 2000 relating to the disclosure of information.
	2. 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 RIGs submissions.

**Your feedback**

* 1. We believe that consultation is at the heart of good policy development. We are keen to receive your comments about this guidance. We’d also like to get your answers to these questions:
1. Do you have any comments about the overall quality of this guidance?
2. Do you have any comments about its tone and content?
3. Was it easy to read and understand?
4. Any further comments?

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

1. **General Instructions for completing the data template**

| **Section summary**The purpose of this section is to provide general instructions for completing the C&V RRP worksheets. This is to enable Ofgem to effectively monitor the performance of TO’s in relation to the opening allowance set as part of the RIIO-ET2 Final Determinations and against previous years’ submitted actuals and forecasts. Ofgem will use this information to assist in the annual assessment of the C&V RRP submissions for RIIO-ET2.  |
| --- |

**Introduction**

* 1. The C&V RRP consists of a series of data tables in MS Excel. The purpose of the C&V RRP is to facilitate the submission of uniform and comparable financial and outputs information from licensees. This enables comparison of licensees with the baseline settlement agreed at Final Determination, in the first instance, and against prior year’s performance as we progress through RIIO-ET2. This will enable comparative regulation on a consistent basis throughout the RIIO-ET2 period. The workbooks should support and be consistent with the RIIO-ET2 Final Determinations.
	2. Ofgem will use this information to assess and monitor the performance of TO’s in relation to the opening allowance set as part of the RIIO-ET2 Final Determinations and against previous years’ submitted actuals and forecasts.
	3. The workbooks have been designed to have single data entry where possible in order to avoid duplication and to facilitate reconciliations and balance checks.
	4. Each licensee must complete the template in full, unless otherwise instructed in the specific table guidance. If information is incomplete, the licensee must provide a clear explanation for why.

**Overview**

**Accounting policies**

* 1. All costs are to be entered on a cash basis. Cash means exclusive of provisions and accruals and prepayments that are not incurred as part of the ordinary level of business. Licensees should use the same accounting policies as in the preparation of the regulatory financial statements, in accordance with UK GAAP or IFRS unless otherwise stated.
	2. In the event that the accounting policies applied to prepare the template differ from those used in the regulatory financial statements (for some or all years) the Licensee must include appropriate details including quantification of the difference.

**Structure of the template**

* 1. The template has a common structure, comprising an initial series of tabs dealing with procedural issues (contents tables, log of changes, etc), followed by the main data input sections.
	2. The C&V RRP template has been separated into the following sections:
* **Company input** (scheme level): Cost, volumes and outputs where activity can be represented at a scheme level[[4]](#footnote-5). Worksheets have light green colouring.
* **Company allowance input** (scheme level): allowance where activity can be represented at a scheme level (initial population will reflect the Final Determination set for each TO). Worksheets have dark green colouring.
* **Other company input** (functional level): Cost and volumes information where activity is represented at a functional level[[5]](#footnote-6). Worksheets have light green colouring and have the prefix “C” or “D” in the title.
* **Other company allowance input** (functional level): allowance where activity is represented at a functional level (initial population will reflect the Final Determination set for each TO). Worksheets have dark green colouring and prefix of “C” or “D” in the title.
* **Other input:** to summarise financial information and output activity in bespoke area (applicable to LOTI, HVDC centre). Worksheets have grey colouring. A further worksheet is reconciling data (reported through the NARM RRP) with the associated costs of delivering those outputs (reported through the C&V RRP).
* **Analysis:** The worksheets contain a series of analysis tables and graphical representations of performance for both cost and volumes for Totex and the main funding categories and sub-categories. In addition, it details the Top 3 projects (materiality & variance) for both Load & Non Load. These tabs aid Ofgem’s reporting and should be used by TO’s to structure and inform their narrative submissions.
* **Totex and cost matrix:** The worksheets collate and summarise the cost information populated in the Company Input section above (i.e. scheme representation and functional level information). Worksheets have no colouring.
* **Asset Movement** matrix tabs which have dark purple colouring.
* **Allowances summary:** The worksheets collate and summarise the allowance information populated in the Company Input section above. Worksheets have light purple colouring.
* **Additional tables**: The worksheets capture information on areas of performance against the output targets and incentives. Worksheets have yellow colouring.

**Interface worksheets**

* 1. There are two interface worksheets which exist to allow data that is common to other parts of the price control to be collated and linked where necessary. The purpose and instructions for each are outlined below.
* Revenue Workbook linking sheet: the purpose of this worksheet is to provide a single interface point to gather the required inputs for the revenue worksheets. Where practical the revenue information is linked to the relevant C&V worksheets. Where the data is not contained elsewhere the cells are yellow input cells. Please refer to the latest published version of the PCFM guidance.
* NARM Interface: this worksheet is required to provide a summary of the capex expenditure that is linked to NARM outputs. This table draws upon data from elsewhere in the pack, there are no input requirements for this sheet. This table will be subject to further auto-population on the finalisation of the NARM RRP.

**Revenue Sheets and interface with the C&V RRP**

* 1. As noted above, the revenue elements of reporting now reside in the C&V RRP and RIIO-ET2 PCFM. The PCFM Guidance sets out the data input requirement for these data worksheets.
	2. The RRP contains a “Revenue Workbook linking sheet” that serves as a link between the Revenue sheets and the rest of the C&V RRP. To facilitate the data input to the Revenue Workbook and input to the ET2 PCFM, two additional “working” sheets have been established to collate information from the C&V RRP and translate into the relevant totex spend categories (licence terms ALC, AOC etc. represented in the “Revenue Workbook linking sheet” rows 6 to 18).

**Baseline allowance population**

* 1. As agreed with licensees, an initial population of the C&V RRP data template is required to capture the population of expenditure profiles, outputs and allowances to reflect the Final Determination of each licensee. This process will establish a common interpretation and avoid the need for annual restatement of the opening baseline allowance position. Once this position is established the C&V RRP template will focus on the reporting of the RIIO-ET2 price control and will be used as the basis for monitoring future adjustments to allowances (e.g. uncertainty mechanism activity and re-opener adjustments).

**General**

* 1. This document (version 1. 9) details the tables that need to be filled in for conveying data for annual reporting.
	2. As the templates are a series of tables in MS Excel workbooks, links and formulae have been included to limit, where possible, the amount of manual data entry required. Licensees are not to change any formulae or formats (including insertion of deletion of rows or columns, moving any cells, or altering any text, figures, or formulae in any cells not shaded yellow) without instruction from Ofgem first. If a change is necessary (to correct an error, for example), Ofgem will notify licensees of the correction to be made.
	3. Certain fields require positive entries (e.g. asset additions), whereas others require negative entries (e.g. asset disposals). Unless specified in the individual table instructions below, the following rules apply:
* Gross costs are to be entered as positive values.
* Contributions (customer or otherwise) are to be entered as negative values.
* Cost recoveries are to be entered as negative values.
	1. The RIGs require the reporting of actual and forecast costs for RIIO-ET2. The C&V RRP data worksheets also currently contain the six years beyond (2027-2032) which will be used to provide a rolling forecast during RIIO-ET2 for schemes that commence works in T2 but are not expected to complete until T3. For the avoidance of doubt, all tables requiring annual historical data must be fully reconcilable to the latest published Regulatory Reporting Pack.
	2. A financial year for the provision of information required will be a period of 12 months commencing on 1 April of each year and ending on 31 March of the following calendar year.
	3. All C&V RRP allowance worksheets are to be completed
* exclusive of real price effects (RPE)[[6]](#footnote-7), and
* inclusive of all adjustments and attributions the final BPDT submission was subject to i.e. scheme allowance will reflect all in-built adjustments relevant to each licensee to reflect the Final Determinations.
	1. Each licensee must use reasonable endeavours to populate each of the tables above. Licensees should ignore any funding categories that do not apply to them.
	2. The template is unprotected to allow each licensee to add additional rows to the relevant tables to facilitate data entry.

**Definitions**

* 1. Definitions are included in the specific instructions for the tables. Licensees must ensure that the definitions are clearly understood and are complied with when entering any data into the template. Where there is doubt or uncertainty, please refer to Ofgem for clarification. This is to ensure consistency and comparability of data entry across licensees.

**Use of Estimates and Allocations**

* 1. Where a licensee (and any affiliate or related undertaking of the licensee) has apportioned costs to complete the tables, the basis of apportionment must be provided. Changes in apportionments should also be highlighted and explained.

**Cost phasing**

* 1. Each licensee is required to populate year-on-year actual asset category level cost information the current reporting year.
	2. In terms of costs reporting in future years, licensees are required to provide robust forecast information at a scheme level (to be provided as part of the accompanying narrative). Each licensee is required to explain and justify the allocation methods that are applied in providing forecast information and can ensure that the information provided is representative, reliable, repeatable, and auditable.
	3. We acknowledge that attribution and allocation methods will take time to develop and establish, and that processes applied translating internal financial systems to the RRP categorisations will improve as the reporting cycle progresses. The focus in the formative years (reporting year one and two) is on the development of a robust allocation and reporting process, including the control and governance mechanisms that will support and provide assurance to the data. Licensees will be required to explain and justify exceptions where stable forecast information cannot be provided through the allocation method and an alternative method is applied (i.e. generic profiling).

**Additional information**

* 1. If licensees consider that additional information beyond that requested is necessary to develop a complete understanding of the information presented in the tables then such information should be included in the narrative.

**Template errors**

* 1. Where errors (e.g. incorrect formulae, incorrect links) in a worksheet are identified then Ofgem should be notified as soon as possible. Ofgem will make the necessary corrections, log them in the change log and notify the Licensees.

**Re-Openers**

* 1. In relation to re-openers, where licensees expect their application to be successful and report forecast expenditure, licensees should also ensure they report the corresponding forecast allowance. Please refer to the PCFM Guidance for further forecasting guidance for re-openers.

**General tables**

**Cover**

|  |  |
| --- | --- |
| Purpose and Use by Ofgem | The purpose of this worksheet is to capture the licensee name, as well as the data file submission date and version number.  |
| Instructions for Completion | The licensee should complete the version number and submission date. |

**Contents**

|  |  |
| --- | --- |
| Purpose and Use by Ofgem | The purpose of this sheet is to provide a summary of the data table names contained within the template, a detailed description of the contents, and quick reference links. |
| Instructions for Completion | There is no input required in this worksheet. |

**User Guide**

|  |  |
| --- | --- |
| Purpose and Use by Ofgem | The purpose of this table is to provide a high-level summary of the inputs required in the template. |
| Instructions for Completion | There is no input required in this worksheet. |

**Data Flow**

|  |  |
| --- | --- |
| Purpose and Use by Ofgem | The purpose of this table is to provide a visual representation of how data flows through the model. |
| Instructions for Completion | There is no input required in this worksheet. |

**Change Log**

|  |  |
| --- | --- |
| Purpose and Use by Ofgem | The purpose of this table is to track the status of change proposals (and the action taken) and the correction of errors within the template. |
| Instructions for Completion | There is no input required to this sheet, any errors identified, or changes required should be notified to Ofgem, who will update the template, record the changes and issue a revision. |

**Universal Data**

|  |  |
| --- | --- |
| Purpose and Use by Ofgem | The purpose of this worksheet is to capture data used throughout the workbook, such as reporting year and indexation data. |
| Instructions for Completion | There is no input required to this sheet. Ofgem will update the relevant information each year. |

**Control**

|  |  |
| --- | --- |
| Purpose and Use by Ofgem | This sheet provides the control for the collation of relevant inputs into 'Scheme\_Cost\_Calcs' and 'Scheme\_Volume\_Calcs' |
| **Instructions for Completion** | Once the company input is complete go to the "Controls" tab and click the "Update Calculations" button. This will automatically populate the "Scheme\_Cost\_Calc" and "Scheme\_Volume\_Calc" sheet into a list of all the cost and volume and allowance inputs respectively. |

**Asset possibilities / Look up tables**

|  |  |
| --- | --- |
| Purpose and Use by Ofgem | This sheet contains the asset classification list (agreed with TOs) and any data constants used throughout the template, including lookup values.TOs are required to input schemes and associated project references, which are fundamental to the completion of the whole workbook. |
| **Instructions for Completion** | Look Up Tables sheet requires each licensee to input the Ofgem Scheme Reference (OSR) (column A) and a Project Reference (Column B).Where applicable, schemes that form the basis of the RIIO-ET2 Final Determination must be assigned the same OSR consistent with the BPDT submission upon which the Final Determinations were based. Referencing will continue in chronological order for new schemes. All new schemes will be assigned a new OSR and continue the sequence established through the Final Determinations. A Project Reference can apply to one scheme or multiple schemes. All schemes must therefore be assigned a Project Reference. For example, a new generation connection project delivering an output within the RIIO-ET2 period (hence a “Load” project under the “Local Enabling (Entry)” category) is comprised of three individual schemes: OSR1, OSR2 and OSR3. The Project Reference in column B will either be consistent with the BPDT submission upon which the Final Determinations were based (in the case of baseline projects) or use nomenclature chosen by the relevant TO that concisely and accurately identifies the Project. The descriptor chosen will apply equally to each of the OSR’s (three in the above example).  |

**ASTI Look up tables**

|  |  |
| --- | --- |
| Purpose and Use by Ofgem | This sheet contains lookup values relevant to projects delivered through the Accelerated Strategic Transmission Investment (ASTI) framework for each Licensee. TOs are required to input schemes and associated project references for ASTI projects only. |
| **Instructions for Completion** | Look Up Tables sheet requires each licensee to input the Ofgem Scheme Reference (OSR) (column A) and a Project Reference (Column B).A TO reference can be populated in Column D. To distinguish from the company input required for load and non-load schemes/projects that form the basis of the RIIO-ET2 Final Determination, the OSR in Column A will apply the prefix “ASTI” to all data entries (e.g. ASTINGT, ASTISPT, ASTISHET) and a numerical reference (e.g. 0001). Referencing will continue in chronological order. All future schemes where an application is subsequently approved and a funding decision is made will be assigned a new OSR. A Project Reference can apply to one scheme or multiple schemes. All schemes must therefore be assigned a Project Reference. For example, an ASTI investment is comprised of three individual schemes: OSR1, OSR2 and OSR3. The Project Reference in column B will either be consistent with the approval decision or use nomenclature chosen by the relevant TO that concisely and accurately identifies the Project. The descriptor chosen will apply equally to each of the OSR’s (three in the above example).  |

**Checks sheet**

|  |  |
| --- | --- |
| Purpose and Use by Ofgem | This sheet contains and data cross checks or validation within the template  |
| **Instructions for Completion** | There is no input required in this worksheet. |

**Revenue worksheets**

|  |  |
| --- | --- |
| Purpose and Use by Ofgem | These tables contain the necessary algebra as outlined in the license to convert the cost, output or incentive data provided by ETOs in the RRP into the required inputs to the PCFM |
| **Instructions for Completion** | Inputs in these worksheets are linked to the Revenue Workbook linking sheet where possible. Licensees are still required to input directly to the following tables: · Tax Pools Totex Allocations · DRS Revenue Where further guidance is required in completing the worksheets listed above, please refer to the latest PCFM guidance. |
| Specific definitions for this worksheet | None  |

1. **Instructions for completing the data template**

| **Section summary**The purpose of this chapter is to inform the completion of worksheets that provide information on elements of the total expenditure of each TO (where applicable), on incentives, system data, and other TO-specific information. This information is to enable Ofgem to effectively monitor the performance of the companies in relation to their business plans and expenditure baselines set in the Final Determinations.The chapter also contains information on worksheets containing points of aggregation within the C&V RRP, worksheets to record information on future re-opener applications and the proposed interface with the NARM templates. |
| --- |

**Introduction**

* 1. The purpose of the worksheets in this area is to report relevant information at various levels of granularity to enable Ofgem to fully understand the incentive performance, system data or are aggregation sheets to summarise data population elsewhere in the template.
	2. All costs are to be entered on a cash controllable basis (see Definitions). Cash controllable means exclusive of all provisions and all accruals and prepayments that are not incurred as part of the ordinary level of business.

**Overview**

* 1. The worksheets included within this chapter are:
* A1.1 Totex AP
* A1.1 Totex AP ASTI
* A2.1 Cost Matrix (by year)
* A7 Asset Movements (by year)
* E1.1 Business Carbon Footprint (BCF)
* E1.2 Environmental scorecard
* E1.3 Energy Not Supplied
* E1.4 IIGs Incentive
* E1.5 Quality of connections satisfaction survey
* E1.6 System Characteristics
* E1.7 SO-TO optimisation
* E1.8 Timely connections
* E1.9 TPD &TPG (NGET only)
* E1.10 Net Zero / UIOLI
* E1.11 ET Pipeline log
* E1.12 CVP Biodiversity (SHET only)
* E1.13 WW calcs (NGET only)
* IT PCD (NGET only)
* Bay PCD (NGET only)
* P&C PCD (NGET only)
* OHL PCD (NGET only)
* Sub Aux UIOLI (NGET only)
* SF6 PCD (NGET only)
* D4.8 Directly Remunerated Services (DRS)
* D4.9 Pass Through
* D4.13-16 Innovation
* NARM Interface
* LOTI (memo)
* Network access policy
* HVDC centre (SHET only)
* EECA memo (SPT and SHET only)

**A1.1 Totex AP**

|  |  |
| --- | --- |
| Purpose and Use by Ofgem | This table summarises costs attributable to ‘price control’ and ‘non price control’ categories for each Licensee and delineates costs relating to Baseline, Uncertainty Mechanisms, T1 Carry Over and Total. This information is auto-populated from the data entry tables contained with the RRP template. ‘Price control costs’ is further separated into the following cost categories: Load Related, Non Load Related, Network Operating Costs (NOCs), Indirect Costs, Non Operational and Other costs.‘Non price control costs’ is further separated into the following cost categories: Non-Activity Based Costs and Excluded Services. |
| Instructions for Completion | Input is permitted in cells D108:N112 (entitled “Notes/Explanation of variance:”) to enable licensees to provide any further insight on the information presented either to make Ofgem aware of any particular data point, assumption or methodology that has been applied that is important to acknowledge and understand when viewing the data presentation.  |

**A1.1 Totex AP ASTI**

|  |  |
| --- | --- |
| Purpose and Use by Ofgem | This tables summarises costs associated with projects delivered through the Accelerated Strategic Transmission Investment (ASTI) framework for each Licensee. This information is auto-populated from the data entry tables contained with the RRP template.  |
| Instructions for Completion | There is no input required in this worksheet.  |

**A2.1 Cost matrix (all)**

|  |  |
| --- | --- |
| Purpose and Use by Ofgem | The purpose of this table is to collate information from annual worksheets and present overview information intended to enable summary details on specific areas of expenditure/activity to aid Ofgem’s understanding of the data. |
| Instructions for Completion | Data is auto populated from the annual worksheets |

**A2.1 Cost Matrix (by year)**

|  |  |
| --- | --- |
| Purpose and Use by Ofgem | This tables summarises costs attributable to ‘price control’ and ‘non price control’ categories for each Licensee per individual reporting year.  |
| Instructions for Completion | Information is reported against the following categories which is auto-populated from the relevant scheme data tables. Non scheme data (e.g. NOC’s, Indirects etc.) will require a manual entry for contributions and non-asset costs:1. Baseline - Gross Direct Costs. Values are auto populated.
2. Customer Contributions (baseline) - (input as negative values and auto populated from “Scheme data worksheets). Manual entry required for non-scheme activity contributions where applicable
3. TOTAL NET BASELINE – calculation row
4. Uncertainty Mechanism – auto populated from scheme data & activity worksheets
5. Re-opener - – auto populated from scheme data & activity worksheets
6. Other - auto populated from scheme data. Manual entry required for non-scheme activity worksheets where applicable
7. Non Asset Cost Type - auto populated from scheme data. Manual entry required for non-scheme activity worksheets where applicable
8. One-off contribution - auto populated from scheme data. Manual entry required for non-scheme activity worksheets where applicable
9. Customer Contributions (other) - auto populated from scheme data. Manual entry required for non-scheme activity worksheets where applicable
10. TOTAL NET UNCERTAIN – calculation row
11. Other T2 capital costs associate with T1 deliverables (net) - auto populated from scheme data. Manual entry required for non-scheme activity worksheets where applicable
12. TOTAL COSTS – calculation row should not be construed to mean the sum of direct capex costs and indirects

For each cost categorisation (e.g. ‘load’ Wider Works, ‘non-load’ Asset Replacement, etc.), Gross costs will equal:* the sum of applicable schemes
* net of indirects
* before the impact of the customer contributions and cost recoveries.

**Rows 33-49: Indirect Allocations to any Activity**This table enables Licensees to capture the allocation of indirect costs in their entirety. |

**A7 Asset movements (by year)**

|  |  |
| --- | --- |
| Purpose and Use by Ofgem | The purpose of this table is to collect information in relation to asset additions and disposals by intervention type, asset category and by voltage in each reporting year. These provide a sense of the scale of the TO’s network and how this changes as a result of additions and disposals linked to data cleansing and areas of activity (i.e. refurbishment and replacement). Columns A-D are auto-populated from the directory of electrical assets listed in the “Asset possibilities” worksheet (Columns C-F). Data is required to be captured for both Load Related schemes and Non-Load Related schemes.  |
| Instructions for Completion | Data is auto-populated in columns: I to P, V to AC, AI to AS.The licensee should fill in the boxes shaded in yellow:**Additions*** Opening Balance (column G). Input required in the first ET2 reporting year only.
* Data cleansing (column H). On an ongoing reporting basis only.
* Non-load Other (column Q): All non-load asset movements excluding Replacement and Decommissioning.
* Other (column R): any other movements not captured in the other columns.
* Faults (column S): where applicable.

**Disposals** (Report as negative values)* Non-load Other (column AD): All non-load asset movements excluding Replacement and Decommissioning.
* Other (column AE): any other movements not captured in the other columns.
* Faults (column AF): where applicable.

**Please note,** for the RIIO-ET2 reporting years (2022 to 2026 inclusive) all other addition and disposal columns auto-populated from information provided earlier in the RRP. We note that asset energisation associated with the output delivery and completion of T1/T2 crossover projects (funded through the relevant T1 volume driver mechanisms) may require consideration as part of the data cleanse exercise (column H).  |

**E1.1 Business Carbon Footprint (BCF) reporting**

|  |  |
| --- | --- |
| Purpose and Use by Ofgem | The purpose of this table is to collect data on the licensee's scope 1 and 2 business carbon footprint (BCF) excluding losses.The annual table will ultimately show a percentage change against a pre-agreed base year to demonstrate the licensee's performance in comparison to its RIIO-ET2 BCF target. This data will be published by Ofgem as part of a report on all licensee’s performance across the RIIO-ET2 outputs.This table allows the licensee to provide data on scope 3 emissions if it wishes to do so. This data will not be published by Ofgem unless agreed with the licensee.  |
| Instructions for Completion | The licensee must report on its scope 1 and 2 BCF for the regulatory reporting year. The reporting methodology must be compliant with the principles of the Greenhouse Gas Protocol (GHG Protocol). In summary, the BCF reporting must be:* Relevant: the inventory must reflect the substance and economic reality of the company’s business relationships, not merely its legal form
* Complete: all relevant emission sources must be included (although in practice lack of data or cost of gathering could be a limiting factor)
* Consistent: accounting approaches, inventory boundary and calculation methodology must be applied consistently over time
* Transparent: information on the processes, procedures, assumptions and limitations of the BCF reporting must be disclosed in a clear, factual, neutral and understandable manner, enabling internal and external verifiers to attest to its credibility
* Accurate: GHG measurements, estimates, or calculations must be systemically neither over nor under the actual emissions value, as far as can be judged, and that uncertainties be reduced as far as practicable

The licensee must report on all Scope 1 and Scope 2 emissions on an ‘operational control’ basis, i.e. report all emissions from operations on which the licensee has full authority to introduce and implement its operating policy.A licensee that forms part of a larger corporate group must provide a brief introduction outlining the structure of the group. The commentary must detail which organisations are considered to be within the reporting boundary for the purpose of this exercise.**Guidance on completing the tables.****Scope 1****Transport:** Enter the tCO2e for direct commercial vehicles.Direct commercial vehicles are the transportation (often a fleet of vehicles) used in the day-to-day operation of the business.Direct commercial vehicle emissions calculations can be based on fuel consumption, mileage, or electricity consumption. The appropriate conversion factors from the “[[Government conversion factors for company reporting of greenhouse gas emissions factors](https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting)](https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting)” should be applied.In cases where emission factors for specific transport means are not available (we are aware of this issue for helicopters, but there may be some other instances) the equivalent tonnes of carbon dioxide (tCO2e) must be estimated and summed to the closest means of transport (e.g. “air” for helicopters). The methodology and assumptions used for estimating/measuring these emissions must be included in the commentary. UK Government guidelines provide for a range of emission conversion factors for transport means, with the aim to provide the best possible estimate of emissions from the vehicle portfolio owned and/or operated by the company. The reporting must, as far as reasonably practicable, use the full range of emission conversion factors available (as applicable to the range of means of transport actually used by the company) unless there is a compelling case for using another conversion factor.**Fugitive emissions:** Enter any emissions related to the activity of transporting electricity such as sulphur hexafluoride (SF6) or equivalent. Emissions should be converted to tCO2e**Scope 2****Electricity consumption**: Enter the emissions for electricity use which are converted using the “Grid Rolling Average” emission factor or a published local grid emission factor, as permitted under the Greenhouse Gas Protocol.Row 31: requires each licensee to indicate their year-by-year progress, expressed as a percentage, against the baseline targets (not against yearly targets). The accompanying narrative will explain whether the licensee is on-track to meet its end of RIIO-ET2 BCF target and any relevant information pertaining to the calculation applied. The row contains yellow manual entry cells.Row 32: requires each licensee to indicate their actual year-by-year BCF reductions as a percentage. The accompanying narrative will explain the movements (reductions or increases) and any relevant information pertaining to the calculation applied. The row contains yellow manual entry cells.**Scope 3 – Optional**It is desirable but not essential that the licensee also reports on its scope 3 emissions following the [Greenhouse Gas Protocol: Technical Guidance for Calculating Scope 3 Emissions (V 1.0)](https://ghgprotocol.org/sites/default/files/standards/Scope3_Calculation_Guidance_0.pdf). This will ensure that reporting captures all significant emissions arising from the development and operation of the licensee's Transmission System, regardless of the legal entity carrying out each activity. The licensee can amend rows titled ‘spare’ in the RRP table to define the sub-type of scope 3 emissions that are most relevant to them under each category.  |

**E1.2 Environmental scorecard**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | The purpose of this table is to collect information on the licensee’s annual environmental performance compared to the baseline targets included in the licensee’s Environmental Scorecard ODI. |
| Guidance on completing this worksheet | The licensee should fill in the boxes shaded in yellow. **Business mileage emissions table (column references are relevant for reporting year 2024/25)*** In column E, select the activity data from the drop-down list that the licensee records to measure vehicle use of all vehicles for a specific type.
* In column F, enter the total amount of activity data recorded in the year for the vehicle type group.
* In column G, enter the appropriate conversion factor from the “[[Government conversion factors for company reporting of greenhouse gas emissions factors](https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting)](https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting)” to estimate the greenhouse gas emissions associated with business mileage.

Please note: For both waste and water, the expectation is not to report on all operational sites separately, total by source can be reported e.g. operational use and office use.**For operational waste and office waste tables****(column references are relevant for reporting year 2024/25)*** In column D, enter the waste type.
* In column E, enter the weight of the waste type disposal in the year.
* In column F, enter the final destination of the waste type.
* In column G, select from the drop-down list if the final destination constitutes recycling of the disposed waste i.e. the waste materials are recovered and reprocessed into products or materials whether for the original or other purposes.

**For water use table** **(column references are relevant for reporting year 2024/25*** In column D, enter the office site.
* In column E, enter the volume of water use metered on the office site in the year.

 **For environmental value on non-operational land (column references are relevant for reporting year 2024/25)*** In column D, enter the project name and site address.
* In column E, enter the land area in hectares at the location site that will be subject to the intervention
* The licensee can merge project name and land area cells with subsequent rows, where the project name and land area cover all the interventions that have been listed in the project in column F.
* In column F, list the types of interventions that have been delivered on site in the year. This is free text entry. Put each intervention on a separate row.
* In column G, enter a measure of the type of intervention to be delivered e.g. if creating a wildflower meadow is entered in column F, the volume might be 0.5 ha, if native tree planting, the volume might be 100 trees, if intervention is hedgerow laying, the volume might be 0.5km.
* In column H, enter the proportion of the project’s total interventions completed in the reporting year.
* In column I, list the ecosystem services that the location site provides. This is free text entry. List the most significant ecosystem service on separate rows, and the lesser ecosystem services could be entered together as a single entry.
* In column J, state the baseline monetary value of the ecosystem services provided in a year from the site.
* In column K, state the baseline natural capital value of the site.
* In column L, state the monetary value of the ecosystem services that will be provided in a year after the project is completed.
* In column M, state the natural capital value of the site after the total project is complete.

**For environmental net gain on construction projects (column references are relevant for reporting year 2024/25)*** In column D, enter the construction project name and site location.
* In column E, indicate whether project has required formal planning consent.
* In column F, list the planned interventions that are included in the approved habitat plan and/or the licensee’s environmental gain plan for the project.
* In column G, state the number of biodiversity units measured in the baseline survey of onsite and offsite biodiversity using the Defra and Natural England [[Biodiversity Metric](http://publications.naturalengland.org.uk/publication/6049804846366720)](http://publications.naturalengland.org.uk/publication/6049804846366720).
* In column H, state other environmental quality measures in the baseline survey that are relevant for the site or construction project.
* In column I, state the overall baseline measure for the project site i.e. the combination of column G and H.
* In column J, state the expected number of biodiversity units to be achieved from the implementation of the approved habitat plan.
* In column K, state the environmental quality improvements expected to be achieved from the implementation of the approved habitat plan and/or the environmental gain plan associated with the construction project or site.
* In column L, state the overall measure for the project site after the habitat plan and/or the environmental gain plan are completed i.e. the combination of column J and K.
* In column N, enter the outturn costs (in 2018/19 prices) for delivering the habitat plan and/or the environmental net gain plan.

A free entry text box (cell D212) is provided to enable each licensee to highlight and provide a high-level summary explanation of any assumptions or further narrative behind the calculations. Further rationale and detailed explanation can be provided in the supporting narrative.  |
| Commentary | **Include a description of the methodologies for calculating natural capital value and environmental gain.** **Include a commentary on changes made to the reporting methodologies if these result in different values to those previously reported.** |

**E1.3 Energy Not Supplied**

|  |  |
| --- | --- |
| Purpose and Use by Ofgem | The purpose of this table is to collect information in relation to incidents on the licensee’s transmission system and the volume of unsupplied energy that is a consequence of these interruptions for the calculation of the licensee’s Energy Not Supplied (ENS) incentive. |
| Instructions for Completion | The licensee should fill in the boxes shaded in yellow.To complete the worksheet each TO is required to give details of:* the total number of transmission system incidents that occurred during the year, the number of events excluded from the definition of incentivised loss of supply events, the number of incentivised loss of supply events, and the number of incidents categorised as exceptional events
* the volume of energy that was not supplied to customers as a result of the total number of incidents, the volume of energy not supplied for incidents excluded from the definition of incentivised loss of supply events, the volume of energy not supplied for incidents due to Incentivised Loss of Supply Events, and the volume of ENS for incidents categorised as exceptional events.

Exceptional events: The licensee should detail separately: 1. the number of incidents and volume of unsupplied energy for incidents that the Authority has determined to be exceptional events under Part D of Special Condition 4.2
2. the number of incidents and volume of unsupplied energy for incidents that it views as exceptional events, but the Authority has yet to make a determination under Part D of Special Condition 4.2.

6.2 Part A: Compensation Payments (SHET Only)SHET must provide the data required to calculate the Compensatory Payments Adjustment (SHCPt) made in each Relevant Year t. The required terms are as defined in Special Condition 6.2 (Energy not supplied compensatory scheme pass-through).SHET is also required to provide additional data relating to the application of its Compensatory Payment Statement and the number of customers that have received compensation.  |

**E1.4 IIG Incentive**

|  |  |
| --- | --- |
| Purpose and Use by Ofgem | The purpose of this table is to collect information in relation to Special Condition 4.3: Insulation And Interruption Gas (IIG) emissions output delivery incentive. Data collected will include emissions data relating to IIGs, (including sulphur hexafluoride), from assets comprising part of the licensee’s transmission system.  |
| Instructions for Completion | The respective IIGs used in the licensee’s transmission system should be added to the table (L7:L15), along with their respective Global Warming Potential values, as set out in the latest assessment report of the United Nations Intergovernmental Panel on Climate Change (as published on the Greenhouse Gas Protocol Website).The licensee should fill in the cells for their respective row in the Base Calculation Table (H40:042), with the volume of each IIG in Kg, at the end of March 2021. This will calculate the Base Leakage Target for RIIO-ET2.To complete the remaining worksheet each Licensee is required to **complete a table for each type of IIG** used on their transmission system for the relevant year. For each table the following details should be entered (where relevant) in relation to their respective definitions within Condition 4.3:* **No. of Additions (new assets):** The total number of any new assets added to the transmission system, in the quarter of the year commissioning was completed.
* **Gas inventory of additions:** The total IIG inventory in Kg of the aggregated sum of additions, per quarter.
* **Manufacturer’s leakage rate:** The leakage rate of the sum of additions per quarter in percentage value as stated by the manufacturer of the asset (i.e., 0.5%).
* **No. of Disposals (assets removed):** The total number of any decommissioned assets removed from the transmission system, in the quarter of the year decommissioning commenced.
* **Gas inventory of disposals:** The total IIG inventory in Kg of the sum of disposals, per quarter.
* **Disposals 3-year average annual leakage:** The leakage in Kg calculated by the average leakage from the last 3 years of operation for each asset disposed in the relevant quarter. Where there is more than one asset disposed in the quarter, the totals should be aggregated.
* **Actual leakage (inc exceptional events):** The volume of leakage in Kg from all assets containing the IIG, as calculated in accordance with the licensees latest IIG Methodology Document. This should not be adjusted for any approved IIG Exceptional Events.
* **Adjustment for exceptional events:** This should include the aggregated total of any Ofgem approved IIG Exceptional Event leakage in Kg during the year.

For SF6 only * **No. SF6 Asset Interventions:** The total number of any asset interventions funded through a relevant SF6 funded condition, including: 3.6 (Net Zero Reopener), 3.14 (MSIP), 3.27 (SF6 asset intervention Re-opener PCD) for the relevant quarter the intervention is completed.
* **Expected annual leakage abatement:** The aggregated estimated annual leakage of abatement in kg of any SF6 asset interventions for the relevant quarter. This should be calculated in accordance with the final submission for funding for those interventions.
 |
| Commentary | Commentary should include: * A high-level summary of the performance in year, including emissions levels compared to previous annual levels.
* A summary of the main drivers for any notable differences between actual emissions and projected emissions/targets.
* Where relevant a high-level summary of any IIG Exceptional Events approved.
* Where relevant, a high-level summary of any SF6 Asset Intervention project adjustments made.
 |

**E1.5 Quality of connections satisfaction survey output delivery incentive**

|  |  |
| --- | --- |
| Purpose and Use by Ofgem | The purpose of this table is to collect information in relation to the quality of connections satisfaction survey output delivery incentive term and movements in the licensee customer service performance.  |
| Instructions for Completion | **Pre-application Engagement milestone (row 12)**: Up to 30 calendar days after engagement e.g. pre-application meeting or discussion.**Application Process and Offer milestone (row 13)**: Up to 30 calendar days after National Grid Electricity System Operation (NG ESO) notifies a TO an offer has been issued to a connection customer. **Project Development milestone (row 14)**: Trigger point will be within 30 calendar days of the end of Project Development, which is indicated by the issue of a Section 37 consent (or end of Gate C/3) and issue of an ITT. Connection customers will be surveyed as a minimum on an annual basis during project development whether or not their project has hit a specific trigger point.**Project Delivery milestone (row 15)**: Trigger point for end of Project Delivery will be within 30 calendar days of completion of energisation (where there is phased energisation - as a result of a non-firm connection, a survey will be issued at the completion of each stage of energisation). Connection customers will be surveyed as a minimum on an annual basis during project delivery whether or not their project has hit a specific trigger point.**Outage Management milestone (row 16):** At a minimum on an annual basis and within 30 calendar days following engagement with those direct connection customers affected by the year ahead outage plans or within 30 calendar days following post outage management.**Connected Customer Reviews milestone (row 17):** Within 30 days following direct engagement with connected customers in respect of non-outage plan matters.For example: Safety and site access/project closure/repowering |

**E1.6 System Characteristics**

|  |  |
| --- | --- |
| Purpose and Use by Ofgem | The purpose of the table is to collect high-level information relating to physical characteristics of the transmission network and to provide key indicators of the overall level of transmission activity. The table requests data for each year of the RIIO-ET2 price control period and beyond.  |
| Instructions for Completion | All system characteristics should normally be entered as at the end (i.e. 31 March) for a reporting year. Data for the reporting period in question should be input directly into the yellow input cells of this worksheet. Forecast for future regulatory periods is not required.Substation sites: TOs to provide the count of sites by voltage (rows 12-17)Circuit Breaker numbers: TOs to provide the count of CB type by voltage (rows 20-23)Transformer numbers: TOs to provide the count of transformer by type (rows 26-31)Reactive compensation numbers: TOs to provide the count of reactive equipment type by voltage (rows 35-41)Tower / support numbers: TOs to provide the count by type (rows 44-48)Route km: TOs to provide the count of route km by voltage for OHL (rows 51-55) and onshore underground cable (row 56)Grid Supply Points: TOs to provide the count of GSP by voltage (rows 60-64)Grid Entry Points: TOs to provide the count of GEP by voltage (rows 66-69)HVDC links: TOs to provide the count of number of links owned, the capacity and the length of link in km (rows 72-74)Modern Equivalent Asset Value (MEAV) (row 77) Systematic  |
| Definitions for use in this worksheet  |
| Transmission circuits | Transmission circuits are as defined in the National Electricity Transmission System Security and Quality of Supply Standard (NETS SQSS) but exclude transformers. For clarity, a 50km double-circuit 400kV route should be included as 50km + 50km in the 400kV category. A 20km double-circuit construction with one side run at 400kV and the other at 275kV should be included as 20km in the 400kV category, and 20km in the 275kV category. |
| Substation | To be counted as a substation, a site has to meet one or more of the following criteria: * Has voltage changing transformers, i.e. SGTs or GTs;
* Has circuit breaking switchgear, i.e. a switching substation;
* Has capacitors or voltage regulators;
* Connects two or more transmission circuits through a busbar;
* Is electrically separated from another substation of the same voltage on the same physical site, and this is reflected in the operational nomenclature.

 The number of substations at a site is dependent on the number of different voltage busbars there are, not the number of different voltages in use at that site. For example, one or more of the feeders may be transformer feeders, e.g. 400/275kV, but the site would only be considered as a 275kV site unless there was 400kV switchgear/busbar present. Cable compounds are not substations unless they have circuit breaking switchgear. Where there is more than one company’s equipment at a substation, the owner of that substation is defined as being the owner of the busbars, couplers and sections, if present. |
| MEAV | MEAV is a proxy for the cost of replacing every operational asset that is currently on a TO’s asset register. Please specify the MEAV for the network in each year reflecting the changes in assets year to year. **[NOTE: MEAV does not need to be populated until further notice.]** |
| Average Circuit Unreliability | ACU is leading indicator of Loss of supply incidents and lagging indicator of asset condition. A change risk to reliability can be observed through changes in the ACU as levels of repair work change.Average Circuit Unreliability (ACU) measures network unavailability resulting from asset unreliability. It is effectively monitoring asset functional failure: a reliability-related event which results in the unavailability of an asset. It identifies all reliability issues, includingcatastrophic failures as well as defect repairs and fault investigation.ACU= Total repair outage time in the period/(No of circuits)\*(time in period)The calculation above should be performed for each of the assets listed on the table (i.e. Cables (Main Interconnected Transmission System) & Supporting equipment (e.g. cable cooling), Switchgear (Circuit Breaker, Disconnector, Earth switch, Instrument Transformers, Surge Arresters, Insulators and Busbar), Transformers (SGT, Reactor, Quad Booster), Substation Infrastructure and Auxiliaries (Security Systems, Civils, Air Systems, Aux Supplies), Overhead Lines, Protection & Substation Control, Telecommunications) and consistent with that information collected and reported via the ESO system performance and availability.  |

**E1.7 SO:TO optimisation**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | The purpose of this table is to collect information in relation to service provided by the licensee to the ESO within the scope of STCP11-4 and in accordance with the SO:TO governance document (the Governance Document) for the annual calculation of the licensee’s SO:TO output delivery incentive specified in special condition 4.7 (SO:TO optimisation output delivery incentive).  |
| Guidance on completing this worksheet | To complete the worksheet each TO is required to provide the following details: * The name of the project and identification which the service/solution provided was related to

Both the name and the identification code should be in line with unique works identifications (Ofgem Scheme Reference).* The service/solution/ type chosen from a drop-down list;
* If the solution type selected is “other”, a manual description of the solution
* Estimated cost of the solution which as *approved* by the ESO in line with STCP11-4 and the Governance Document
* Total estimated ex ante constraint savings of the solution regardless of cost of solution
* Estimated ex ante constraint savings net of the cost of solution as assessed by the ESO in line with the Governance Document.
* Actual cost of solution as reported in table [3.9 in RIIO-1 – check for RIIO-2] “excluded services – outage change request”
* Actual constraint savings: ex post calculation of the actual constraint costs saving of the solution as assessed by the ESO in line with the SO:TO optimisation governance document
* Actual Net constraint savings: ex post calculations of the actual constraint costs savings of the solutions net of the cost of the solution as assessed by the ESO in line with the governance document
* Delivery date: this should be the date from which the solution/service was available to provide the benefit its intendent to create

For projects that will deliver benefit which will span over two regulatory years:* The service/solution should have entrance for both regulatory years.
* Year 1 entrance should include
	+ Project name, identification code and solution type
	+ the cost of the solution (estimated and actual)
	+ the estimated and estimated net constraint savings attributed to the first regulatory year in which the solution was delivered
	+ the actual and actual net constraint savings delivered by the solution in the year
	+ the delivery date
* year 2 entrance should include:
	+ Project name, identification code and solution type
	+ Estimated constraint savings attributed to the 2nd regulatory year in which the solution was delivered
	+ actual constraint costs savings delivered by the solution in the year (if known by the time of reporting)
	+ the delivery date
* year 3 entrance should include:
	+ Project name, identification code and solution type
	+ Estimated constraint savings attributed to the 3rd regulatory year in which the solution was delivered
	+ actual constraint costs savings delivered by the solution in the year (if known by the time of reporting)
	+ the delivery date
* year 4 entrance should include:
	+ Project name, identification code and solution type
	+ Estimated constraint savings attributed to the 4th regulatory year in which the solution was delivered
	+ actual constraint costs savings delivered by the solution in the year (if known by the time of reporting)
	+ the delivery date
* year 5 entrance should include:
	+ Project name, identification code and solution type
	+ Estimated constraint savings attributed to the 5th regulatory year in which the solution was delivered
	+ actual constraint costs savings delivered by the solution in the year (if known by the time of reporting)
	+ the delivery date

Additional rows can be added to the annual data tables as required (currently 30). |

**E1.8 Timely connections**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | The purpose of this table is to collect information in relation to the timely connections output delivery incentive term and licensee performance in delivering timely offers for connection to the licensee's Transmission System.  |
| Guidance on completing this worksheet | Licensees will identify the total number of connection offers by category of generation type where it made an offer in each reporting year. “Total offers” means the sum of the number of Untimely Offers and the number of offers made consistent with the licensee's Timely Connections Obligations. “Untimely offers” means the total number of offers made other than in accordance with the licensee’s Timely Connections Obligations.  |

**E1.9 TPD & TPG (NGET only)**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | The purpose of this table is to collect information in relation to the User terminated works - total expenditure and termination receipts - associated with works to connect to the licensee's Transmission System (generation and demand).This applies to NGET only  |
| Guidance on completing this worksheet | Lead Scheme: Licensee should use the same unique scheme name within the output tables and the cost information tables NGET should report in the total expenditure table the expenditure it has incurred on relevant connections works for a specific scheme where the user has terminated the relevant bilateral agreements prior to commencing use of the connection. NGET should report the amount of termination receipts received in the form of revenues or capital contributions, for connection works.See definition in the licensee’s Electricity Transmission Licence for TPGt, TPRGt, TPDt and TPRDt. |

**E1.10 Net Zero / UIOLI**

|  |  |
| --- | --- |
| Purpose and Use by Ofgem | The purpose of this table is to collect information relating to for net zero/UIOLI activity as set out in the RIIO-ET2 electricity transmission licence (RIIO-ET2 Licence)* SpC 3.5 Net Zero and Re-opener Development Fund use it or lose it allowance (All TOs)
* SpC 3.19 Enhanced Environmental Requirements use it or lose it allowance (SPT only)
* SpC 5.5 Net Zero Fund use it or lose it allowance (SPT only)
* SpC 5.6 Net zero carbon Capital Construction use it or lose it allowance (NGET only)
 |
| Instructions for Completion | The licensee should fill in the boxes shaded in yellow **Net Zero and Re-opener Development Fund use it or lose it allowance (RDFt)**Project name: Enter the name/reference of the Net Zero project for which re-opener development works have been undertaken. This list of projects should aim to be consistent with capex reporting wherever appropriate.Project Description: Describe the re-opener development activities that have been undertaken in the Regulatory Year.Net Zero Project Development Deliverables: Enter the key outputs that will result from the re-opener development activities and the timing for completion.**Enhanced Environmental Requirements use it or lose it allowance (EERt)**Project name: Enter the name/reference of the project or network site. Project Description: Describe the enhance environmental requirements activities that have been undertaken in the Regulatory Year. This should include the area of land to be treated by the activities. Enhanced Environmental Requirements Deliverables: Enter the key outputs of the enhanced environmental requirements and the timing for completion. The output should be the implementation of either:* a habitat plan to achieve No Net Loss In Biodiversity, or
* a remediation plan to clean up land contamination.

**Net Zero Fund use it or lose it allowance (NZFt)**Project name: Enter the name of the NZF project. Project partners: Enter the name of the organisation or group that proposed the NZF project. Project Description: Describe the activities of the NZF project, as agreed with the proposer of NZF project, undertaken in the Regulatory Year. Project Deliverables: Enter the key outputs of the NZF project, and the timing for completion.**Net zero carbon Capital Construction use it or lose it allowance (NZ3Ct)**Project name: Enter the name/reference of the construction project. This list of projects should aim to be consistent with capex reporting wherever appropriate.Residual tCO2e in Capital Construction: Enter the amount of tCO2e that will result from the construction project.Offset project name: Enter the name of the Offset project that has been used to net off the residual tCO2e of the construction project.Note: Licence term NZ3CR cannot be populated from RRP as this just relates to carbon offsetting which is the subject of a separate report at the end of the price control period to verify efficient spend.  |

**E1.11 Re-opener application pipeline log**

|  |  |
| --- | --- |
| Purpose and Use by Ofgem | This table records information relating to all future Re-opener applications. The information is to be forecast as far as is reasonably practicable and with a particular emphasis on providing accurate information for Re-openers due to be submitted within the next 12 months. Before completing the table licensees should refer to our [Re-opener Guidance and Application Requirements](file:///C%3A/Users/CraigG/AppData/Local/Temp/MicrosoftEdgeDownloads/c97be12e-5311-4589-83e2-d32a4fa2798a/reopener_guidance_and_application_requirements_document%20%283%29.pdf) document and our [Indicative Re-opener Application Assessment Process](https://www.ofgem.gov.uk/sites/default/files/2021-06/working_document_-_riio-2_indicative_re-opener_application_assessment_process_version_1_0.pdf) document.This table will be used by Ofgem primarily for ongoing monitoring and resource planning purposes including pre-application engagement with licensees. This will facilitate timely decision making once Re-opener applications have been received. In addition the table will be used to source the estimated value of the adjustment to baseline allowances which will feed into the relevant Re-opener Price Control Financial Model (PCFM) Variable Value and will be reflected in its Allowed Revenue at the next Annual Iteration Process.When a decision is made to adjust allowances, the decision will supersede the forecast information that was previously taken from the Re-opener application pipeline log, and any differences between the forecast Re-opener allowances and the final decision will be trued up within the PCFM with an appropriate time value of money adjustment.The Re-opener application pipeline log includes an option for the licensee to select if they do or do not wish for the forecast adjustment to baseline allowances for each relevant Re-opener to feed in to the Re-opener Variable Value in the PCFM; for example if the project or costs are too uncertain at the point in time the Re-opener application pipeline log is submitted. |
| Instructions for Completion | Input information as indicated by the yellow shaded boxes on the table.* **Project Name**: Where individual projects or programs are to be submitted, for separate assessment under the same mechanism each should be assigned a unique name. This will be used by Ofgem during future engagements. A separate row should be used to submit information on each individual project.
* **Ofgem Scheme**: unique Ofgem Scheme Reference assigned by the licensee.
* **Forecast Submission Date**: In those instances where there is no defined application window a forecast month and year of submission should be input. This informs Ofgem as to when future applications might be expected.
* **To be used in PCFM? Yes/No**: Select Yes/No from the drop-down menu. This informs Ofgem if the licensee wishes for the potential value of adjustment to baseline allowances specified by the licensee in the Re-opener application pipeline log for a relevant Re-opener to feed into the Re-opener Variable Value in the PCFM.
* **Probability of Submission High/Medium/Low**: Select High/Medium/Low from the drop-down menu as appropriate.
* **Energisation Date:** Select the appropriate regulatory year from the drop-down menu.
* **Forecast Expenditure**. For each regulatory year a forecast expenditure figure is required. This should be reported in £m 2018/19 price base. For those Re-opener mechanisms which are subject to the Opex Escalator (Special Condition 3.36) only Direct Costs should be included. For all other mechanisms both Direct and Indirect Costs should be included. These values will feed into the relevant Re-opener PCFM Variable Value if ‘Yes’ has been selected in the ‘**To be used fin PCFM?**’ column.

In each of the free text boxes which follow reference may be made to additional commentary if the licensee prefers to add greater detail in a separate document alongside the Re-opener application pipeline log. It is recognised that certain information with respect to Re-opener applications in future years may not be available. More detail should be provided where the Re-opener application is expected to be submitted in the next 12 months. * **Trigger for Submission / Needs Case**: A free text box for a brief description of the trigger / needs case for seeking additional allowances for example a change in specific policy / regulations / legislation or necessary capital expenditure not funded in baseline allowances.
* The text may refer to additional commentary if the licensee prefers to add greater detail in a separate document alongside the Re-opener application pipeline log.
* **Option Selection Methodology**: A free text box for a brief description of the methodology used to justify the selection of the preferred option. Whether by use of Cost Benefit Analysis, Engineering Justification Process or some other appropriate methodology.
* **Preferred Option:** A free text box for a brief description of the preferred option.
* **Forecast Expenditure Justification Methodology**: A free text box for a brief description of the methodology that will be used to justify the level of additional funding requested, for example benchmarking, tendered rates.
* **Broader Regulatory Issues to be Considered**: A free text box for a brief description of any broader regulatory issues that Ofgem may wish to consider, for example alignment with wider policy objectives or regulatory precedent.
 |

**E1.11a Pipeline Log Memo Table**

|  |  |
| --- | --- |
| Purpose and Use by Ofgem | To develop Ofgem’s understanding of future reopener submissions currently planned by network companies, in a consistent manner across ET, to enable Ofgem to plan its consideration of reopeners in 2023 |
| Instructions for Completion | The fields to be completed as follows: • Re-opener mechanism: details of the re-opener mechanism (Lic’ term) which the re-opener will be submitted under. • Project name: breakdown of individual projects even if under the same re-opener • Description of project including brief description of driver for project and any interdependencies • Likely date • Project start date: the actual date of physical work commencing• Project end date (defined as financial closure of project)• Planned submission date • Scope of submission: needs case, options and costs • Probability of submission: low, medium, high • Recent engagement with Ofgem on the project: some details on the nature of engagement and Ofgem point of contact. • Lifetime cost (£m): Sum of all costs related to a project over its lifetime including beyond RIIO 2 period  |

**E1.12 CVP Biodiversity**

|  |  |
| --- | --- |
| Purpose and Use by Ofgem | The purpose of this table is to collect information relating to for CVP biodiversity activity. This applies to SHET only. |
| Instructions for Completion | The licensee should fill in the boxes shaded in yellow Project name: Enter the name/reference of the construction project. This list of projects should aim to be consistent with capex reporting wherever appropriate.Year consented: Enter the year the project achieved planning consent.BU required to satisfy target: Enter the number of Biodiversity Units required to achieve Biodiversity No Net Loss (NNL) if the project is consented up to 2024, and the number of Biodiversity Units required to achieve Biodiversity Net Gain (BNG) for projects consented from 2025.BU designed-in: Enter the number of Biodiversity Units that were actually designed into the project when it achieved planning consent.Difference in BU: is an automatic calculation.  |

**E1.13 WW calcs (NGET only)**

|  |  |
| --- | --- |
| Purpose and Use by Ofgem | The purpose of this table is to collect information relating to for operation of the wider works volume driver. This applies to NGET only. |
| Instructions for Completion | The licensee should fill in the boxes shaded in yellow Table 5: Manual input is required in column A (insert project id reference), column B (insert output value in MW, e.g. “100”), column C (insert output year, e.g. “2023”). Table 6: Manual input is required in * columns A, B and C (see table 5 instructions)
* column D (insert principle boundary, e.g. “B6”)
* column F (insert OHL route length in km, e.g. “10.3”)
* column G (insert cable route length in km, e.g. “2.5”)

column H (insert type of underground cable from one of three options: “132kV”, “275kV” and “400kV”) |

**E1.14 IT PCD (NGET only)**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | This worksheet seeks to collate the relevant information associated with specific types of Price Control Deliverable (PCD) in Special Condition 3.22 of NGET’s T2 Licence established as part of the Final Determinations.This sheet is applicable to NGET only. |
| Guidance on completing this worksheet | This table is auto-populated using the appropriate licence values and volume data from elsewhere on the RRP.Table 3 will establish the actual volume delivered and the forecast volumes expected to be delivered by each asset description (column D) and driver category (Column E) across the price control period.  |

**E1.15 Bay PCD (NGET only)**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | This worksheet seeks to collate the relevant information associated with specific types of Price Control Deliverable (PCD) in Special Condition 3.23 of NGET’s T2 Licence established as part of the Final Determinations.This sheet is applicable to NGET only. |
| Guidance on completing this worksheet | This table is auto-populated using the appropriate licence values and volume data from elsewhere on the RRP.Table 3 will establish the actual volume delivered and forecast volume expected to be delivered for each asset category (column C) across the price control period.  |

**E1.16 P&C PCD (NGET only)**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | This worksheet seeks to collate the relevant information associated with specific types of Price Control Deliverable (PCD) in Special Condition 3.24 of NGET’s T2 Licence established as part of the Final Determinations.This sheet is applicable to NGET only. |
| Guidance on completing this worksheet | This table is auto-populated using the appropriate licence values and volume data from elsewhere on the RRP.Table 3 seek to establish the actual volume delivered and forecast expected to be delivered for each asset description (column C) across the price control period. We are mindful that the narrative will need to indicate any work on protection assets for projects that have individual project submissions to ensure that there is no double counting.  |

**E1.17 OHL PCD (NGET only)**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | This worksheet seeks to collate the relevant information associated with specific types of Price Control Deliverable (PCD) in Special Condition 3.25 of NGET’s T2 Licence established as part of the Final Determinations.This sheet is applicable to NGET only. |
| Guidance on completing this worksheet | This table is auto-populated using the appropriate licence values and volume data from elsewhere on the RRP.Table 3 seek to establish the actual volume delivered and forecast expected to be delivered for each asset description (column C) across the price control period.  |

**E1.18 Sub Aux UIOLI (NGET only)**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | This worksheet seeks to collate the relevant information associated with specific types of Price Control Deliverable (PCD) in Special Condition 3.26 of NGET’s T2 Licence established as part of the Final Determinations.This sheet is applicable to NGET only. |
| Guidance on completing this worksheet | The majority of data in this worksheet is auto-populated using the appropriate licence values and volume data from elsewhere on the RRP.Table 3 will establish the actual costs incurred and forecast costs expected to be incurred for each scheme (column C) across the price control period.Populate the yellow input cells in Column C (cells C30 to C41) to capture the appropriate scheme reference. The table can be extended if required). Populate Asset subcategory (column E) by choosing one of the drop down options provided: “Substation Auxiliary Supplies at substations”, “Diesel Generators & LVAC Boards” or “LVAC cabling”. The remainder the worksheet is auto-populated.  |

**E1.19 SF6 PCD (NGET only)**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | This worksheet seeks to collate the relevant information associated with specific types of Price Control Deliverable (PCD) in Special Condition 3.27 of NGET’s T2 Licence established as part of the Final Determinations.This sheet is applicable to NGET only. |
| Guidance on completing this worksheet | The majority of data in this worksheet is auto-populated using the appropriate licence values and volume data from elsewhere on the RRP.Table 3a will establish the actual costs incurred and forecast costs expected to be incurred for each site (column C) across the price control period.Populate the yellow input cells in Column C (cells B26 to B35) to capture the appropriate scheme reference. Populate Actual Delivery Year (cells L26 to L35) when the information is known. The remainder the worksheet is auto-populated, including the values in Table 3b to apply an uplift to reflect Closely Associated Indirects. Cell G14: When Ofgem direct a reduction to allowances following late/non/partial delivery of a PCD, this value can be included at G14. |

**D4.8 Directly Renumerated Services (DRS)**

|  |  |
| --- | --- |
| Purpose and Use by Ofgem | The purpose of this table is to collect information relating to for each category of DRS as set out in the RIIO-ET2 electricity transmission licence (RIIO-ET2 Licence). |
| Instructions for Completion | The licensee should fill in the boxes shaded in yellow Costs should be input as positive values for each category of DRS as set out in paragraph 10 of Special Condition 9.7 of the RIIO-ET2 Licence.It may be that some services have no identifiable costs.The total costs are linked to A2.1 Cost Matrix worksheets (column AL).To avoid double counting, do not enter information if it is populated elsewhere in the template (e.g. information associated with investment categories local enabling entry/exit sole use connection activity). If consented and de Minimis services are reported outside of the TO business, please do not complete the information but state this in the narrative. |

**D4.9 Pass Through**

|  |  |
| --- | --- |
| Purpose and Use by Ofgem | The purpose of these tables is to record information on certain elements of allowed revenue that are treated as pass through items. |
| Instructions for Completion | Actual data for the reporting period in question should be input directly into the yellow input cells of this worksheet, which should be used to populate the PCFM. The licence terms are Special Condition 6.1 (Pass through items). Forecasts for future regulatory periods should be input directly into this worksheet, which should be used to populate the PCFM. The ‘Pension scheme established deficit’ value should be input in row 14 in line with the information provided in the Price Control Financial Handbook.All values should be exclusive of VAT. |

**D4.13-16 Innovation**

|  |  |
| --- | --- |
| Purpose and Use by Ofgem | The purpose of these tables is to record information directly applicable to the innovation mechanisms. D4.13: The purpose of this table is to report the TO’s expenditure under the RIIO-ET2 Network Innovation Allowance (NIA). The NIA is a set allowance that the TO can use to spend on innovation projects which comply with the RIIO-ET2 NIA Governance Document.D4.14: The purpose of this table is to report Strategic Innovation Fund (SIF) projects that the TO will receive funding for in RIIO-ET2. Additionally, the table also seeks to capture other categories of SIF funding that will be relevant if the TO has to return any funds on these projects. The different SIF categories are all defined in the SIF Governance Document[[7]](#footnote-8). D4.15: The purpose of this table is to report the TO’s expenditure under the carryover of the RIIO-ET1 NIA (CNIA). The CNIA allows the TO to spend and recover any remaining unspent funds from the 2020-21 NIA, providing that projects were started before 31 March 2021 and comply with the NIA Governance Document. The table only includes reporting for 2021-22 because this is the only year that CNIA can be recovered.D4.16: The purpose of this table is to report funding for NIC projects that the TO received funding for in RIIO-ET1 and remain in-flight during the RIIO-ET2 price control. Additionally, the table also seeks to capture other categories of NIC funding that will be relevant if the TO has to return any funds on these projects. |
| Instructions for Completion | **NIA:** Input details of each RIIO-ET2 NIA activity / project in the yellow cells in cells D11:F78 as required and provide the outturn and forecast expenditure in the yellow cells V11:Z78.Input actual data from 1 April 2021 up to and including the current reporting year and forecast data for the remaining RIIO-ET2 period, i.e. each year of RIIO-ET2 (as applicable).Input details of any expenditure has been declared Unrecoverable NIA Expenditure by Ofgem in the yellow cell D88:F89 as required and provide the outturn and forecast expenditure in the yellow cells V88:Z89. Additionally, the TO will report how much of their Total NIA Expenditure has been spent on internal resources in the yellow cells V95:V96 (year one).Input unfunded NIA expenditure for each RIIO-2 year in the yellow cells in row 107.**CNIA:** Input the CNIA expenditure by cost type in the yellow cells V13 and details of each CNIA activity / project in the yellow cells in columns D:F as required and provide the outturn expenditure in the yellow cells in column V. Input the total of any third-party income or contributions towards projects into the yellow cell V66. Input the unrecoverable CNIA expenditure into the yellow cell V70.Input the required licence terms in the yellow cells in rows 74:78. These licence terms are defined in Special Condition 5.3 of the TO’s licence as in force on 31 March 2021.**NIC:** Input details of each NIC project it received funding for in RIIO-2 in the yellow cells in columns D:F as required and provide the outturn and forecast expenditure in the yellow cells in columns U:Z.Additional rows may be added as required to complete the required information for all of its NIC projects.**SIF:** Input details of each SIF project it receives funding for in the yellow cells in columns D:G as required and provide the outturn and forecast expenditure in the yellow cells in columns W:AA.  |

**Large onshore transmission investment (LOTI) (memo table)**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | The purpose of this table is to collect information in relation to LOTI projects. This will include baseline allowance, pre-construction allowance and expenditure.  |
| Instructions for completion  | **Table 1 – LOTI baseline allowance** Please provide any existing baseline allowance that was provided as part of RIIO-ET2 and/or as part of RIIO-ET1. This should exclude preconstruction funding allowance made as part of RIIO-ET2 and already included in version 1 of SpC 3.15 (Pre-Construction Funding Re-opener and Price Control Deliverable). **Table 2 – LOTI preconstruction baseline funding allowance (PCFAt).** This should include any preconstruction funding provided to the project ahead of RIIO-ET2 period and aligns with the term PCFAt in SpC 3.15.**Table 3 – LOTI preconstruction PCD funding allowance (PCFRAt)** This should include any preconstruction funding provided to the project during RIIO-ET2 period and aligns with the term PCFRAt in SpC 3.15.**Table 4 -** **LOTI Outputs, delivery dates and allowance (LOTIREt) (£m)** This should include any allowance made for LOTI project and aligns with the term LOTIREt in SpC 3.13 (Large onshore transmission investment Re-opener). Expected delivery date should be as stated in the licence condition.**LOTI expenditure**This should include any LOTI expenditure (in £m). Once known, actual date of delivery should be added. If a forecast of a date is known, then this could be added and a comment should be added to flag this is yet an estimation. |
| Commentary | Please provide update of any LOTI projects in this section and flag any risks and/or issues related to delivery date. Any expected potential material change in spend relative to allowance should also be flagged.  |

**NARM\_Interface**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | The purpose of this worksheet is to reconcile data reported the C&V RRP with data reported through the NARM RRP, and to help align NARM output delivery (reported through the NARM RRP) with the associated costs of delivering those outputs (reported through the C&V RRP).This worksheet aggregates the **intervention volumes** and costs for each NARM Asset Category. The NARM RRP contains an equivalent worksheet with **intervention volumes** and monetised risk by NARM Asset Category. Intervention volumes reported in the C&V RRP, and intervention NARM RRP must align for each NARM Asset Category.  |
| Guidance on completing this worksheet | The licensee is required to ensure that the NARM intervention volumes reported those reported in the CV RRP are aligned. Should any misalignment occur due to a resubmission of either RRP, then the other RRP must also be resubmitted with input data updated to bring the two submissions back into alignment. The worksheet is split into two sections:1. NARM Categorisation (top section)
2. CV Categorisation (bottom section)

NARM CategorisationThis section aggregates the data from ‘CV Categorisation’ section for relevant NARM Categories. No manual data input is required.CV CategorisationThis section will be auto-populated [formulae to be entered once the NARM RRP is finalised] from scheme volume and scheme cost worksheets for each CV asset category. The CV Category (column B) is mapped against relevant NARM Category (column C). Once agreed this mapping will be fixed for the duration of the price control. **Tertiary connected reactor** The NARM Aggregation Category for ‘Tertiary connected reactor’ (asset nos. 130 and 131) are entry cells. The ETO is required to select the reactor category from the drop-down list that best aligns with the categorisation convention that it applies for these assets, and that best represents the asset volumes reported. This requirement does not amend the instructions/definitions relating to reporting of these asset in either the NARM RRP or the other worksheets of the CV RRP. We accept that this approach may lead to some misalignment between CV RRP reported volumes and NARM RRP reported volumes. The ETO should provide explanation of any misalignment in its NARM supporting narrative. |

**Network Access Policy (all TOs)**

No reporting requirement. **The TOs may mention their NAP work and add link to their published NAP.**

**HVDC centre (SHET only)**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | The purpose of this table is to provide financial information on the HVDC centre.  |
|  | **Allowance (core activities)**The allowance for the operation of the HVDC centre should be included in the CAI allowance. Note this is subject to opex efficiency (OE) challenge of 1.25%The 1.25% challenge is compounded year on year starting from 18/19: the OE is a compounded calculation (i.e. Yr1 1.25% challenge on £1 = £0.9875, then 1.25% on £0.9875 the following year and so on) applied each year from 18/19The allowance should cover all core activities. If there is any additional contribution from third party to cover core activities, then this needs to be reported in the respective CAI’s line for additional income. This sum is then deducted from the CAI allowance. **Expenditure on core activities**Any expenditure on core activities should be included in the existing CAI expenditure table**Revenue – non-core activities (income from third party)** The total revenue for non-core activities should be reported as revenue excluded services. **Expenditure – non-core activities** Non-core activities expenditure should be reported as expenditure excluded services. **Net revenues (reinvestment) – non-core activities**In line with the decision on the future operation of the HVDC centre, SHET is required to reinvest any net revenues in the HVDC centre. Reinvestment in the HVDC centre should be reported as expenditure excluded services when it is spent. In line with the decision on the future operation of the centre (see link below), any remaining net revenue which was not reinvested in the centre should be shared with consumers. |
| Commentary requirements  | **The licensee is required to provide a report in line with Annex A of the** [Decision on the future operation of the HVDC centre following end of NIC funding period](https://www.ofgem.gov.uk/publications/decision-future-operation-hvdc-centre-following-end-nic-funding-period).*This will include at least the following:*  Update on the activities held in the previous year, including but not limited to those listed above (core activities and dissemination).  Planned activities for the coming year (core activities and dissemination).  Include any updates on agreements with suppliers.  Financial report which will include income and expenditure.  Summary of annual/periodic Technical Advisory Board meetings; and  Key decisions made by SHET and the rationale for those decisions. SHET will additionally flag to Ofgem any issues or events which might affect the benefits to be gained from the Centre as set out in its BP proposal submitted to Ofgem in February 2020. |

**EECA memo (SPT and SHET only)**

The memo table is designed to enable SHET and SPT to provide the necessary details to derive the value of EECAt (the entry and exit connection asset allowance term) in accordance with the formula specified in Special Condition 3.37: Entry and exit connection asset allowance of the RIIO-ET2 licence (SpC 3.37)

The requirement to populate the table does not apply to NGET, as the necessary details to derive EECAt are provided elsewhere within the RRP template.

Transmission assets that are owned by the licensee fall into two distinct categories:

1. Transmission “connection” assets, which are for the sole use of each connected party. The costs of these assets are recovered directly from the user via connection charges.
2. Transmission “infrastructure” assets that cannot be solely attributed to a single user. In other words, the assets can be potentially shared by other users of the NETS. The costs of these assets are charged to all users of the NETS via Transmission Network Use of System charges.

For NGET, the effect of SpC 3.37 is to adjust the Totex Allowance for the capital contributions relating to Transmission Connection Assets that the licensee receives from users during the RIIO-ET2 period. The value of EECAt is equal to any capital contribution from users relating to Transmission Connection Assets.

A different approach is taken in SpC 3.37 applicable to SHET and SPT to account for historical differences between the high voltage systems. The effect is to adjust the Totex Allowance to fund the licensee for the net cost of Transmission Connection Assets delivered during the RIIO-ET2 period.

A different approach is required due to the impact that the differences have on the prevalent charging boundary arrangements in Scotland (compared to E&W) and the relevant information required to derive the value of EECAt in Scotland (compared to E&W). Specifically, to capture situations where a (specific) customer elects to make a choice that goes beyond a TO’s statutory obligations (under the Electricity Act) and is prepared to fund the difference.[[8]](#footnote-9)

1. **Instructions for completing the data template**

| **Section summary**The purpose of this chapter is to inform the completion of costs, volume and output activity by each Licensee. This is to enable Ofgem to effectively review the annual reporting submission of the companies. |
| --- |

**Introduction**

* 1. The purpose of the worksheets in this area is to report projected expenditure, volume and allowance information at various levels of granularity to enable Ofgem to fully understand the relationships with proposed outputs.
	2. All costs are to be entered on a cash controllable basis.

**Overview**

* 1. The worksheets included within this chapter are:
* Project\_Meta\_Data
* Scheme\_C&V\_Calc\_Load\_Actuals
* Scheme\_C&V\_NonLoad\_Actuals
* Scheme\_Output
* Other\_T2\_Capital\_Cost\_From\_T1
* Scheme\_C&V\_Calc\_Load\_Allowance
* Scheme\_C&V\_NonLoad\_Allowance
* ASTI\_C&V\_Calc\_Allowance
* ASTI\_C&V\_Calc\_Actuals
* Scheme\_Output ASTI
* Allowances input
* A8 allowances
* PCD
* C2.11 Spares
* C2.12 Black Start
* C2.13 Losses
* C2.20 Faults
* C2.21 Inspections
* C2.22 Maintenance
* C2.22a Repairs
* C2.23 Veg Mgt
* C2.24 Legal & Safety
* C2.25 Operational Protection Measures & Op IT Capex
* C2.26 Visual Amenity (EPI)
* C2.27 Visual Amenity (NTMP)
* C2.28 Faults & failures
* C2.29 Net Zero
	+ D4.1 Non-Op Capex
	+ D4.2a Physical Security Capex
* D4.2b Physical Security Opex
	+ D4.3 Closely Associated Indirects (CAI)
	+ D4.4 Business Support (BS)
	+ D4.4b BS Allocation
	+ D4.5 Op Training (CAI)
	+ D4.6a TO cyber security OT
	+ D4.6b TO cyber security IT
	+ D4.7 Uncertain Costs
	+ D4.10 Asset mapping
	+ D4.11 Asset identification
	+ D4.12 Site ID

**Project Meta Data**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | The purpose of this table is to collate all administrative details on projects incurring cost with the RIIO-ET2 period. This will act as a link to the detailed outputs, cost and volumes in the supporting sheets and avoid the need for duplicate entry of identifying details.This is a summary sheet presenting a consolidated view of the individual scheme information relevant to the delivery of the project deliverable (to be consistent with RIIO-ET2 Final Determinations).  |
| Guidance on completing this worksheet | Projects are deemed to be applicable and to be reported if: * A scheme has actual or forecast expenditure within RIIO-ET2

OR* A scheme has an associated RIIO-ET2 Capital Contribution

OR* A scheme is expected to deliver Outputs on or before 31 March 2028 (i.e. end of RIIO-ET2+2) or beyond.

The purpose of this information is to provide visibility of all Projects (and schemes that contribute to this project delivery) that meet the above criterion irrespective of the price control period they are initiated or completed. For this worksheet please input:1. Project Reference (column A) All schemes will be assigned a Project Reference. For example, a new generation connection project delivering an output within the RIIO-ET2 period is comprised of three individual schemes: OSR1, OSR2 and OSR3. The Project Reference in column B will be consistent with the BPDT submission upon which the Final Determinations were based (in the case of baseline projects). The descriptor chosen will apply equally to each of the OSR’s (three in the above example). Project Reference in the Scheme Data worksheet is driven by what is populated in the Look up Table. 2. Start Year (Column M): the commencement of expenditure on the project (including the cost of Indirect Activities)3. Close year (Column N). The date of financial closure (or expected financial closure).4. Stage (column O). This is drop-down menu based on the current established milestones of a project (not started, in progress, completed, closed). Column U can be used to reference relevant supporting documents (e.g. engineering justification paper) or sections in the supporting narrative that will provide more detail on a particular project or element of a project that requires further explanation to aid understanding.   |

**Scheme\_C&V\_Load\_Actuals**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | The purpose of this table is to collate all details on load related schemes. This will act as a link to the detailed outputs and cost matrix tables and avoid the need for duplicate entry of identifying details.The table enables each network company to provide a list of the expected volumes (electrical and physical) across the agreed asset classification categories. This will allow Ofgem to have a more granular understanding of the proposed volumetrics in each of the scheme activities (which is a sub-element of a project).The table enables each network company to provide a list of the associated direct costs across the agreed asset classification categories. This will allow Ofgem to have a more granular understanding of the proposed costs in each of the aggregated cost activities.Individual schemes delivering multiple outputs can be captured as well as multiple schemes delivering single outputs. For example, consider a project (A) consisting of two schemes: scheme 1 delivering a section of OHL, scheme 2 is delivering a transformer, and together they are delivering a reinforcement to the licensee’s system of 10MW. The template design provides an overview of what is denoted as being delivered by the component parts (i.e. schemes) of project A. A licensee is able to denote the physical assets against the relevant schemes (km of OHL and # of transformers using the embedded asset possibilities list) and denote the value of the reinforcement resulting from the completion of the scheme activity (either by allocating against scheme 1 or 2 or by allocating proportionally across both schemes). NB: adjustments to the available options in the Look Up table (option for “WWVD DAF adjustment” and the term “DAF”) allow the capability to capture specific DAF adjustments for specific projects/schemes to be entered in the scheme entry tab and ultimately flow into the A8 allowances |
| Guidance on completing this worksheet | Schemes are deemed to be applicable and to be reported if: * Scheme has actual or forecast expenditure within RIIO-ET2

OR* Scheme has an associated RIIO-ET2 Capital Contribution

OR* Scheme is expected to deliver Outputs on or before 31 March 2028 (i.e. T2+2) or beyond.

The purpose of this information is to provide visibility of all schemes that meet the above criterion irrespective of the price control period they are initiated or completed. Relate each scheme to a project by selecting from the dropdown in column C, then select the appropriate categories in columns E, N and O.1. Scheme Reference (column A): The drop down menu should be used to denote the scheme reference code (as entered on the Look Up Tables) that the cost & volume details relate to. See “Look up” table guidance.2. 2. Active (column B): automated entry to denote if the scheme is active i.e. works have commenced on the scheme3. Project reference (column C). This will capture the mapping of schemes to projects. A project may consist of a single scheme or many schemes. A scheme can only be part of one project4. Scheme name (column D): Manual entry of scheme name.5. Scheme subcategory (column E). The drop-down menu is based on the current established cost categorisation for “Load Related” schemes, which must only be assigned against the following categories in column E: * Local Enabling (Entry)
* Local Enabling (Exit)
* Wider Works
* LRE - sole-use Local Enabling (Exit - Sole Use)
* LRE - sole-use Local Enabling (Entry - Sole Use)
* TSS Infrastructure

General principle: sub category will be driven by the primary purpose of the scheme and costs subsequently recorded against the primary activity/purpose chosen. When categorising works on a single asset, the descriptor chosen in the drop down menu will follow the greatest level of intervention applied with any other consequential costs also being recorded under this activity.Schemes that are associated with activities/assets that are covered by connection charges (as of the connection charging boundary at the time) please enter as either ‘Local enabling entry sole use’ or ‘Local enabling exit sole use’ as appropriate.6. Columns F to J contain drop down menu that enable each licensee to identify, where applicable, all the relevant cost driver information across categories that were originally established through the BPDT. These categories include:• Geographical location • Consents & Planning Ground Condition • Ground condition • Environmental condition• Proximity to Existing Electrical InfrastructureThe population of driver information will represent the licensees best available information and intelligence. The supporting narrative can be used to provide further explanation and/or identify factors that are not currently captured by the list (or to confirm where no drivers are applicable to certain schemes).Outputs determine the number of rows needed; a scheme that is anticipated to deliver one output directly need only be listed once (in this instance the scheme and the project are the same). Where a project is anticipated to deliver two or more outputs the requirement is to list all constituent elements of the project (each “scheme”) on separate rows, e.g. local enabling (entry) investment - distinction is required to be made between the connection output (MW) and the associated transmission infrastructure reinforcement activity where appropriate.7. Mechanism category (column K): The drop down menu provides four options: Baseline, Uncertainty Mechanism, Re-opener. 8. Start Year (Column L): the commencement of expenditure on the project (including the cost of Indirect Activities). 9. Close year (Column M). The date of financial closure (or expected financial closure).10. Asset Heading (Column N): the drop down menu enables a licensee to identify the type of volumetric category, i.e. does it apply to a physical asset (“Assets”) or to another activity (e.g. “Protection”, “civils” etc.).11. Asset Category (Column O): the drop down menu enables a licensee to identify the type of asset category (e.g. transformer). The list is informed by the asset classification list agreed with all TOs.12. Asset sub asset category (column P): the drop down menu enables a licensee to identify the specific asset category (e.g. “CB (Air insulated busbar)”). The list is informed by the asset classification list agreed with all TOs.13. Asset sub asset category secondary (column Q): the drop down menu enables a licensee to identify the secondary categorisation that may apply (e.g. ”Security – Gates(#)” ). The list is informed by the asset classification list agreed with all TOs.14. Voltage / rating (column R): the drop down menu enables a licensee to identify the voltage or rating classification that may apply. 15. Intervention (column S): the drop down menu enables a licensee to identify the intervention classification that may apply (Addition, Disposal or New Build). 16. Volume Measure (column T): the drop down menu enables a licensee to capture the volume measure description that may apply (Addition, Disposal, Maintenance volume, Refurb volume, Sites Resolved). 17. Licence term, (column U): the drop down menu enables a licensee to assign an applicable licence term against the scheme/activity, where applicable. 18. Units (column V): the drop down menu enables a licensee to identify the applicable volumetric unit that may apply (e.g. MW electrical output, the count of a physical asset, or length of security fencing). 19. Volume (column W): manual entry to specify the applicable physical volume count (e.g. ‘6’ Circuit Breakers).20. Subtotal RIIO-1 (column Y): The licensee is required to manually input the value of direct costs incurred in the RIIO-1 period attributable to each scheme. Columns Z and AA are auto-populated from information listed on the data worksheet. 21. Annual costs (columns AB to AL): Each TO will provide annual direct costs information on any activity undertaken (or forecast to be undertaken) between 1 April 2021 and 31 March 2028 inclusive (T2+2 period) associated with the progression and delivery of outputs in the RIIO-ET2+2 period and beyond. Future period reporting will reflect the rolling forecast requirement (see para 2.11).22. Customer Contributions (column AM): Each TO will provide annual information on the value of * capital contributions (applicable to contributions relating to the T2 baseline agreed at Final Determinations) that is currently forecast between 1 April 2021 and 31 March 2028 inclusive (T2+2 period) or beyond. Other schemes relate to non-baseline schemes.
* the value of any “one-off” works paid directly by the connecting customer, or
* legal settlement and insurance claims that relate to the transmission business, or other cost items that have no associated volumes (using the drop down option “non-asset cost type”).
* the value of any cost recoveries at a scheme level (to be entered as negative values).

NOTE: the forecast value attributable to “risk and contingency” allocated at a scheme level is not an entry option in this worksheet. An additional category has been included in the Asset Possibilities worksheet (entitled “Risk”) to enable each TO to provide data entry at a scheme level. 23. Non Asset cost type descriptor (column AN): can be used to reference relevant supporting documents or sections in the supporting narrative that will provide more detail on a particular project or element of a project that requires further explanation to aid understanding.24. Sub-total RIIO1 Contributions (column AO): The licensee is required to manually input the value of contributions received in the RIIO-1 period attributable to each scheme. 25. Annual Customer Contributions (columns AR to BB): Each TO will provide annual customer contributions information on any activity undertaken (or forecast to be undertaken) between 1 April 2021 and 31 March 2028 inclusive (T2+2 period) associated with the progression and delivery of outputs in the RIIO-ET2+2 period and beyond. Future period reporting will reflect the rolling forecast requirement (see para 2.11).26. Delivery year (column BC): This will mark the scheme completion or expected completion date. This is a manual entry cell.27. Delivery Period (column BD): This will mark the price control period for the expected completion date. This is a manual entry cell.28. Forecast energisation year (column BE): This will mark the anticipated date of live operation of the scheme. 29. Actual energisation year (column BF): This will mark the actual date of live operation of a scheme.For each RRP submission a TO will populate **only one column (BE or BF) for each scheme.** If the date is a forecast, column BE must be populated (Column BF will be blank). Once energised column BF will be populated (Column BE will be blank).30. Narrative (column BG) can be used to reference relevant supporting documents (e.g. engineering justification paper) or sections in the supporting narrative that will provide more detail on a particular project or element of a project that requires further explanation to aid understanding. |
| Definitions for use in this worksheet |
| Local Enabling (Entry – sole-use | Defined as expenditure by the Licensee required to meet increases in the total power entering the network from generators and interconnectors. It only includes expenditure on assets that are covered by connection charges as of the connection charging boundary at the time. |
| Local Enabling (Exit – Sole-Use) | Defined as expenditure by the Licensee required to meet increases or changes in the power demand of grid supply points and other directly connected customers as a result of load growth, load transfer or closure of embedded generation. Only includes expenditure on assets that are covered by connection charges as of the connection charging boundary at the time. |
| Local Enabling (Entry) | Expenditure on assets covered by TNUoS charges yet directly triggered by one or more individual generation connection projects.  |
| Local Enabling (Exit) | Expenditure on assets covered by TNUoS charges yet directly triggered by one or more individual demand connection projects.  |
| Wider Works | Expenditure required for generation- or demand-driven reinforcement of the transmission system in order to fulfil the company's obligations to the transmission Licence. Includes * load related expenditure covered by use of system charges including all wider works as detailed in Licensee’s licence conditions and Final Determinations as well as approved LOTI projects (construction only).
* For forecast purposes only, the Licensee is permitted to assume that the value of any future Authority funding provision will equal its latest forecasts (direct costs only).

Excludes Local enabling (entry), Local Enabling (Exit) and TSS expenditure as well as expenditure allowed under TIRG. |
| Infrastructure – TSS | Expenditure on schemes aimed primarily at improving the efficiency of system operation.  |
| Customer Contributions (enter as negative) | These exclude connection charges and contributions associated to customer specific connection assets. |
| NETS | The NETS is the high voltage network of overhead lines, underground or subsea cables and substations that transports electricity from generators to a lower voltage distribution network for onward transportation to consumers. The NETS comprises both the 400kV and 275kV circuits across Great Britain and the 132kV circuits in Scotland and in offshore waters. |
| Transmission Assets | Transmission assets that are owned by the Licensee fall into two distinct sub categories:1. “Connection” assets, which are for the sole use of each connected party. These are generally referred to as assets that facilitate connection to the rest of the NETS. The costs of these assets are recovered directly from the user via connection charges.
2. “Infrastructure” assets that cannot be solely attributed to a single user. In other words, the assets can be potentially shared by other users of the NETS. The costs of these assets are charged to all users of the NETS via TNUoS charges, as these assets can ultimately benefit all users of the transmission system.
 |
|  |  |
| Scheme completion  | The date and time that the apparatus is made fully available for service to the Electricity System Operator without exclusion or limitation. |
| Expected completion | The date and time that the apparatus is expected to be made fully available for service to the Electricity System Operator without exclusion or limitation. |
| Energisation  | The insertion of a fuse or operation of a switch that will allow an electrical current to flow from an Electricity Transmission Operators system to the Customer’s installation, or from the Customer’s installation to that transmission system, when the action in question is required to be carried out by the electricity transmitter and is subject to standard industry requirements. |
| Direct and Indirect Activities | Direct Activities: Those activities which involve physical contact with transmission network infrastructure assets.Indirect Activities: Activities which in most cases support work being physically carried out on transmission network infrastructure assets that could not, on their own, be classed as a direct network activity. Indirect Activities do not involve physical contact with transmission network infrastructure assets and secondary systems, whereas direct activities do.INCLUDES:• Closely Associated Indirects (see D.4.3)• Business Support Costs (see D4.4)• Non-Operational Capex (see D.4.1)Note that operational engineers working on planning and project mobilisation, preparing and planning associated with protection settings, administration of outages, contract specification and liaising with contractors and customers are considered Indirect Activities.EXCLUDES:• site surveys and non-site based costs associated with flooding (in Direct Activities) |

**Scheme\_C&V\_NonLoad\_Actuals**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | The purpose of this table is to collate all details on non load related schemes. This will act as a link to the detailed outputs and cost matrix tables and avoid the need for duplicate entry of identifying details.The table enables each network company to provide a list of the expected volumes (electrical and physical) across the agreed asset classification categories. This will allow Ofgem to have a more granular understanding of the proposed volumetrics in each of the scheme activities (which is a sub-element of a project).The table enables each network company to provide a list of the associated direct costs across the agreed asset classification categories. This will allow Ofgem to have a more granular understanding of the proposed costs in each of the aggregated cost activities.Individual schemes delivering multiple outputs can be captured as well as multiple schemes delivering single outputs.  |
| Guidance on completing this worksheet | Schemes are deemed to be applicable and to be reported if: * Scheme has actual or forecast expenditure within RIIO-ET2

OR* Scheme has an associated RIIO-ET2 Capital Contribution

OR* Scheme is expected to deliver Outputs on or before 31 March 2028 (i.e. T2+2) or beyond.

The purpose of this information is to provide visibility of all schemes that meet the above criterion irrespective of the price control period they are initiated or completed. Relate each scheme to a project by selecting from the dropdown in column C, then select the appropriate categories in columns E, N and O,1. Scheme Reference (column A): The drop down menu should be used to denote the scheme reference code (as entered on the Look Up Tables) that the cost & volume details relate to. See “Look up” table guidance.2. 2. Active (column B): automated entry to denote if the scheme is active i.e. works have commenced on the scheme3. Project reference (column C). This will capture the mapping of schemes to projects. A project may consist of a single scheme or many schemes. A scheme can only be part of one project4. Scheme name (column D): Manual entry of scheme name.5. Scheme subcategory (column E). The drop-down menu is based on the current established cost categorisation for “Non Load Related” schemes, which must only be assigned against the following categories in column E: * Replacement
* Refurb Major
* Refurb Minor
* Decommissioning
* Uncertain Costs

General principle: sub category will be driven by the primary purpose of the scheme and costs subsequently recorded against the primary activity/purpose chosen. When categorising works on a single asset, the descriptor chosen in the drop down menu will follow the greatest level of intervention applied with any other consequential costs also being recorded under this activity.6. Columns F to J contain drop down menu that enable each licensee to identify, where applicable, all the relevant cost driver information across categories that were originally established through the BPDT. These categories include:• Geographical location • Consents & Planning Ground Condition • Ground condition • Environmental condition• Proximity to Existing Electrical InfrastructureThe population of driver information will represent the licensees best available information and intelligence. The supporting narrative can be used to provide further explanation and/or identify factors that are not currently captured by the list (or to confirm where no drivers are applicable to certain schemes).Outputs determine the number of rows needed; a scheme that is anticipated to deliver one output directly need only be listed once (in this instance the scheme and the project are the same). Where a project is anticipated to deliver two or more outputs the requirement is to list all constituent elements of the project (each “scheme”) on separate rows. 7. Mechanism category (column K): The drop down menu provides four options: Baseline, Uncertainty Mechanism, Re-opener or Other. 8. Start Year (Column L): the commencement of expenditure on the project (including the cost of Indirect Activities). 9. Close year (Column M). The date of financial closure (or expected financial closure).10. Asset Heading (Column N): the drop down menu enables a licensee to identify the type of volumetric category, i.e. does it apply to a physical asset (“Assets”) or to another activity (e.g. “Protection”, “civils” etc.).11. Asset Category (Column O): the drop down menu enables a licensee to identify the type of asset category (e.g. transformer). The list is informed by the asset classification list agreed with all TOs.12. Asset sub asset category (column P): the drop down menu enables a licensee to identify the specific asset category (e.g. “CB (Air insulated busbar)”). The list is informed by the asset classification list agreed with all TOs.13. Asset sub asset category secondary (column Q): the drop down menu enables a licensee to identify the secondary categorisation that may apply (e.g. ”Security – Gates(#)” ). The list is informed by the asset classification list agreed with all TOs.14. Voltage / rating (column R): the drop down menu enables a licensee to identify the voltage or rating classification that may apply. 15. Intervention (column S): the drop down menu enables a licensee to identify the intervention classification that may apply (Replacement, Refurb Major, Refurb Minor, Addition, Disposal). Note that for replacement activity the costs of Disposal will be separated and captured in this worksheet (i.e. costs are not allocated to Additions only).16. Volume Measure (column T): the drop down menu enables a licensee to capture the volume measure description that may apply (Addition, Disposal, Maintenance volume, Refurb volume, Sites Resolved). 17. Licence term, (column U): the drop down menu enables a licensee to assign an applicable licence term against the scheme/activity, where applicable. 18. Units (column V): the drop down menu enables a licensee to identify the applicable volumetric unit that may apply (e.g. MW electrical output, the count of a physical asset, or length of security fencing). 19. Volume (column W): manual entry to specify the applicable electrical or physical volume count (e.g ‘6’ Circuit Breakers).20. Subtotal RIIO-1 (column Y): The licensee is required to manually input the value of direct costs incurred in the RIIO-1 period attributable to each scheme. 21. Annual costs (columns AB to AL): Each TO will provide annual direct costs information on any activity undertaken (or forecast to be undertaken) between 1 April 2021 and 31 March 2028 inclusive (T2+2 period) associated with the progression and delivery of outputs in the RIIO-ET2+2 period and beyond. Future period reporting will reflect the rolling forecast requirement (see para 2.11).22. Customer Contributions (column AM): Each TO will provide annual information on the value of * capital contributions (applicable to contributions relating to the T2 baseline agreed at Final Determinations) that is currently forecast between 1 April 2021 and 31 March 2028 inclusive (T2+2 period) or beyond. Other schemes relate to non-baseline schemes.
* the value of any “one-off” works paid directly by the connecting customer, or
* legal settlement and insurance claims that relate to the transmission business, or other cost items that have no associated volumes (using the drop down option “non-asset cost type”).
* the value of any cost recoveries at a scheme level (to be entered as negative values).

NOTE: the forecast value attributable to “risk and contingency” allocated at a scheme level is not an entry option in this worksheet. An additional category has been included in the Asset Possibilities worksheet (entitled “Risk”) to enable each TO to provide data entry at a scheme level. 23. Non Asset cost type descriptor (column AN): can be used to reference relevant supporting documents or sections in the supporting narrative that will provide more detail on a particular project or element of a project that requires further explanation to aid understanding.24. Sub-total RIIO1 Contributions (column AO): The licensee is required to manually input the value of contributions received in the RIIO-1 period attributable to each scheme. 25. Annual Customer Contributions (columns AR to BB): Each TO will provide annual customer contributions information on any activity undertaken (or forecast to be undertaken) between 1 April 2021 and 31 March 2028 inclusive (T2+2 period) associated with the progression and delivery of outputs in the RIIO-ET2+2 period and beyond. Future period reporting will reflect the rolling forecast requirement (see para 2.11).26. Delivery year (column BC): This will mark the scheme completion or expected completion date. This is a manual entry cell.27. Delivery Period (column BD): This will mark the price control period for the expected completion date. This is a manual entry cell.28. Forecast energisation year (column BE): This will mark the anticipated date of live operation of the scheme. 29. Actual energisation year (column BF): This will mark the actual date of live operation of a scheme.For each RRP submission a TO will populate **only one column (BE or BF) for each scheme.** If the date is a forecast, column BE must be populated (Column BF will be blank). Once energised column BF will be populated (Column BE will be blank).30. Narrative (column BG) can be used to reference relevant supporting documents (e.g. engineering justification paper) or sections in the supporting narrative that will provide more detail on a particular project or element of a project that requires further explanation to aid understanding. |
| Definitions for use in this worksheet |
| Replacement Refurb Major Refurb Minor New Build Decommissioning | See Transmission Glossary |
| Customer Contributions (enter as negative) | These exclude connection charges and contributions associated to customer specific connection assets. |
| NETS | The NETS is the high voltage network of overhead lines, underground or subsea cables and substations that transports electricity from generators to a lower voltage distribution network for onward transportation to consumers. The NETS comprises both the 400kV and 275kV circuits across Great Britain and the 132kV circuits in Scotland and in offshore waters. |
| Transmission Assets | Transmission assets that are owned by the Licensee fall into two distinct sub categories:1. “Connection” assets, which are for the sole use of each connected party. These are generally referred to as assets that facilitate connection to the rest of the NETS. The costs of these assets are recovered directly from the user via connection charges.
2. “Infrastructure” assets that cannot be solely attributed to a single user. In other words, the assets can be potentially shared by other users of the NETS. The costs of these assets are charged to all users of the NETS via TNUoS charges, as these assets can ultimately benefit all users of the transmission system.
 |
|  | See Transmission Glossary |
| Scheme completion  | The date and time that the apparatus is made fully available for service to the Electricity System Operator without exclusion or limitation. |
| Expected completion | The date and time that the apparatus is expected to be made fully available for service to the Electricity System Operator without exclusion or limitation. |
| Energisation  | The insertion of a fuse or operation of a switch that will allow an electrical current to flow from an Electricity Transmission Operators system to the Customer’s installation, or from the Customer’s installation to that transmission system, when the action in question is required to be carried out by the electricity transmitter and is subject to standard industry requirements. |
| Direct and Indirect Activities  | Direct Activities: Those activities which involve physical contact with transmission network infrastructure assets.Indirect Activities: Activities which in most cases support work being physically carried out on transmission network infrastructure assets that could not, on their own, be classed as a direct network activity. Indirect Activities do not involve physical contact with transmission network infrastructure assets and secondary systems, whereas direct activities do.INCLUDES:• Closely Associated Indirects (see D.4.3)• Business Support Costs (see D4.4)• Non-Operational Capex (see D.4.1)Note that operational engineers working on planning and project mobilisation, preparing and planning associated with protection settings, administration of outages, contract specification and liaising with contractors and customers are considered Indirect Activities.EXCLUDES:• site surveys and non-site based costs associated with flooding (in Direct Activities) |

**Scheme Output**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | The purpose of this table is to enable each network company to provide a list of the associated scheme outputs (and projects) delivered through the prescribed mechanisms defined in the RIIO-ET2 licence. This sheet will capture all electrical outputs (e.g. MW or MVA) and any physical outputs that are not recorded through the Scheme Volumes worksheets and the agreed Asset Possibilities list. |
| Guidance on completing this worksheet | **Data in column F is auto populated from previous worksheets.**For this worksheet please input:1. Scheme reference (column A) 2. Mechanism type (Column B): the drop down menu enables a licensee to identify the type of mechanism through which the output is being delivered, e.g. does it form part of a PCD, is it being delivered through a Volume Driver mechanism, is it expected to form part of a Re-opener application submission or is it non-variant in nature. For Volume Driver schemes (generation and demand connection mechanisms), functionality has been included on the drop down menu to allow data entry. 3. Mechanism (Column C): the drop down menu enables a licensee to identify the precise mechanism (e.g. Generation connection). 4. Licence term (column D): the drop down menu enables a licensee to identify the applicable licence term.5. Boundary (column E): the drop down menu enables a licensee to identify the applicable boundary that may apply (for use against the Wider Works volume driver mechanism only)6. Units (column J): the drop down menu enables a licensee to identify the applicable unit metric.7. Annual profile (columns L to R): Each TO will provide annual information on the profile of output delivery activity that is currently forecast between 1 April 2021 and 31 March 2028 inclusive (T2+2 period) or beyond. Future period reporting will reflect the rolling forecast requirement (see para 2.11).Narrative (column U) can be used to reference relevant supporting documents or sections in the supporting narrative that will provide more detail on a particular project or element of a project that requires further explanation to aid understanding. |

**Other T2 capital costs from T1**

|  |  |
| --- | --- |
| Purpose and Use by Ofgem | This tables enables TOs tocapture costs associated with schemes that have delivered an output (and received funding through the appropriate T1 mechanism) but are continuing to incur costs in the T2 period. It will also cover cost inputs for T1/T2 volume driver crossover schemes which will deliver outputs within the first two years of T2.This will allow Ofgem to have visibility of the costs of schemes that span the ET1 and ET2 price control periods.For the avoidance of doubt, this worksheet will not duplicate information on schemes with outputs in the RIIO-ET2+2 period and beyond reported in the “Scheme Costs” worksheet. |
| Instructions for Completion | 1. Scheme Reference (column A). 2. Project reference (column B). This will capture the mapping of schemes to projects. A project may consist of a single scheme or many schemes. 3. Scheme category (column C). The drop down menu provides two choices: Load related and Non Load related.4. Scheme sub category (column D). The drop-down menu is based on the established cost categorisation for load related schemes (Local enabling (Entry), (Local enabling (Exit), Wider Works, etc) and non-load related schemes (Replacement, Refurb\_Major, Refurb\_Minor). The options also enable licensees to choose to further sub categories of activity: Decommissioning and Uncertain Costs. 5. Subtotal RIIO-1 (column M): The licensee is required to manually input the value of direct costs incurred in the RIIO-1 period attributable to each scheme. Columns N and O are auto-populated from information previously listed on the meta data worksheets. 6. Annual costs (columns P to Z): Each TO will provide annual direct costs information between 1 April 2021 and 31 March 2026 inclusive. Future period reporting will reflect the rolling forecast requirement (see para 2.11).Narrative (column AA) can be used to reference relevant supporting documents or sections in the supporting narrative that will provide more detail on a particular project or element of a project that requires further explanation to aid understanding.The annual total from this worksheet feeds into the relevant Cost Matrix tables.  |

**Scheme C&V Calc Load Allowance/Scheme C&V NonLoad Allowance/ Scheme output allowance**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | The purpose of this table is to enable each network company to provide the detail on the value of allowance attributable to all applicable schemes.This will act as a link to the opening allowance (reflecting Final Determinations) and be used as the basis for monitoring future adjustments. This will provide a more granular understanding of the levels of allowed expenditure for each scheme and provide improved visibility to the movement in allowance across the price control period. |
| Guidance on completing this worksheet | The licensee is required to input allowance data attributed against each scheme. The structure replicates that of the scheme C&V Actuals (Load & NonLoad) / scheme output worksheets described above. The same data input requirements applyThe worksheet requires each licensee to enter the annual value of allowed expenditure attributable to each asset entry ((reflecting all necessary adjustments that the final BPDT submission was subjected to, i.e. all in-built adjustments relevant to each licensee to reflect the Final Determinations pre-Real Price Effects)These allowances flow through to the outputs on the "A8.Allowances XXXX" worksheets.Annual reporting will then present a view of what the actual costs (at a scheme level) are at the end of each reporting year. The information will be provided through the data worksheets (for scheme) and the relevant memo style worksheets (non-scheme) Where a scheme was provided with a level of funding provision through Final Determinations, we will be able to track this via the referencing. **Population of baseline position:** Licensees have agreed to populate the RRP template with their understanding of the scheme level baseline allowance position, to reflect the position directed at Final Determinations. The one-off exercise is intended to mitigate issues experienced in RIIO-ET1 on traceability of the BPDT submission (what network companies were expected to do and what they had budgeted for), the settlement decision (what funding was provided based on the BPDT submission) and the outturn activity (the actual cost incurred and output delivery. Only those schemes with allowance agreed at Final Determinations will be reported through the scheme data worksheets, and allowances for non-scheme activity will be reported through the non-scheme memo style worksheets. We recognise that the baseline plan will be subject to change as the price control progresses.  Reporting will provide visibility on what has changed from the original composition and anything “new”, that was not part of the original baseline representation, will be captured as a new data entry with an accompanying new OSR.  For example, if a hypothetical baseline connection project A (consisting of three constituent schemes and delivering an output of 10MW) is subsequently removed from the baseline plan and replaced with a new connection at a new location, this will be presented in the RRP by an entirely new set of schemes and OSR’s. |

**ASTI\_C&V\_Calc\_Actuals and ASTI\_C&V\_Calc\_Allowance**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | The purpose of this table is to collate all actual and allowance cost and volume details on Accelerated Strategic Transmission Investment (ASTI) related schemes associated with projects being progressed under SpC 3.40, SpC 3.41, SpC 4.9 and the associated works required to progress and complete Pre-Construction activity. The table allows each licensee to populate information on ASTI projects approved by OFGEM. ASTI\_C&V\_Calc\_Allowance: Licensees will provide the detail on the value of allowance attributable to all applicable ASTI schemes that have agreed funding. To allow Ofgem to have a more granular understanding of the funding provision, the table has been designed to delineate between Pre-construction funding (PCF) and Construction funding.ASTI\_C&V\_Calc\_Actuals:Licensees will provide the detail on the value of associated direct costs attributable to all applicable ASTI schemes that have agreed funding. To allow Ofgem to have a more granular understanding of the cost activities, the table has been designed to delineate between Pre-construction costs and Construction costs (actual and forecast).The tables also enable each Licensee to provide a list of the expected volumes (electrical and physical) across the agreed asset classification categories. This will allow Ofgem to have a more granular understanding of the proposed volumetrics in each of the scheme activities (which is a sub-element of a project).1. Scheme Reference (column A): The drop down menu should be used to denote the scheme reference code (as entered on the ASTI Look Up Tables) that the cost & volume details relate to. 2. Project reference (column D). This will capture the mapping of schemes to projects. A project may consist of a single scheme or many schemes. A scheme can only be part of one project.3. Scheme name (column E): The drop down menu should be used to denote the scheme name (as entered on the ASTI Look Up Tables).4. Scheme category (column C). The drop-down menu allows the scheme to be allocated against two types of activity: Pre construction or Construction. General principle: allocation will be driven by the primary purpose of the scheme and costs subsequently recorded against the primary activity/purpose chosen. Outputs determine the number of rows needed; a scheme that is anticipated to deliver one output directly need only be listed once (in this instance the scheme and the project are the same). Where a project is anticipated to deliver two or more outputs the requirement is to list all constituent elements of the project (each “scheme”) on separate rows. 5. Start Year (Column M): the commencement of expenditure on the project (including the cost of Indirect Activities). 6. Close year (Column N). The date of financial closure (or expected financial closure).7. Asset Heading (Column O): the drop down menu enables a licensee to identify the type of volumetric category, i.e. does it apply to a physical asset (“Assets”) or to another activity (e.g. “Protection”, “civils” etc.).8. Asset Category (Column P): the drop down menu enables a licensee to identify the type of asset category (e.g. transformer). The list is informed by the asset classification list agreed with all TOs.9. Asset sub asset category (column Q): the drop down menu enables a licensee to identify the specific asset category (e.g. “CB (Air insulated busbar)”). The list is informed by the asset classification list agreed with all TOs.10. Asset sub asset category secondary (column R): the drop down menu enables a licensee to identify the secondary categorisation that may apply (e.g. ”Security – Gates(#)” ). The list is informed by the asset classification list agreed with all TOs.11. Voltage / rating (column S): the drop down menu enables a licensee to identify the voltage or rating classification that may apply. 12. Intervention (column T): the drop down menu enables a licensee to identify the intervention classification that may apply (Replacement, Refurb Major, Refurb Minor, Addition, Disposal). Note that for replacement activity the costs of Disposal will be separated and captured in this worksheet (i.e. costs are not allocated to Additions only).13. Volume Measure (column U): the drop down menu enables a licensee to capture the volume measure description that may apply (Addition, Disposal, Maintenance volume, Refurb volume, Sites Resolved). 14. Licence term, (column V): the drop down menu enables a licensee to assign an applicable licence term against the scheme/activity, where applicable. 15. Units (column W): the drop down menu enables a licensee to identify the applicable volumetric unit that may apply (e.g. MW electrical output, the count of a physical asset, or length of security fencing). 16. Volume (column X): manual entry to specify the applicable electrical or physical volume count (e.g ‘6’ Circuit Breakers).17. Subtotal RIIO-1 (column Z): Where applicable, the licensee is required to manually input the value of direct costs incurred in the RIIO-1 period attributable to each scheme. 18. Annual costs (columns AC to AM): Each TO will provide annual direct costs information on any activity undertaken (or forecast to be undertaken) within the RIIO-ET2 price control period and beyond. 19. Customer Contributions (column AM): Each TO will provide annual information on the value of * capital contributions
* the value of any “one-off” works paid directly by the connecting customer, or
* legal settlement and insurance claims that relate to the transmission business, or other cost items that have no associated volumes (using the drop down option “non-asset cost type”).
* the value of any cost recoveries at a scheme level (to be entered as negative values).

20. Sub-total RIIO1 Contributions (column AP): The licensee is required to manually input the value of contributions received in the RIIO-1 period attributable to each scheme. 25. Annual Customer Contributions (columns AS to BC): Each TO will provide annual customer contributions information on any activity undertaken (or forecast to be undertaken) within the RIIO-ET2 period associated with the progression and delivery of outputs. 26. Delivery year (column BD): This will mark the scheme completion or expected completion date. This is a manual entry cell.27. Delivery Period (column BE): This will mark the price control period for the expected completion date. This is a manual entry cell.28. Forecast energisation year (column BF): This will mark the anticipated date of live operation of the scheme. 29. Actual energisation year (column BG): This will mark the actual date of live operation of a scheme.For each RRP submission a TO will populate **only one column (BF or BG) for each scheme.** If the date is a forecast, column BF must be populated (Column BG will be blank). Once energised column BG will be populated (Column BF will be blank). |
| Guidance on completing this worksheet | The tabs utilise the same structure and design architecture that is currently applied in the reporting of Load and Non-Load schemes, and will be familiar to all Licensees. The key difference is that each tab is designed to enable data entry against applicable ‘ASTI’ licence terms only for Pre-construction and Construction activity. Any ASTI application not yet approved or in receipt of a funding decision should be reported in the pipeline log. |

**Scheme Output ASTI**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | The purpose of this table is to enable each network company to provide a list of the associated scheme outputs (and projects) delivered through ASTI framework.This sheet will capture all electrical outputs (e.g. MW or MVA) and any physical outputs that are not recorded through the C&V ASTI worksheets and the agreed Asset Possibilities list. |
| Guidance on completing this worksheet | **Data in column F is auto populated from the ASTI Look up worksheet.**For this worksheet please input:1. Scheme reference (column A) from the drop down list provided2. Licence term (column D): the drop down menu enables a licensee to identify the applicable licence term.5. Boundary (column E): the drop down menu enables a licensee to identify the applicable boundary that may apply6. Units (column J): the drop down menu enables a licensee to identify the applicable unit metric.7. Annual profile (columns L to R): Each TO will provide annual information on the profile of output delivery activity that is currently expected in the RIIO-ET2 period or beyond.  |

**Allowances input**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | The purpose of the Allowance Input worksheet is twofold: 1. to enable each network company to provide a list of the associated allowances for each cost category area that is not represented at a scheme level or for which no separate a baseline allowance memo worksheet exists that enable allowed expenditure to be input
2. to report the constituent parts of schemes that form part of approved Re-openers or an Uncertainty Mechanism.

To illustrate category (i) an example of “cyber security” activity (represented on the A8 allowance worksheets in column AG and AH) is set out in the worksheet guidance below. This activity is not represented at a scheme level (no Scheme Reference) and it does not have an associated memo table. To illustrate the reporting of a functional activity (category ii above) an example of an approved investment through the Non-operational IT Capex Reopener is set out in the worksheet guidance below. To further illustrate category ii, a further example of a load-related capex scheme (LE Entry cost category) that is subject to an indirect cost uplift through the opex escalator uncertainty mechanism is provided.For any cost category listed in the column header an annual allowance must be entered at an aggregate level. (NOTE: cost categories where the information is collated from scheme or memo worksheets are greyed out. Licensees must populate the remaining columns.)This will allow Ofgem to have visibility of the aggregate representation of allowances across the remaining categories of activity in the RIIO-ET2 period. **Population of baseline position**To assist in the data population exercise to capture baseline allowance representation, columns within the Allowance Input worksheet were initially proposed to be ‘greyed-out’ to indicate areas where baseline allowances are populated elsewhere in the C&V RRP and no data input is required[[9]](#footnote-10). The current version of the template reinstates the data entry requirements (i.e. reverts from grey to yellow input cells) to allow for possible data entry associated with uncertainty mechanism activity or re-opener activity in annual reporting timescales.  |
| Guidance on completing this worksheet | The majority of the worksheet is manual data entry. Licensees will create a separate data entry line for each year and for each category (representing the aggregated activity). **Category (i) example**: if at Final Determinations a network company was provided funding for Cyber activity at £1m per annum for each of the RIIO-ET2 price control, the worksheet will be populated as follows:**Column A:**Five separate data entries containing a description of the cyber activity in each reporting year (2022, 2023, 2024, 2025 and 2026). **Column B:**Drop down menu: “baseline” option chosen for each entry.**Column C:**Free entry. Five separate line entries “2022”, “2023”, “2024”, “2025” and “2026” .**Column D:**The applicable Scheme Reference should be entered in this field, this should be consistent with the referencing in the Scheme data. **Column E:**Drop down menu: the applicable licence term will be chosen. **Column Y or Z:**Five separate line entries each of “£1m” will be recorded in the applicable column against the “Cyber Security” category. The total would be £5m (reported as the sum of the applicable cells).**Category (ii) example:** a network company receives approval under special Condition 3.7 to install IT equipment; £5m in 2024 and £10m in 2025 (total £15m). The worksheet will be populated as follows:**Column A:**Two separate data entries containing a description of the activity in each reporting year will be provided (2024 and 2025). **Column B:**Drop down menu: “Re-opener” option chosen for each entry.**Column C:**Free entry. “2024” will be inserted in one line and “2025” inserted in the second reporting line applicable to this activity.**Column D:**Free entry. As this is a functional activity there is no applicable Scheme Reference collated from the Scheme Data worksheet. “n/a” will be entered. **Column E:**Drop down menu: the applicable licence term will be chosen. In this example, “NOITt” will be chosen for each separate entry.**Column J:**Two separate line entries; one for “£5m” in 2024 and another for “£10m” in 2025 will be recorded in column J against the “Non-Operational Capex” category. **Category (ii) example:** a network company incurs expenditure over a two year period (2024 and 2025) on an activity that is subject to an uplift through the opex escalator mechanism. To simplify, we assume that an uplift of £1m is applied in 2024 and a further uplift of £1m is provided in 2025. The worksheet will be populated as follows:**Column A:**In this example a two data entry lines are required; to capture the opex escalator uplift value in reporting years 2024 and 2025. The element associated with direct cost activity - allocated a Scheme Reference through the Scheme Cost and Volume worksheets – does not require a data entry row or description in this worksheet. **Column B:**Drop down menu: “Uncertainty Mechanism” option chosen for each entry.**Column C:**Free entry. “2024” will be inserted in one line and “2025” inserted in the second reporting line applicable to this activity.**Column D:**Free entry. Data entry is required to align these activities to the direct cost activity allocated a Scheme Reference (through the Scheme Cost and Volume worksheets). The relevant Scheme Reference will be inserted for each separate entry. **Column E:**Drop down menu: the applicable licence term will be chosen. In this example, “OEt” will be chosen for each separate entry.**Column J:**Two separate line entries; one for “£1m” in 2024 and another for “£1m” in 2025 will be recorded in column T against the “CAI” category. **NOTE: Once the company input is complete go to the "Controls" tab and click the "Update Calculations" button. This will automatically populate the "Scheme\_Cost\_Calc" and "Scheme\_Volume\_Calc" sheet into a list of all the actuals and allowance cost and volume inputs respectively.** |

**PCD**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | These worksheets contain formulae to produce “long” lists that are driven from the company inputs for costs, volumes, outputs and allowances. Data entry is only required in the worksheet entitled “PCD”. This worksheet seeks to collate the relevant information associated with specific types of Price Control Deliverable (PCD) established as part of the Final Determinations. |
| Guidance on completing this worksheet | This worksheet contains scope to summarise information against a possible 50 PCD projects. The worksheet requires each licensee to choose the applicable project (cell C5) to initiate the collation from the company input files. The name of PCD project/scheme will reflect the title provided as part of the RIIO-ET2 Final Determination document suite or T2 Licence text. Columns D and E enable licensee to capture the specific boundaries that are applicable to the delivery of a PCD, including where boundary reinforcement is delivered across more than one boundary.Rows 20-21, 25-26 and 28-29 are auto-populated from cost and output information provided elsewhere in the packIn recognition that there may be elements associated with the delivery of a PCD prescribed in the ET2 Licence that may not be fully captured through the asset classification list applied within the template, applicable cells in Col F allow a TO to enter further information on any PCD project not adequately captured through the reporting structure. Applicable cells in Col G allow TO’s to denote the Delivery Status of each of the schemesThe current view of delivery status may be: * on track;
* not on track;
* complete; or,
* removed.

"on track" describes a PCD that is on track for delivery in T2 in accordance with the agreed scope and delivery timeline agreed as part of the RIIO-ET2 settlement. "not on track" refers to projects that are not currently expected to deliver in T2 or are subject to a change of scope or timing of delivery that is divergent to expected parameters agreed as part of the RIIO-ET2 settlement A short narrative will be provided to further explain the movements and provide associated justification, including confirmation of any financial impact adjustment arising from movements/adjustments and/or potential non-delivery. "complete" denotes PCDs that have delivered in the regulatory year. A short narrative will be provided to provide confirmation on where the PCD is “Fully Delivered” (no change to specification agreed as part of T2 settlement, no further delivery components remain outstanding and the project is financially complete) or where the PCD delivery falls into one of the following categories: * “Fully Delivered with Alternative Specification” (change to specification agreed as part of T2 settlement but no further delivery components remain outstanding and the project is financially complete)
* “Partially Delivered with Alternative Specification” (change to specification agreed as part of T2 settlement and the project is financially complete)
* “Partially Delivered” (no change to specification agreed as part of T2 settlement but the remaining components of the original specification are not anticipated to be delivered at all and the project is financially complete)

"removed" identifies those PCDs that no longer contribute to the PCD suite to be delivered. A short narrative will be provided to further explain the reason for removal and provide confirmation of any financial impact adjustment arising from non-delivery.The applicable cells in Col H allow each Licensee to denote the Scheme Output Status. The current view of output status may be: * Increase
* Decrease
* No change, or
* Project no longer required.

"Increase" describes a PCD output that has increased more than the output specified in the Electricity transmission licence Special Conditions and/or in accordance with T2 agreed scope as part of the RIIO-ET2 settlement. "Decrease" refers to PCD output that is lower than the output specified in the Electricity transmission licence Special Conditions and/or in accordance with T2 agreed scope as part of the RIIO-ET2 settlement. Supporting commentary will be provided to further explain the movements and provide associated justification, including confirmation of any financial impact adjustment arising from movements/adjustments and/or potential change in scope. "No change" denotes PCD outputs that remain aligned with the Electricity transmission licence Special Conditions and/or T2 agreed scope as part of the RIIO-ET2 settlement. “Project no longer required” identifies those PCD outputs that no longer contribute to the PCD suite to be delivered. Column I must be populated to denote the scheme name which corresponds to the scheme reference captured in Column B.  |

**Analysis (coloured red)**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | These worksheets contain data table analysis and graphical representation of the input data provided. These worksheets should be used to inform the structure and content of the narrative, providing an insight to how the data can be presented, validated and compared.  |
| Guidance on completing this worksheet | There is no input required.  |

**A8 Allowances**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | These worksheets collate the allowance input data provided earlier in the template (see “Allowances input” and “Scheme data allowances” etc.) and summarises allowances attributable to each category for each Licensee per individual reporting year. |
| Guidance on completing this worksheet | The worksheet requires the following data entry from each licensee:Row 16: data entry is auto-populated from information provided elsewhere in the pack (e.g. “Scheme cost calc” for Load Related schemes) Row 17: the value of the capital contribution at an aggregate level by category (applicable to capture contributions relating to the T2 baseline agreed at Final Determinations) are auto populated form the information provided in the Non asset cost worksheet.Row 18: no data entry required in columns B to AQ. The value of the impact of Real Price Effect adjustment at a portfolio level is required in columns AR, AS and AT reflecting three PCFM categories: Non-variant, Uncertainty Mechanism and PCD.* Rows 20 -25: data entry is auto-populated (where applicable) from information provided elsewhere in the pack
 |

**C2.11/12/13: Spares, Black start, Losses**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | The purpose of these tables is to provide a summary of costs incurred, by asset type, across the RIIO-ET2/beyond T2 periods, for each of Spares, Black Start & Losses. This will allow Ofgem to have a more granular understanding of the proposed costs in each of the aggregated cost activities. |
| Guidance on completing this worksheet | **Spares** - the costs of acquiring and the credits associated with utilising Strategic Spares are to be recorded in this worksheet. Instructions on how to record Strategic Spares costs are included below.We expect Strategic Spares captured in this worksheet to be whole assets only. Sub-component parts of whole assets are not considered to be Strategic Spares and Licensees should maintain their own record of volumes, as they would for stock items. The purchase of a Strategic Spare is treated as a Totex cost, which is different to the treatment of normal stock items.There are two treatments to be considered when recording the activities relating to Strategic Spares:Strategic Spares currently held:* Volumes should be reported against the relevant asset classification (or pre-agreed aggregation point) within the "Activity Volumes" section of the worksheet under column AA (e.g. a positive entry of “5” if 5 strategic spare transformers are currently held by the Licensee). No volumes should be recorded in the Scheme Volumes worksheets as the strategic spare has not yet been utilised on the network.

No cost reporting is required for Strategic Spares currently held (i.e. purchased in T1) because the expense incurred will have been reported and funding provision made in the previous price control.The acquisition of new Strategic Spares within the RIIO-ET2 period (1 April 2021 to 31 March 2026):* The costs of acquisition should be recorded as a positive value within the year of purchase against the relevant asset classification (or pre-agreed aggregation point). For example, if a further 5 spare transformers are purchased in year 2 of RIIO-ET2 with an acquisition cost of £2m each, the Licensee will enter £10m in column N (2023/24) against the relevant asset classification.
* Volumes should be reported against the relevant asset category (or pre-agreed aggregation point) within the "Activity Volumes" section within the year of purchase against the relevant asset classification (a positive entry of “5” using the example above, giving a total inventory of 10 Strategic Spare transformers).

Treatment on the utilisation of Strategic Spares:* Licensees will track the usage of Strategic Spares to specific incidents and their deployment / utilisation within specific schemes in the RIIO-ET2 period.
* Once utilised on the network the cost of the spare should be recorded as a negative value within the year of utilisation as it enters service. Using the example above, if a single Strategic Spare transformer enters service in year 3, the cost is presented by an entry of "-2" (£m) in the cost table (column O). The impact on the total inventory is a reduction from £20m to £18m as a result of the spare entering service.
* In terms of total volume, if the Strategic Spare transformer enters service in year 3 the Licensee will report an entry of "-1" in the Activity Volumes section against the relevant asset classification in year 3 (column AC). The impact on the total inventory is a reduction in the count from 10 to a count of 9 as one enters service in year 3.
* A “matching” positive cost & volume entry can then be recorded in the “Scheme cost and volume” worksheets for which the utilisation relates (e.g. the scheme in which the Strategic Spare is utilised will record the costs and volume against the relevant asset classification - a count of 1 and a cost of £2m against the transformer type using the example above). This will allow the auto-population of the relevant A7 asset movements worksheet and record the scheme cost in its entirety.
* If a Strategic Spare is required to rectify a fault, these costs are to be recorded on the relevant row on Table ‘C2.20 – Faults’.
* The associated asset volume should be recorded at this point on Asset Register class row of the CV table relating to the cost (in the above example - faults).

The utilisation of Strategic Spares has no net impact on Totex as the cost transactions recorded at this point are equal and opposite (other than in the unlikely event that the utilisation relates to an activity outside of the price control).Costs will be populated in columns M to W.Activity Volumes will be populated in columns AA to AK.**Black start:** Volumes and costs should be reported against the appropriate asset classes listed in worksheet C2.12. In the first table ‘Sites resolved’ Licensees should report the volumes of sites where Black Start resilience has been achieved and the costs of achieving this. In the second table ‘Outstanding population of sites to be resolved’ Licensees are not currently required to populate.Costs will be populated in columns M to W.Asset additions will be populated in columns AB to AL.**Losses:** Volumes and costs should be reported against the appropriate asset classes listed in worksheet C2.13. Licensees should only complete this worksheet where losses management is the primary driver of the investment or action. This is to avoid double counting of volumes and costs reported in other worksheets.Costs will be populated in columns M to W.Asset additions will be populated in columns AB to AL.Disposal information is auto-populated.  |

**C2.20: Faults**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | The purpose of this table is to provide data on the number of faults by asset category as well as the associated totex cost of fault restoration.  |
| Guidance on completing this worksheet | Volumes and costs should be reported against the appropriate asset classes listed in worksheet C2.20. Note: the asset possibilities list in this worksheet is different to the list applicable elsewhere in the reporting pack. The list was developed and agreed in discussion with the ETOs. Licensees should report on costs of the types of works done as a result of fault restoration activity (columns M:W) and on activity volumes (columns AB:AL) to capture a count of the number of faults. For non-linear asset categories the volume metric reflects a simple count of a fault (represented by “Each”, “per site”, “Per set”). For linear assets, the volume metric reflects that a fault is likely to reflect a single point of failure, which may require replacement of a length of cable (represented by “km”). We understand from TOs’ that the cost of certain fault activities are not individually discernible but that volumetric information is available and can be recorded at a more granular level. Volumetric information should therefore be reported against the specific asset (or the lowest level practical based on the asset possibilities list).In terms of cost reporting, we expect this to be against the same asset level that volumes are presented (if directly available from internal systems/contractual structure), Where not available, we expect costs to be reported * against a pre-agreed aggregation point, if available.
* against the lowest available asset level (if a robust application method can be applied)
* for bay assets only, to be recorded against the highest value asset in that bay (in accordance with the glossary instructions).

The narrative will provide any additional insight into how to interpret the volumes against each asset and to improve our line of sight and understanding of a TOs' fault policy more generally. Additional input rows are included below the gross cost line to allow TO’s to enter the capex/opex split for these costs. This entry will be used to inform the PCFM calculationsAdditional input rows are included to allow TO’s to enter the costs split across baseline/reopener/uncertainty mechanism. This information will be used to inform the relevant PCFM calculations. |
| Definitions for use in this worksheet |
| Fault | A fault is an event which causes plant to be automatically disconnected from the transmission system for investigation and further action if required. |

**C2.21: Inspections**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | The purpose of this table is to * provide data on number of inspections carried out and associated costs by asset category and
* establish a better understanding of each TO’s inspection practices on both electrical & civil assets to ensure a reasonable level of intelligence on network assets is gathered.
 |
| Guidance on completing this worksheet | Inspection costs exclude the cost of any asset interventions carried out in response to the inspection results. The volume inspected is for Licensees to report the quantity of individual assets or sites that have been inspected, irrespective of the number of times that the same asset has been inspected. For example, if an individual asset has been inspected four times during the reporting year, a count of one inspection would be recordedFor Inspections reporting, Licensees should report on costs (columns M:W) on activity volumes (columns AB:AL) as a result of the inspection programme performed. Note: Note that the asset possibilities list in this worksheet is different to the list applicable elsewhere in the reporting pack. The list was developed and agreed in discussion with the ETOs. We understand from TOs’ that the cost of certain inspections (bay inspection, for example) is not individually discernible but that volume reporting at an asset level is available and can be recorded at a more granular level. Volumetric information should therefore be reported against the specific asset (or the lowest level practical based on the asset possibilities list). Cost (and volume) reporting is required against the following agreed aggregation points:1. Assets:
* Sites at 132kV (each)
* Sites at 275kV (each)
* Sites at 400kV (each)
* HVDC sites (each)
* Overhead lines (km)
* Submarine cable (km)
* Circuit cable (km)
1. Civil sites (each)

Volume reporting is required across the remaining asset points, where applicable. The narrative will provide any additional insight into how to interpret the volumes against each asset and to improve our line of sight and understanding of a TOs' inspection policy more generally. Additional input rows are included below the gross cost line to allow TO’s to enter the capex/opex split for these costs. This entry will be used to inform the PCFM calculationsAdditional input rows are included to allow TO’s to enter the costs split across baseline/reopener/uncertainty mechanism. This information will be used to inform the relevant PCFM calculations. |
| Definitions for use in this worksheet |
| Inspections | The standardised and systematic collection of information from as found asset condition indicators which can be used in a standalone or aggregated format to provide asset data sufficient to determine or justify any intervention or deferral of standard maintenance, refurbishment or replacement works a TO may elect. |

**C2.22: Maintenance**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | The purpose of this table is to * provide data on number of routine maintenance activities and associated costs by asset category.
* establish a better understanding of each TO’s maintenance practices on both electrical & civil assets to ensure a reasonable level of intelligence on network assets is gathered.
 |
| Guidance on completing this worksheet | Maintenance activities - definitions are available in the Transmission Glossary.The volume data to be reported shall represent the activity volume where Maintenance activities have been undertaken. Where Maintenance activities are undertaken as part of other works that are classified as Refurbishment, then the associated costs shall be recorded on the Scheme data worksheet.For Maintenance reporting, Licensees should report on costs (columns M:W) on activity volumes (columns AB:AL) as a result of the programme or works performed. Note: Note that the asset possibilities list in this worksheet is different to the list applicable elsewhere in the reporting pack. The list was developed and agreed in discussion with the ETOs. We understand from TOs’ that the cost of certain maintenance activities are not individually discernible, but that volumetric information is available and can be recorded at a more granular level. Volumetric information should therefore be reported against the specific asset (or the lowest level practical based on the asset possibilities list).In terms of cost reporting, we expect this to be against the same asset level that volumes are presented (if directly available from internal systems/contractual structure), Where not available, we expect costs to be reported * against a pre-agreed aggregation point, if available.
* against the lowest available asset level (if a robust application method can be applied)
* for bay assets only, to be recorded against the highest value asset in that bay (in accordance with the glossary instructions).

The narrative will provide any additional insight into how to interpret the volumes against each asset and to improve our line of sight and understanding of a TOs' R&M policy more generally. Additional input rows are included below the gross cost line to allow TO’s to enter the capex/opex split for these costs. This entry will be used to inform the PCFM calculationsAdditional input rows are included to allow TO’s to enter the costs split across baseline/reopener/uncertainty mechanism. This information will be used to inform the relevant PCFM calculations. |
| Definitions for use in this worksheet  |
| Protection Communication Circuits – Repair & Maintenance | Protection Communication Circuits are used within power system protection schemes where signalling and information exchange is required between protection equipment at separate remote sites to allow high speed clearance of faults. The activity 'Protection Communication Circuits – Repair & Maintenance' refers to the repair and maintenance of existing protection communication circuits and all necessary work associated with the activity.  |

**C2.22a Repairs**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | The purpose of this table is to * provide data on number non-routine repair interventions and associated costs by asset category.
* establish a better understanding of each TO’s repair practices on both electrical & civil assets to ensure a reasonable level of intelligence on network assets is gathered.
 |
| Guidance on completing this worksheet | Repair activities - definitions are available in the Transmission Glossary.The volume data to be reported shall represent the activity volume where Repair activities have been undertaken. Where Repair activities are undertaken as part of other works that are classified as Refurbishment, then the associated costs shall be recorded on the Scheme data worksheet.For Repairs reporting, Licensees should report on costs (columns M:W) on activity volumes (columns AB:AL) as a result of the programme or works performed. Note: Note that the asset possibilities list in this worksheet is different to the list applicable elsewhere in the reporting pack. The list was developed and agreed in discussion with the ETOs. We understand from TOs’ that the cost of certain repair activities are not individually discernible but that volumetric information is available and can be recorded at a more granular level. Volumetric information should therefore be reported against the specific asset (or the lowest level practical based on the asset possibilities list).In terms of cost reporting, we expect this to be against the same asset level that volumes are presented (if directly available from internal systems/contractual structure), Where not available, we expect costs to be reported * against a pre-agreed aggregation point, if available.
* against the lowest available asset level (if a robust application method can be applied)
* for bay assets only, to be recorded against the highest value asset in that bay (in accordance with the glossary instructions).

The narrative will provide any additional insight into how to interpret the volumes against each asset and to improve our line of sight and understanding of a TOs' R&M policy more generally. Additional input rows are included below the gross cost line to allow TO’s to enter the capex/opex split for these costs. This entry will be used to inform the PCFM calculationsAdditional input rows are included to allow TO’s to enter the costs split across baseline/reopener/uncertainty mechanism. This information will be used to inform the relevant PCFM calculations. |
| Definitions for use in this worksheet  |
| Protection Communication Circuits – Repair & Maintenance | Protection Communication Circuits are used within power system protection schemes where signalling and information exchange is required between protection equipment at separate remote sites to allow high speed clearance of faults. The activity 'Protection Communication Circuits – Repair & Maintenance' refers to the repair and maintenance of existing protection communication circuits and all necessary work associated with the activity.  |

**C2.23: Vegetation management**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | The purpose of this table is to provide data on the volume of vegetation management activities by type of activity and associated cost of those activities.  |
| Guidance on completing this worksheet | Vegetation management: The activity of physically felling or trimming vegetation in order to ensure the reliable performance of transmission assets. These are the costs and volumes directly related to tree cutting and facilitation of cutting activities. This includes the workload involved with the physical felling or trimming of vegetation away from network assets and also associated costs for activities such as outages, traffic management, obtaining consents and Network Rail costs, compliance with the requirements of ENATS 43-8 (horizontal and vertical clearances) and ETR 132 (network resilience) of the ESQCR 2006.For Veg Mgt reporting, Licensees should report on costs (columns M: W) on activity volumes (columns AB:AL). The data must be reported by the applicable voltage category and categorisation listed within the table.Rows 27-34 (inclusive): Each licensee is required to separately report the cumulative activity of physically felling or trimming vegetation included as part of a management contract and/or to maintain minimum safety clearances for overhead network length (km) for the following voltages (where applicable): 66kV, 132kV, 275kV and 400kV.Row 38: Each licensee is required to separately report the cumulative activity of physically felling or trimming vegetation included as part of a management contract and/or to maintain minimum safety clearances for non-OHL activity. This includes cutting and management activity required near non-linear assets (e.g. substations, compounds, cable routes and cable link boxes). The volume is required to be reported on an activity count (#) for vegetation cleared around non-linear assets.This worksheet contains a data entry for “Woodland Management” (row 39). This is intended to capture tree felling and tree planting and maintenance measures (potentially at different sites) associated with adhering to planning requirements and wider environmental policy objectives.Additional input rows are included below the gross cost line to allow TO’s to enter the capex/opex split for these costs. This entry will be used to inform the PCFM calculationsAdditional input rows are included to allow TO’s to enter the costs split across baseline/reopener/uncertainty mechanism. This information will be used to inform the relevant PCFM calculations. |

**C2.24: Legal & safety**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | The purpose of this table is to provide data on the Legal and Safety activities.  |
| Guidance on completing this worksheet | Categories for which costs and volumes to be reported in this this worksheet (rows 10 to 19):* Site security by number of substations (split by voltage)
* Asbestos management – surveys & signage by number of sites
* Asbestos management – containment or removal by number of sites
* Safety climbing fixtures - for supports or plant items
* Fire protection by number of substations
* Earthing upgrade by number of locations
* Cable Pits by number of sites
* Shallow Cables.
* Other (free entry in rows 23 to 30)
* Fluvial and Coastal (rows 35 to 59)
	+ flooding mitigation schemes
	+ flood site surveys
* Pluvial (rows 61 to 77)
	+ flooding mitigation schemes
	+ flood site surveys

Licensees should report on costs (columns N:X) on activity volumes (columns AC:AM). The data must be reported by the applicable voltage category and categorisation listed within the table.Cost information (columns N to X) is also required for substation electricity* Units Consumed (#MWh)
* Cost per unit (p/MWh)
* Substation Electricity Costs (£m)

Additional input rows are included below the gross cost line to allow TO’s to enter the capex/opex split for these costs. This entry will be used to inform the PCFM calculationsAdditional input rows are included to allow TO’s to enter the costs split across baseline/reopener/uncertainty mechanism. This information will be used to inform the relevant PCFM calculations. |

**C2.25:** **Operational Protection Measures & Op IT Capex**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | Not in use. Costs to be reported against D4.3 (CAI) |
| Guidance on completing this worksheet |  |

**C2.26: Visual amenity (EPI)**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | The purpose of this table is to provide costs on the volume and associated cost of work to mitigate the visual impact of pre-existing infrastructure.  |
| Guidance on completing this worksheet | Licensees are required to report project data on proposed projects under Special Condition 3.10 of the T2 Licence. Column A requires licensees to manually enter the relevant project name for each applicable scheme. Column B requires a short description of the project (manual entry). Column C requires entry of the approval date for the projectColumn D requires entry of the Delivery date.Columns M-W requires entry of annual Gross cost information across T2 period and beyond. Column Z requires entry of pre-T2 Gross Cost information per project. Additional input rows are included below the gross cost line to allow TO’s to enter the capex/opex split for these costs. This entry will be used to inform the PCFM calculationsAdditional input rows are included to allow TO’s to enter the costs split across baseline/reopener/uncertainty mechanism. This information will be used to inform the relevant PCFM calculations. |

**C2.27: Visual amenity (Non-Technical Mitigation Projects, NTMP)**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | The purpose of this table is to provide costs on the volume and associated cost of work for Non-Technical Mitigation Projects. |
| Guidance on completing this worksheet | Licensees are required to report project data on proposed projects under Special Condition 5.4 of the T2 Licence.  |

**C2.28 Faults & Failures**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | The purpose of this table is to provide historical and forecast data on the number of faults & failures by asset category. |
| Guidance on completing this worksheet | Licensees are required to report on:* Total Weather-related Trip and DAR Faults (rows 43 to 50)
* Faults that required an outage of more than 3 hours (rows 54 to 61)
* Total faults (rows 65 and 66)
* Total failures (rows 70 and 71)
* The causes of failures and faults consistent with codes from the National Faults and Interruption Reporting Scheme (NaFIRS) – see rows 80 to 148 for Trips and rows 156 to 224 for Failures – and the asset classification provided within the worksheet.

The Licensee should report any faults or failures that are currently under investigation, or the cause is unknown, in the ‘Unknown’ category. Within the commentary the Licensee should state how many of these are currently under investigation and when it expects the investigation to be complete. Any faults or failures that the cause is known but is not on the list provided must be explained in the commentary. When reporting fault and failures caused by airborne deposits licensees should focus on the specific cause of the fault or failure – did the industrial pollution lead to corrosion of conductors which subsequently failed (in which case use code 15) or did the depositing of material on the conductors lead to arcing or similar or was it the moisture content of the industrial pollution.Only faults and failures of cardinal assets are required to be broken down by asset type and cause. For sub-cardinal assets licensees are required to report only the total numbers of faults and failures for ‘measurement transformers’ and for ‘other sub-cardinal assets’. Faults and failures are expected to be reported on a financial year basis. Summary information on any events associated with significant disruption, loss of supply or customer disconnection greater than 3 minutes (‘Category a’) must provide detail on the duration of the event and magnitude of the associated loss.Summary information on significant condition related faults affecting a family or a number of lead or non-lead asset category that have occurred (‘Category b’) must provide a description of the fault, its cause, the actions that will be taken e.g. maintenance, replacement etc. and detail on the duration of the event and magnitude of the associated loss (where applicable). |
| Definitions for use in this the worksheet | **Faults**A fault is an event which causes plant to be automatically disconnected from the transmission system for investigation and further action if required.**Failures**A power transformer failure is defined as an event that requires the unit to be taken off the plinth either for replacement or factory repair. A reactor failure is defined as an event that requires the unit to be taken off the plinth either for replacement or factory repair. Failure of circuit breakers is defined as an event that requires the replacement of the breaker, or repair equivalent to the replacement of at least one head. An overhead line is considered to have failed if a conductor drops.Cable failures are events where a cable section, joint or sealing end has failed in service requiring its replacement. Third party causes are not counted.A protection or control failure is defined as an event that requires the bay (and associated primary equipment) to be removed from service to undertake repair which entails the replacement of a complete device (containing a protection or control function) without which the bay could not remain service on a continuous basis.Compensation failure is defined as an event that requires replacement of fault-damaged components other than those normally replaced under routine maintenance. A substation auxiliary’s failure is defined as an event that requires the replacement of the entire unit.**Cardinal assets**Transformers, reactors, circuit breakers, overhead lines, underground cables, protection & control equipment, compensation (static VAR compensators & mechanically switched capacitors), and substation auxiliaries. **Sub-cardinal assets** Any network assets other than cardinal assets.  |

**C2.29: Net Zero**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | This table records expenditure against two Net Zero mechanisms: * the Net Zero and Re-opener Development Fund use it or lose it (UIOLI) allowance under Special Condition 3.5 of the T2 Licence. The purpose of this UIOLI is to enable Licensees to fund small Net Zero facilitation projects, and also to allow early development work on projects that network companies intend to bring forward at a later stage.
* Net zero carbon Capital Construction UIOLI allowance under Special Condition 5.6 of the T2 Licence. The purpose of this UIOLI is to enable Licensees to fund the construction of projects that network companies intend to bring forward at a later stage.
 |
| Guidance on completing this worksheet | The table rows can be expanded as required by the licensee to accommodate project reporting.**Special Condition 3.5** Insert project name (Column A).“Early development work” (Column B) is pre-populated (in accordance with Special Condition 3.5.8 (a) in the Electricity Transmission Licence). This identifies projects that network companies may need to undertake early development work on prior to submitting a full funding request through a re-opener, but which is not funded elsewhere in the price control. For narrative reference (Column C) – Provide reference to the narrative where a brief description of the project and when outputs are expected to be realised is provided.Unique ID (Column E) – provide each project with a unique identification marker. Cost per annum (Columns H to N) – This should be stated on net cost basis (£m, 18/19 prices). **Special Condition 5.6** Insert project name (Column A).For narrative reference (Column C) – Provide reference to the narrative where a brief description of the project and when outputs are expected to be realised is provided.Unique ID (Column E) – provide each project with a unique identification marker. Cost per annum (Columns H to N) – This should be stated on net cost basis (£m, 18/19 prices). More information: [Net Zero Re-opener Development UIOLI Allowance Governance Document (see: ofgem.gov.uk)](https://www.ofgem.gov.uk/sites/default/files/docs/2021/03/net_zero_and_re-opener_development_uioli_allowance_governance_document_30_march_2021.pdf) On an annual basis, the licensee must provide information through its supporting narrative on the level of baseline emissions residual emissions to inform Ofgem of the reduction in emissions per project and per year in each of the five years of the price control period. The licensee must submit to the Authority a net zero carbon Capital Construction evaluation report by 31 July 2026. Additional input rows are included below the gross cost line to allow TO’s to enter the capex/opex split for these costs. This entry will be used to inform the PCFM calculationsAdditional input rows are included to allow TO’s to enter the costs split across baseline/reopener/uncertainty mechanism. This information will be used to inform the relevant PCFM calculations. |

**D4.1: Non-operational capital expenditure**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | The purpose of this table is to report expenditure on non-operational capital expenditure. We will use this information to assess the performance of each licensee over the price control period.  |
| Guidance on completing this worksheet | Capital expenditure on new and replacement Non-Operational Assets which are not system assets.INCLUDES:IT & telecoms (non-operational)Non-Operational PropertyNon-operational vehiclesSmall tools, equipment, plant and machinery.Definitions for each of these can be found in this worksheet.For IT & Telecoms, the table requires the licensee to insert the name of specific IT systems / projects where the total expenditure is £1m or more. Full project details, not just expenditure in the year, should be entered as indicated by the column headings. Expenditure on all other IT assets less than £1m should be entered in total. Where the total spent on a project is more than £1m but the expenditure within a particular year is less than £1m, this should be shown as an individual project and not included in the IT expenditure <£1m category.This table specifically excludes funding associated with the provision of Ministry of Defence Armed Guards. See definition for ‘security (armed guards)’.In the reporting breakdown of “IT System/Projects > £1m”, each licensee is required to assign a unique ID against each work programme (to be entered in column C) in both the expenditure and allowance tabs. Column D enables each Licensee to identify the applicable mechanism (e.g. Baseline, UM, Re-opener). The information in this table will allow Ofgem to have a definitive list of the exact projects that spend has been incurred against to date (and an explicit RIIO-2 allowance exists), the current expectation of the spend to be incurred across the remaining five-year price control period (and an explicit RIIO-2 allowance exists), and work programmes where there is activity (or expected activity across the RIIO-2 period) but no explicit allowance exist. This table will be updated as part of annual reporting so as to allow Ofgem to track what has been taken out, added or moved.  |
| Definitions for use in this worksheet |
| IT & Telecoms | Expenditure on new and replacement IT assets which are not system assets. These include Hardware and Infrastructure and Application Software Development. INCLUDES:Purchase of IT equipment that is either located away from network assets or does not directly relate to the control of those assets.Purchase and installation of new hardware systems (e.g. servers, firewalls, switches & ISDXs).Purchase of equipment for the physical IT environment (i.e. air conditioning, fire and flood prevention and detection), where these can be differentiated from Property costs.Purchase of Client equipment (e.g. desktops, laptops, monitors, printers, plotters).Purchase of Telecoms equipment (e.g. staff mobile devices) where not used exclusively in the real time management of network assetsHardware that is purchased as part of an IT software project.IT software upgrade costs: New and upgraded software licences where the benefit is received over more than one year. Cost of software development staff employed to undertake development work during the reporting year.Purchase and installation of new application software and their license fees.EXCLUDES:Ordnance survey data / licences (include under System Mapping).Any of the property costs associated with IT & Telecoms (include under Property Management), except where the cost of specific IT environmental control systems can be distinguished from other property costs. |
| Property (Non-Operational) | Expenditure on new and replacement property assets which are not system or operational assets.INCLUDES:Premises used by people (e.g. stores, depots and offices) which are not operational premises (e.g. substations)Office equipment. |
| Vehicles & Transport (Non-Operational) | Expenditure on new and replacement wheeled vehicles and generators which are not system assets but are utilised by the TO or any other Related Party for the purposes of providing services to the TO.INCLUDES:Commercial vehicle fleetMobile plant for example:* + Mobile compressors
	+ Cranes
	+ Excavators
	+ Dumpers
	+ Trailers
	+ Drum trailers
	+ Wheel mounted winches
	+ Hiab vehicles and accessories
	+ All-terrain vehicles
	+ Water pumping vehicles

Generators, which include wheel mounted and non-wheel mounted generators used to power the network and small portable generators, used to power tools.The labour costs of fuelling unfuelled generators.EXCLUDES:company cars (except where included under the labour cost)Fork lifts (include in stores)Fuel costs for wheeled vehicles and generators (report in Vehicles and Transport (CAI)).  |
| Small Tools, Equipment, Plant and Machinery (Non-Operational)  | Small tools, equipment, plant and machinery which are used to work on, assist work on or test system assets. ( These items are not considered to be permanently connected to the network). Typically INCLUDES:Fault location equipment - re-energising, e.g.* + Bidoyng, Modular Rezap, Faultmaster Rezap)

Fault location equipment - non re-energising, e.g.* + Cable Sniffers
	+ OHL Pathfinder
	+ Cable fault locator (Kehui  , EZ Thump, Meggar TDR, Riser Bond TDR, Bicotest TDR, BAUR Test Vans, SEBA Test Vans, Megger EZ Thump 12KV, Megger Test Van) (vans are reported under Vehicles and Transport (Non-Operational) but equipment within vehicles is within STEPM
	+ Delta V (still in use but no longer manufactured)

Hand and power toolsInstruments and testing equipment, e.g. * + Partial discharge monitors
	+ Voltage recorder
	+ Load monitors

Power quality monitoring equipmentLadders (used at substations and transported on vehicles)Lifting and handling gearStreet Works signing and guarding equipmentNon-wheel- mounted winches and winching equipment Cable drum equipment, e.g. drum standsWorkshop equipment, e.g. pedestal drills, grinding wheels and reciprocating sawsMisc. Equipment, e.g. cable spiking guns, pumps, gas hoses and fittings Inspection costs for recertification and recalibration associated with STEPM.EXCLUDES:Harness, climbing belts and fall arrest equipment (include as labour cost under the relevant activity of that employee).Generators (include capital costs in Vehicles and Transport (Non-Operational) and fuel costs in Vehicles and Transport (CAI)).Additional input rows are included to allow TO’s to enter the capex/opex split for the cost categories. This entry will be used to inform the PCFM calculationsAdditional input rows are included to allow TO’s to enter the costs split across baseline/reopener/uncertainty mechanism. This information will be used to inform the relevant PCFM calculations. |

**4.2a Physical security capex**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | This sheet is to record capex costs and volumes associated with the Government’s Physical Security Upgrade Programme (PSUP), for new sites and to replace IT and Technical assets during the price control. Note that this sheet is specifically for PSUP-related physical security costs and not for any other ‘BAU’ physical resilience work. |
| Instructions for Completion | **New sites**Licensees to enter costs associated with New Site projects. ‘Project Ref’ is the project identifier reference that corresponds with the Final Determinations documents.‘Start date’ is when pre-construction work on each project begins.‘End date’ is when construction on the project has finished.Columns AC-AM – record annual costs associated with new sites.TOs are to separately record costs for projects that were set as PCDs at Final Determinations (baseline) and projects set following a re-opener (Uncertainty Mechanism)**IT assets**Licensees are to enter costs associated with replacing IT assets installed as part of the PSUP programme. TOs are to separately record cost (rows 81-89) and workload (rows 93-101) data for each IT asset type, as per the asset category listed in Column I.Any costs incurred replacing IT assets not listed in Column I are to be reported in row 88 (‘other’) and justified in the RRP narrative submission.**Technical assets**TOs are to enter costs associated with replacing Technical assets installed as part of the PSUP programme. TOs are to separately record cost (rows 108-113) and workload (rows 117-122) data for each IT asset type, as per the asset category listed in Column I.Any costs incurred replacing Technical assets not listed in Column I are to be reported in row 112 (‘other’) and justified in the RRP narrative submission. |

**4.2b Physical security opex**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | This sheet is to record opex costs and volumes associated with the Government’s Physical Security Upgrade Programme (PSUP). |
| Instructions for Completion | Licensees are to report their annual PSUP opex expenditure for both owned (row 13) and shared (row 21) sites. These costs should include any operational costs, including labour, associated with the PSUP programme.In the ‘Workload’ section, Licensees are to report the number of PSUP sites, both owned (row 35) and shared (row 43), that have incurred PSUP opex costs in each year (columns AC-AM). |

**D4.3: Closely Associated Indirects (CAI)**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | The purpose of this table is to collect cost information on the Closely Associated Indirect Activities listed below, which in most cases support work being physically carried out on network infrastructure assets, that could not, on their own, be classed as a direct network activity. The recording and reporting of indirect costs will include two elements:1. those performed by external 3rd parties i.e. contractors engaged to perform “very” Closely Associated Indirect activities on behalf of the ETO and/or agents engaged to provide distinct CAI services under instruction from an ETO.
2. Those CAI activities performed and discharged from an ETOs own internal resource framework e.g. internal project management, design, engineering or clerical staff.

In determining the separation and reporting of CAI costs incurred by ETO staff from that incurred by contractor’s a delineation is required in the types of CAI activities undertaken while physically delivering Transmission investments; applying the nomenclature “very” CAI and “other” CAI, and for this to inform the basis of indirect cost reporting from this point on.  1. ETOs must adhere to and be compliant with the RIGs requirements regarding the recording of all indirect costs. For the current ET2 RIGs, applicable for 23/24 reporting and beyond (i.e. forecast), this necessitates the delineation of direct and indirects (i.e. information taken directly from an internal Contractor Management System and applied to the RRP asset possibility construct and/or subject to an allocation process) as per the definitions irrespective of the party performing this activity. Cost and activity for the reporting years 21/22 & 22/23 may be provided on the basis used for the previous submissions. These prior years can be replicated from the historical RRP and are not required to be restated using the definitional clarification provided as part of the 23/24 RIGs decision.
2. The types of CAI activities undertaken by all parties (i.e. ETO’s and contractors) while physically delivering infrastructure investments will reside within the “very” Closely Associated Indirects include:
* Network Design and Engineering, Project Mgt.

These activities, irrespective of the delivery party, will be treated as indirects (subject to any caveats/derogations noted under the “very” CAI definitions listed below). 1. The types of activity that will reside within the “other” Closely Associated Indirects include the remaining CAI sub-activities as set out in the RIGs definitions include:​
* Engineering Mgt & Clerical Support, Operational IT & Telecoms, Network Policy, Network Planning, System Mapping, Stores & Logistics, Operational Training, Vehicles and Transport, Market Facilitation, Health & Safety ​

These activities, where performed by the ETO, will be recorded as indirects but would not need to be costed and separately identified if performed by 3rd parties, where undertaken as part of their wider duties and/or delivery of direct activities on behalf of the ETO. ​For example, Operational training costs incurred by a 3rd party for the contractors’ own staff (even when required to perform work for the ETO) would be deemed a legitimate contractor overhead and not reported as an indirect. ​However, where 3rd parties have been engaged to specifically perform “other” Closely Associated Indirect activities which have defined outputs and deliverables and are billable to the ETO e.g. Network Planning, Network Policy, System Mapping, Operational Training etc., our expectation is that costs incurred in performing these activities will also be recorded as indirects.  For example, ​where an ETO engages a 3rd party for the specific purpose of delivering operational training, this would be treated as an indirect​.“Other” CAI Summary: * Other CAI incurred by the ETO itself to be recorded as Indirects and separately identified in reporting.
* Other CAI incurred by contractors:
	1. Where the activity is specifically carried out on behalf of the ETO, to be recorded as Indirect Activity Costs and separately identified in reporting (i.e. same as for ETO incurred costs).
	2. Where carried out to enable contractor to fulfil its contractual obligations to the ETO (e.g. contractor training its own staff), to be treated as contractor over-head and cost absorbed to the relevant Direct Activity being delivered by the contractor.

**Closely Associated Indirects**Collectively includes the activities of:* Operational IT & Telecoms,
* Network Design and Engineering,
* Network Policy,
* Network Planning,
* Project Management,
* Engineering Management and Clerical Support,
* System Mapping,
* Stores & Logistics,
* Operational Training,
* Vehicles and Transport,
* Market Facilitation
* Health & Safety

IT & Telecoms Memo Table* Internal Support Costs
* Internal Hosting & Infrastructure costs
* 3rd Party License costs
* 3rd Party Support Costs
* 3rd Party Hosting & Infrastructure costs
* 3rd Party Professional Services
* Other
 |
| Guidance on completing this worksheet | Costs associated with each of the indirect activities listed definitions can be found below) should be reported in this table.Note that operational engineers working on planning and project mobilisation, preparing and planning associated with protection settings, administration of outages, contract specification and liaising with contractors and customers are considered Indirect Activities.EXCLUDES:* site surveys and non-site based costs associated with flooding (in Direct Activities)

Rows 43 to 54 (internal costs). Please populate the yellow input cells for each category of cost for the services/activities provided by internal/in-house functions.Rows 59 to 70 (external costs). Please populate the yellow input cells for each category of cost for the services/activities procured from a third party.Rows 77 to 83 (IT & Telecoms memo table). Please populate the yellow input cells for each category of costs associated with IT and telecoms activity. Additional input rows are included to allow TO’s to enter the capex/opex split for the CAI cost categories. This entry will be used to inform the PCFM calculationsAdditional input rows are included to allow TO’s to enter the CAI cost categories split across baseline/reopener/uncertainty mechanism. This information will be used to inform the relevant PCFM calculations.An additional data entry row (row 106) has been added to enable licensees to separately report and identify CAI related to the advancement of activities associated with ASTI projects with agreed funding. |
| Definitions for use in this worksheet |
|  |  |
| Operational IT and Telecoms | IT equipment which is used exclusively in the real time management of network assets, but which does not form part of those network assets |
| Network Design and Engineering | All processes and tasks involved in the:* Strategic planning of the network at all voltages.
* Detailed engineering design of transmission assets and changes to the network at all voltages (“functional design”).

Includes:* Strategic planning of the network – Relates to the tasks associated with the network in totality rather than individual projects. Includes:
	+ Maintenance of network design data models.
	+ Development of long term development statements.
	+ Network wide demand forecasting.
	+ Network Modelling associated with determination of Use of System charges.
	+ Strategic planning of the network in respect of new connections, load related network reinforcement and all aspects of the “non-load new and replacement asset installation” activity.
* Transmission Asset investments – Relates to the tasks associated with the project specific network design and engineering of transmission asset projects and enquiries.
* Other Network Investment – Relates to the tasks associated with the project specific network design and engineering of all other aspects of Network Investment projects.

The tasks associated with transmission asset projects & enquiries & enquiries and all other aspects of Network Investment projects including:* Load forecasting.
* Network modelling.
* Network and engineering design of the network to accommodate new connections, specific changes in either demand or distributed generation and all aspects of the “non-load new and replacement asset installation” activity.
* Provision of connection charge quotations.
* Approval of network designs undertaken by other parties, such as independent connection providers and related parties.
* The surveying of a specific overhead line in order to identify the detailed work required to address an identified problem/issue.
* The determination of land profiles to select the routes and pole sizes for new or replacement lines.
* The surveying associated with new and existing operational sites in order to identify detailed work requirements.
* Network performance monitoring and evaluation of impact of salient policies.
* Planning new projects up to the point of authorisation.
* System Studies for Compliance – Thermal, Stability, Voltage, Fault.
* System Studies for Network Development – Includes providing options for ESO/FSO analysis and ETYS related purposes.

Please see Appendix 3 for additional tables which further clarify the treatment of design activity, providing specific examples of our delineation between manufacturing configuration design (direct) and functional design (indirect) and a table which sets specific types of design activity against 5 stages of design and their regulatory cost treatment.  |
| Network Policy (incl. R&D) | All processes and tasks involved in the development and review of environmental, technical and engineering policies, and including research and development.Includes:* Evaluating the impact of changes in relevant legislation.
* Development, regular review and updating of asset risk management policies, such as:
	+ asset maintenance policy
	+ asset inspection policy
	+ technical standards and specifications team
	+ plant, equipment and component specifications
	+ vegetation management policy
	+ asset replacement policy
	+ network design and protection policy.
* Analysis and interpretation of asset condition data.
* Development, regular review and updating of environmental policy.
* Research and development (including Fees paid to research and development organisations).

Excludes:* Any of the IT or Property costs associated with Network Policy.
* Excludes IFI related research and development.
 |
| Network Planning | This covers the following activities:* Asset assurance and management of the asset registers.
* Business expert input into IT system development.
* Performance monitoring and improvement.
* Co-ordination and completion of benchmarking activities.
* Control Centre - Operational management and control of the network
	+ Outage planning and management
	+ Real time control and monitoring
	+ Dispatch
	+ Major incidents and emergency planning
 |
| Project Management | Project Management from authorisation through to preparation. (NB: only project management costs for the applicable asset/output may be treated as direct upon construction commencing. Where other assets/outputs are pre-construction, the project management costs pertaining to these deliverables will be treated as indirect as per the definitions below) Includes:* Overall responsibility for major project delivery.
* Determining resource requirements.
* Planning and requisitioning materials & equipment.
* Work and resource programming.
* Risk assessments of the overall project content.
* Preparation of work instructions
* Issue of work to own staff and contractors
* On-site supervision and technical guidance.
* Quality checks on work undertaken.
* Organising network access and co-ordination of outages.
* Organising and supervising (where appropriate) the undertaking of commission tests.
* Issuing completion certificates.
* Arranging energisation of assets.
* Cost control.

For all project management activities undertaken by either the ETO or a 3rd party please see appendix 3 for a project management definitions table which sets out the various stages of project management; their cost treatment (i.e. direct or indirect) and examples of the various deliverables that would be undertaken in each stage by the relevant party.Excludes:* Any IT or property costs associated with Project Management.
* Any employees managing other indirect activities.

Any design work relating to new connections new or replacement assets |
| Engineering Management and Clerical Support | Engineering Management & Clerical SupportThe office-based activities of engineering and clerical support staff (i.e. depot clerical staff, managers, work planners, etc) managing or assisting employees undertaking direct activities and Wayleave Administration.Includes:* Strategic Network Plan Development and implementation:
	+ Managing the delivery organisational structure to achieve the long and short term company goals.
	+ Agreeing resource requirements (own employees, contractors, finances and outcome targets).
	+ Managing the allocation and distribution of delivery resources to achieve plans.
	+ Managing key corporate policies and standards for investment/ service delivery.
	+ Leading the management team for service delivery.
	+ Monitoring the achievement of plans.
	+ Overseeing the management of teams with responsibility for service delivery.
* Identification and implementation of improvement initiatives:
	+ Redesign of business processes
* Work Planning, Budgeting, Allocation and Control:
	+ Monitoring delivery of major works
	+ Monitoring fault activity.
	+ Monitoring budgets of Inspections and maintenance, faults and major works.
	+ Setting and agreeing performance targets, monitoring actual performance.
	+ Reporting and analysis of Key Performance Indicators (“KPIs”).
* Line management of staff undertaking direct activity work:
	+ Standards of performance, disciplinary and sickness absence procedures.
	+ Monitoring absence, back-to-work-interviews and welfare visits.
	+ Establishing day to day work plans.
	+ Managing the allocation tasks to achieve the delivery of operational and capital plans.
	+ Scheduling and monitoring the achievement of work jobs.
	+ Managing budget.
	+ Ensuring work activity adheres to company technical and health & safety requirements.
* Operational Performance Management:
	+ Health and Safety checks on work and personnel
	+ Compliance checks on staff and contractors work carried out
	+ Site safety inspections
	+ Providing safety advise to cable contractors and others (to help prevent damage)
	+ Investigation, report and corrective action following an accident or environmental incident
	+ Authorisation of team members for operational and non-operational duties
	+ Operational safety checks
* Providing safety advice to persons working in proximity to network assets.
* Wayleave Payments:
	+ Annual payments made in advance to the owner and/or occupier to cover the financial impact of having equipment on their land.
* Wayleaves and Easements/Servitudes: Admin Costs:
	+ Obtaining, managing and administering Wayleave, substation rents, easements and servitudes.
	+ Negotiating new Wayleaves.
	+ Managing Wayleave terminations.
	+ Administration of existing Wayleaves including the preparation of payments.
	+ Negotiation conversions from Wayleave arrangements to permanent easement/ Servitudes, substation rents and Wayleave payments.
* Clerical Support:
	+ Updating plant and overhead line support asset inventory databases following asset commissioning and decommissioning.
	+ Updating plant and overhead line support asset condition data following inspection and maintenance.
	+ Dealing with verbal and written enquires for new connections, or faults.
	+ Programming of minor works.
	+ Issuing of work instructions.
	+ Preparation of quotations for minor works.
	+ Sending quotations to customers.
	+ Customer liaison.
	+ Liaising with contractors.
	+ Preparing plans, schematics, notices, materials schedules and work instructions.
	+ Environmental notifications.
	+ Clerical support for staff answering verbal and written enquiries regarding faults, liaising with contractors and other stakeholders.

Excludes: * Any Employees managing indirect activities (e.g. logistics manager) (include under the relevant indirect activity heading).
* Responding to NRSWA notices sent to the Company by other parties (include under Systems Mapping).
* Maintenance of mobile generation plant (include under Vehicles and Transport).
* Any employees engaged in maintaining the financial asset register.
* Idle, down and sick time of direct field staff (include with their normal direct time in the appropriate direct activity).
* IT or property costs associated with Engineering Management & Clerical Support.
* Apprentices undertaking classroom training (include under Operational training and workforce renewal)
* Time of employees attending training (include as labour costs under the relevant activity).
* Training courses and training centre costs for staff relating to working on system assets (include under operational training and workforce renewal).
* Engineering and health and safety training, courses for staff involved in indirect activities (include under operational training and workforce renewal).
* Updating of underground cable and overhead line asset data bases (include under System Mapping).
* Updating financial asset register (Finance & regulation).
* Compliance checks on staff and contractors’ work carried out.
* Site safety inspections.
* Investigation, report and corrective action following an accident or environmental incident.
* Authorisation of team members for operational and non-operational duties.
* Operational field safety checks.
* Time of employees attending training (include as labour cost under the relevant activity of that employee).
* Purchase of equipment (include under non-operational capex).
* Training, courses and training centre costs for staff relating to working on system assets (include under operational training and workforce renewal).
 |
| Protection Communication Circuits – Replacement | Communication circuits used within power system protection schemes where signalling and information exchange is required between protection equipment at separate remote sites to allow high speed clearance of faults. The activity 'Protection Communication Circuits - Replacement' refers to the replacement of historical protection communication circuits with alternative communication circuits and all necessary work associated with the installation of these alternatives. These alternatives include self-owned communication circuits and third party leased communication circuits.  |
|  |  |
| System Mapping  | The activity of mapping of the network and operational premises of the network to geographical locations.Includes:* Updating the geographical system maps with asset and locational information following the installation, removal or repositioning of system assets.
* The updating of Geographic Systems (GIS) records following Ordnance Survey mapping rebasing upgrades.
* Responding to the New Roads and Street Works Act NRSWA notices sent to the Company by other parties.
* Ordnance survey licence fees.

Excludes:* Clerical support and admin associated with New Roads and Street Works Act (NRSWA).
* updating the network control diagram
* onsite collection of asset and locational information where this task is undertaken with the installation of the asset which is part of the associated direct activity:

IT & Property costs associated with System Mapping activity |
| Stores and Logistics  | The activity of managing and operating stores.Includes:* Delivery costs of materials or stock to stores.
* Labour and transport costs for the delivery of materials or stock from a centralised store to a satellite store/final location (and vice versa), taking into account the stock management policies.
* Monitoring stock levels.
* Quality testing of materials held in stores.

Excludes:* Costs of oil or other insulation medium (report under the activity for which it is used, e.g. maintenance, faults.
* Any of the IT systems associated with stores/logistics (include under IT & Telecoms).
* Any property management and maintenance costs of depots/stores locations (include under property management).
* Vehicles and Transport - the activity of managing, operating and maintaining the commercial fleet and mobile plant (include under Vehicles and Transport).
 |
| Operational Training  | Includes operational training and graduate trainees and apprentices.Includes training Workforce Renewal new recruit, Operational Upskilling and Operational Refresher Training.Operational Upskilling - covers all training (whether classroom based or on-the-job) where employee's skill level is increased in order to undertake activities requiring a higher skill level or to undertake activities requiring a different skill set (e.g. multi-skilling or redeployment) or the undertake activities via more efficient / effective processes. (Does not cover, e.g., routine operational refreshers, and safety briefings, non-operational training courses e.g. MS Excel, training for CPD purposes once qualified e.g. accountant).Apprentices are engaged under approved apprentice’s schemes. Trainees are employed under a formal training programme.Includes:* Classroom training.
* On the job training.
* Trainer and course material/running costs (classroom training).
* Training admin.
* Recruitment and external advertising costs for trainees/apprentices.
* Salaries of apprentices and trainees in full time continuous training up to the point they become fully engaged in operational activities.
* Costs of staff that organise and provide operational training and maintain employees training records.

Excludes:* HSE costs (include under Health, Safety & Environment).
* IT & Property management costs associated with Ops Training and Training Centres (include under IT & Property costs respectively).
 |
| Vehicles and Transport | The activity of managing, operating and maintaining the commercial fleet and mobile plant utilised by the Network or any other related party for the purposes of providing services to the Network.Includes:* Lease costs associated with the vehicle fleet and mobile plant.
* Maintenance costs of the vehicle fleet and mobile plant, including mobile generation.
* Cost of accident repairs to business' own vehicles whether covered by insurance or not and the cost recovery where recovered by insurance.
* Fuel costs of the vehicle fleet and mobile plant.

Excludes:* Direct field staff time spent on utilising the vehicles for a direct cost activity (include under direct cost activity).
* IT & Property costs associated with vehicle management.
* Purchases of vehicles, mobile plant and equipment (include under non-op capex).
* Cost of providing company cars to employees which are benefits in kind (include as labour cost under the relevant activity of that employee.
 |
| Market Facilitation | This covers the following activities:* Network code governance and development.
* Proposing and managing industry code modifications.
* Generation and demand forecasting.
* Information provision to the industry.
* Calculation and implementation of Transmission charges.
 |
| Health Safety and Environment | The activity of promoting and maintaining health and safety of employees, contractors, customers and the public.Includes:* Developing the company’s overall health and safety policy.
* Establishing procedures to comply with best practice for health and safety.
* Maintenance of records to show compliance with Factory and Health and Safety at Work Acts.
* Providing advice on security matters both for property and personnel and provision of advice on fire prevention.

Excludes: * Health & Safety checks on work and personnel such as:
	+ compliance checks on staff and contractors' work carried out
	+ site safety inspections
	+ investigation, report and corrective action following an accident or environmental incident
	+ authorisation of team members for operational and non-operational duties
	+ operational field safety checks
	+ time of employees attending training (include as labour cost under the relevant activity of that employee)
	+ purchase of equipment (include under non-op capex)
	+ training, courses and training centre costs for staff relating to working on system assets (include under operational training)
	+ engineering and health and safety training, courses for staff involved in indirect activities (include under operational training).
 |
| Internal Support Costs | Internal resource Support Costs for a specific solution. Examples would include the IT Internal Help Desk support for incident resolution. |
| Internal Hosting & Infrastructure costs | Internal Costs relating to the infrastructure that a solution runs on. |
| 3rd Party License costs | License costs for a 3rd Party Solution. |
| 3rd Party Support Costs | 3rd Party Support Costs for a specific solution. Examples would include the 2nd/3rd line support for incident resolution which may previously have been resourced in-house or applying patches to the solution. |
| 3rd Party Hosting & Infrastructure costs | Costs from a 3rd Party relating to the infrastructure that a solution runs on. |
| 3rd Party Professional Services | Any professional services not covered in the above categories e.g. small change or consultancy. |
| Other | Any IT & Telecoms costs and/or activities not covered in the above categories. |
| Internal costs | cost for the services/activities provided by internal/in-house functions. |
| External  | cost for services/activities procured via a third party. |

**D4.4: Business Support**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | The purpose of this table is to collect cost information on the Business Support Indirect Activities listed below, which in most cases are related to general support activities necessary in the running of a typical Network operator**Business Support Costs**Collectively includes the activities of:* HR
* Non-Operational Training
* Finance, Audit & Regulation
* Insurance
* Procurement
* CEO & Group Management etc.
* IT & Telecoms (Business Support)
* Property Management (Business Support).

IT & Telecoms Memo Table* Internal Support Costs
* Internal Hosting & Infrastructure costs
* 3rd Party License costs
* 3rd Party Support Costs
* 3rd Party Hosting & Infrastructure costs
* 3rd Party Professional Services
* Other
 |
| Guidance on completing this worksheet | Costs associated with each of the indirect activities listed (full definitions can be found below) should be reported in this table. For the avoidance of doubt, the data requirements are relevant to the transmission owner entity and not Group level. Additional input rows are included to allow TO’s to enter the capex/opex split for the BSC cost categories. This entry will be used to inform the PCFM calculations Additional input rows are included to allow TO’s to enter the BSC cost categories split across baseline/reopener/uncertainty mechanism. This information will be used to inform the relevant PCFM calculations.An additional data entry row (row 86) has been added to enable licensees to separately report and identify BSC related to the advancement of activities associated with ASTI projects with agreed funding.  |
| Definitions for use in this worksheet |
| HR | This would include provisions of the HR function i.e. the full range of professional activity for an individual's career path from recruitment to retirement and post-retirement where applicable, e.g. management and administration of pension payments (NB PPF scheme administration costs are excluded) and from related professional advice to directly resolving grievances for staff.Includes:* Costs of payroll and pension’s management and operation.
* Facilitating staff performance, development and reviews.
* Industrial and employee relations including HR strategy, policies and procedures.
* Monitoring equal employment opportunities.
* HR advice to management, succession planning and also retentions and rewards.

Excludes:* Pension Scheme Administration and PPF levy costs

Pension deficit repair payments relating to the „established deficit. and for the avoidance of doubt, all unfunded early retirement deficiency costs (ERDC) post 1 April 2004 |
| Non-operational training | Facilitating and operating training courses of a non-technical nature for office-based staff.Includes* Staff who organise and provide non-operational training and maintain employees training records.
* Cost of running the non-operational training costs e.g. course fees.
* Leadership development training.

Excludes:* Any operational training costs
* Non-operational costs associated with formal training and apprentice programmes (included under operational training)
* Time of employees attending training (include as labour costs under the relevant activity for non-operational).
* HSE costs (include under Closely Associated Indirect costs).
* IT systems associated with HR & Payroll (include under IT & Telecoms).
* IT & Property management costs associated with Non-Ops Training (include under IT & Property costs respectively).
 |
| Finance, Audit & Regulation  | Performing the statutory, regulatory and internal management cost and performance reporting requirements and customary financial and regulatory compliance activities for the network.Includes:* Process of payments and receipts.
* Time sheet evaluation where not part of the payroll process.
* Financial & risk management - e.g. credit & exposure management.
* Financial planning, forecasting & strategy.
* Financial accounting.
* Management accounting.
* Investment accounting.
* Treasury management.
* Transportation income accounting.
* Pricing.
* Statutory & regulatory reporting.
* Tax compliance & management.
* Internal audit & management of the relationship with external audit function.
* External audit fees.
* Cost of regulatory department.

Excludes:* Insurance costs (include under Insurance).
* Any of the IT systems associated with finance, audit and regulation (include under IT & Telecoms).
 |
| Insurance | Support and expertise to develop the business risk profile, managing the claims process and provision of information and understanding to the business in relation to insurable and uninsurable risks.Includes* Insurance premiums
* Insurance premium tax
* Insurance contract negotiating and monitoring
* Insurance claim processing
* Insurance risk management
* Payments relating to uninsured claims
* Costs of in house insurance team
* Brokers fees
 |
| Procurement | Responsible for the procurement of goods & services in the support of the business operations, through the management of procurement contracts with suppliers.Includes:* The cost of carrying out market analysis.
* Identifying potential suppliers, undertaking background review, negotiating contracts, purchase order fulfilment & monitoring supplier performance.
* Setting up and maintaining vendor accounts within the accounting system and maintaining e-procurement channels.
* Setting procurement guidelines and monitor adherence to the guidelines.

Excludes:* Any of the IT systems associated with procurement (include under IT & Telecoms).
* Stores & Logistics - The activity of managing and operating stores (include under Closely Associated Indirect costs for transmission and record in separate stores and logistics category in table 3.1).
* Vehicles and Transport - the activity of managing, operating and maintaining the commercial fleet and mobile plant (include under Closely Associated Indirect costs).
 |
| CEO & Group Management | Includes:* Communications - communication within the UK businesses, internal communications, external communications, media relations, issues management, regional communications, community relations, community awareness, branding, events management
* Group Strategy- function has the responsibility of evaluating the strategic options of the Group.
* Legal / Risk and Compliance/ Company Secretary - legal department, the management corporate governance for all companies to ensure they comply with legislation, regulations and best practice.
* Corporate Responsibility and investor relations - corporate responsibility and interaction with institutional equity investors and market analysts, management of rating agencies also advertising, charity and sponsorship arrangements.
* Board Members and Other – staff and other costs of Board members and other corporate costs not fitting into other categories.
* Non-executive & group directors’ labour costs (where they are not carrying out specific departmental duties) and Board meeting costs.

Excludes:* Insurance management.
* Legal advice relating to wayleaves/servitudes/easements.
* Group costs relating to specific activities e.g. HR, Finance, Audit, Regulation, Taxation, HSE, Insurance, etc (include under the specific cost category).
 |
| IT & Telecoms | Provision of IT services for the day to day service delivery.Includes:* The purchase, development, installation and maintenance of non-operational computer and telecommunications systems and applications.
* Provision of IT services for the day to day service delivery and includes the cost of Help Desk, data centres, IT application development, maintenance and support; establishing and maintaining IS infrastructure projects (IT Network Provision, Network Maintenance, Server’s support/services).
* Voice and data telecoms (e.g. WAN, landline rental and call charges, ISDN data and costs/rental of mobiles except where costs are charged directly to user departments).
* Developing new software for non-operational IT assets including the costs of maintaining an internal software development resource or contracting external software developers. This will include any cost of software licences to use the product where those costs cover more than one year.
* Installing new or upgrading software, other than where it is capitalised. This does not include upgrading of software that is included within the costs of annual maintenance contracts for the software.
* Maintenance and all the operating costs of the IT infrastructure and management costs and Applications cost. This includes any annual fee for the maintenance of software licences, whether or not they include the right for standard upgrades or 'patches' to the software as they become available.
* IT applications maintenance and running costs.
* IT new applications software and upgrade costs.
* Voice and data telecoms (e.g. WAN, landline rental and call charges, ISDN data. includes costs/rental of mobiles except where costs are charged directly to user departments).

Excludes:* IT equipment which is used exclusively in the real time management of network assets, but which does not form part of those network assets.
* Any of the property costs associated with IT & Telecoms (include under Property Management), except where the cost of specific IT environmental control systems can be distinguished from other property costs.
 |
| Property management | The activity of managing, providing and maintaining non-operational premises i.e. premises used by people such as stores, offices and depots. This should include costs such as rent, rates (business), and utilities costs including electricity, gas and water, maintenance/repair costs of premises and also should include the provision of the facilities / property services such as reception, security, access, catering, mailroom, cleaning and booking conferences. The costs of property surveyors should also be included here.Includes:* Stores, depots, offices (including training centre buildings & grounds).
* Rent paid on non-operational premises.
* Rates and taxes payable on non-operational premises.
* Utilities including electricity, gas and water (supply and sewerage).
* Inspection and maintenance costs of non-operational premises.
* Facilities management costs including security and reception.
* Training centre buildings & grounds.
* Control rooms and data centres.

Excludes:* Any costs relating to operational property (i.e. premises which contain network assets and are not maintained for accommodating people e.g. Substations, Boiler Stations, Holder Stations, Compressor Stations, Governor House etc (include under operational property).
* Any IT systems associated with property management (include under IT & Telecoms).
* Depreciation and profit/loss on Fixed Assets Relocation costs to or from non-operational premises.
* Network rates.
 |

**D4.4b: Business Support Allocation**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | The purpose of this table is to provide Ofgem with visibility of Business Support costs incurred at a Group level and their subsequent attribution across the Group legal entity structure. This will be used to ensure that allocation methodologies applied are fair and consistent and do not attempt to unfairly apportion these costs to a licensee. |
| Guidance on completing this worksheet | Business Support costs for each and every regulated entity should reconcile with that reported in their respective annual regulatory returns. Business Support costs for non-regulated entities should be provided in full and on a consistent basis to the definitions provided.  |

**D4.5: Operational Training**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | The purpose of this table is to collect cost and volume data relating to operational training activities. Namely, number of new (operational) recruits and operational training days. This table will be used by Ofgem to assess the efficiency and appropriateness of costs spent in improving workforce resilience.  |
| Guidance on completing this worksheet | This worksheet collects Cost Type data on the Operational Training activity. It also provides a split of these costs, alongside associated volumes, to provide an understanding of the activity for cost assessment purposes.Operational Training is the provision of training to Operational Staff employed by the Licensee or Related Party or Agency Staff to support the Direct Activities of the Licensee. These staff are referred to as Craftsperson’s, Engineers, and Other Operational Employee.Operational Training includes only the costs of training employee, Related Parties and Agency Staff. No contractor training costs should be reported in this activity. Where a Licensee incurs costs assessing the capability of contractors, these costs should be included in De-Minimis. Any costs associated with training contractors within Licensee training facilities should also be reported in the same way.The key terms for this worksheet, are:* Operational Training
* Craftsperson
* Engineer
* Other Operational Employee
* Operational Staff
* Non-Operational Staff
* Operational Refresher
* Operational Up-skilling
* New Recruits
* New Recruits – Craftsperson
* New Recruits – Engineer
* Learner Costs
* Leaver
* Leaver – Due to Retirement
* Leaver – Due to Reasons Other than Retirement
* Training Days
* Agency Staff.

These terms have the prefix “Operational Training”, except Non-Operational Staff and Agency Staff as these terms are used in areas other than in Operational Training.The tables in the worksheet require costs to be split between the class of staff undertaking the training (Craftsperson’s, Engineers) and between the types of training provided (New Recruits, Up-skilling, Operational Refreshers), as well as reporting the costs of providing the Training Centre and courses for Operational Training.Learner Costs should be reported as follows:* *New Recruits (in year and previous years)* – this reports the costs of all operational New Recruits to the Licensee or Related Party, often on a formal training programme for several years (e.g. apprenticeship). The associated volumes are the FTEs recognised as on New Recruits training programmes. No costs or volumes relating to contractor training should be included. The FTEs should be adapted to recognise that a new recruit may only have been employed for part-way through the year, for example 1 FTE starting work in October would be classed as 0.5 FTE; and a part time employee of 0.8 FTE starting work in October would be classed as 0.4 FTE. These costs and volumes should be reported separately between Craftsperson’s Engineers and Other Operational Employees.
* *Operational Up-skilling*  – this reports the costs of all Operational Staff, Related Party Staff and Agency Staff recognised as undertaking Operational Up-skilling training. The associated volumes are the number of Training Days spent on up-skilling training, both classroom and on-the-job. No costs or volumes relating to contractor training should be included. These costs and volumes should be reported separately between Craftsperson’s, Engineers and Other Operational Employee (the role reported against should be the role towards which the employee has been working). A unit cost is then calculated automatically by the table.
* *Operational Refreshers* – this reports the costs of all Operational Staff, Related Party Staff and Agency Staff attending Operational Refreshers. The associated volumes are the number of Training Days spent on refresher training. No costs or volumes relating to contractor training should be included. These costs and volumes should be reported separately between Craftsperson’s, Engineers and Other Operational Employee. A unit cost is then calculated automatically by the table.

Cost of Training Provision should be reported separately between the following, * Trainer and Course Material Costs
* Training Centre and Training Admin Costs.

There are no volumes to be reported in this area.Volumes are also to be reported for the following areas:* *New Recruits in year* – this reports the New Recruits (on an FTE basis) appointed to the Licensee **in the year**. This should not be pro-rated to adapt for date the new recruit joined the Licensee. This should be reported separately between Craftsperson’s and Engineers.
* *Leavers* – this reports the number of Leavers in the year (on an FTE basis), reported separately between Leavers due to Retirement and Leavers for Reasons other than Retirement. These should not be pro-rated to adapt for date the leaver left the Licensee. These are also reported separately by Craftsperson’s and Engineers.
 |

**D4.6a TO Cyber Security Resilience OT**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | Refer to guidance to be published by Cyber Resilience Team |
| Instructions for Completion |  |

**D4.6b TO Cyber Security Resilience IT**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | Refer to guidance to be published by Cyber Resilience Team |
| Instructions for Completion |  |

**D4.7 Uncertain costs**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | The purpose of this worksheet is to capture any disaggregated costs, workloads/volumes related to uncertain activities.This will enable Ofgem to trace and associate any incremental proposals with corresponding baseline figures reported elsewhere in the template, whilst keeping the two clearly separate from one another. |
| Instructions for Completion | Enter a description of the activity. Enter the uncertain costs associated with the uncertain activity for each year of RIIO-ET2. If the uncertain activity has no corresponding baseline component, then the uncertain costs equal the total costs. The uncertain costs entered here should be incremental to any baseline figures reported elsewhere within the template. |

**D4.10: Asset mapping**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | We recognise that the granularity recorded within the internal systems of each TO will be different (and deeper) to the asset possibilities list within the T2 data template. This mapping worksheet will allow each TO to map and aggregate the data from internal systems against the classification of the RRP template. This will provide a new level of understanding and removes the need to have further detailed debates on definitional points on to allocate assets.  |
| Guidance on completing this worksheet | Licensees are required to populate: * column A to capture their asset classification list from its internal system. For example, each licensee is required to provide a list reflecting the full range of all types of “overhead tower line” that are captured through the internal system.
* column B to allocate the appropriate asset heading from the drop down list.
* column C to allocate the appropriate asset category (using the established asset classification list used in the RRP template)
* column D to allocate the asset sub category (again using the asset classification list used in the RRP template).

The mapping exercise must either assign a 1:1 relationship between assets or “1:many” allocation. A licensee cannot map the same asset to more than one classification. |

**D4.11: Asset identification**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | The purpose of this table is to provide detail on the actual and forecast interventions for the following asset categories included in the current T2 delivery program.* Circuit Breaker
* FACTS
* Transformer
* Reactor
* HVDC
* Protection & Control
* OHL
* Cables

Licensees must also populate, where available, all forecast interventions due to a Load driver for any categories listed on the worksheet (e.g. replacement to increase rating) included in the current T2 delivery program.This information will be used by Ofgem to check the interventions and additions carried out in the period prior to RIIO-ET2 against those included in the current T2 delivery program. The information in this table will allow Ofgem to have a definitive list of the exact assets specified within this table, with information such as their type, serial number/unique asset identifier, unique operational identifier, location etc., that have been and are forecast to be the subject of intervention. This table will be updated as part of annual reporting so as to allow Ofgem to track what has been taken out, added or moved. Any addition of new assets due to a Load driver within RIIO-ET2 will also be reported as part of annual reporting.  |
| Guidance on completing this worksheet | Information on all asset interventions in the asset categories that are to be delivered in the RIIO-ET2 period, must be entered in this table. For this worksheet please input:**1. Unique Operational ID (column A)**Enter the unique operational ID given to the asset being intervened on or added, for example, SGT1 or ABCDSGT1. For P&C schemes, enter the name of the protection or control scheme being intervened on, for example, Feedername\_MP1 or Mesh Corner\_1.**2. Serial Number/Unique Asset ID (column B)**Enter the manufacturer’s unique serial number for the lead asset being intervened on or added. Where a manufacturer’s serial number is not available, a unique identifier assigned by the licensee to the lead asset should be entered. This identifier should be similar to a manufacturer’s serial number and be unique to the physical asset itself and not change due to a change in the physical location of the asset. For example, a transformer that has been relocated from substation A to B at some point in its life, should still have the same unique identifier. Similarly, if a circuit breaker has undergone major refurbishment off site, it should still have the same unique identifier post refurbishment as it did before refurbishment. Where a lead asset might have multiple components, the unique identifier of the main component that is being reported should be entered. For example, where a transformer might have multiple components like main tank, bushings, tap changer etc., with each component having a serial number or unique identifier, the serial number or unique identifier of the main tank should be entered. Where FACTs or HVDC equipment have multiple components and sub assets, a serial number is not required, however a unique asset identifier may be entered where there is a clear unique asset identifier assigned to the asset as a whole. A serial number is not required for Protection or Control equipment. Columns C, D, E and F are auto populated from the information provided by licensees in D4.10.**3. Voltage (kV) (column G)**Drop down. Select the voltage of the asset being intervened on or added. For transformers, select the Primary voltage. For P&C schemes, select the voltage of the asset being protected or controlled. Where multiple assets of different voltages are being controlled as part of a substation control system, select the highest voltage applicable. **4. Secondary Voltage (kV) (column H)**Drop down. Select secondary voltage for transformers. **5. Rating (column I)**Enter the nominal rating of the asset together with units. **6. Volume: unit number or route km (column J)** Route km is not relevant to non-linear assets.**7. Age (column K)**Enter the age of the asset being intervened on at the forecast year of intervention (in years). **8. Site ID (column L)**This is auto-populated form the information provided by Licensees in worksheet D4.12**9. Ofgem Scheme Reference (column M)**Drop down (linked to original look up table) **10. Driver (column N)**Drop down; select either “load” or “non load” option**11. Intervention type (column O)**Drop down (linked to original look up table) **12. Intervention Delivery Year (column P)**Enter the year the asset is expected to be electrically commissioned and put in service.  |

**D4.12: Site ID**

|  |  |
| --- | --- |
| Purpose and use by Ofgem | The purpose of this table is to provide detail on the forecast interventions included in the current T2 delivery program.The information in this table will allow Ofgem to have a definitive list of the exact assets, with information such as their type, serial number/unique asset identifier, unique operational identifier, location etc., that have been and are forecast to be the subject of intervention. This table will be updated as part of annual reporting so as to allow Ofgem to track what has been taken out, added or moved.  |
| Guidance on completing this worksheet | For this worksheet please input:**1. Site ID (column A)**Enter the unique ID of the substation or site where the non-linear asset or protection and control scheme is/was physically located. This information is used to populate worksheet C4.11, column L.**2. Substation Name (column B)**Enter the name of the substation where the non-linear asset or protection and control scheme is/was physically situated. Where the protection or control scheme relates to more than one substation, enter multiple lines for the same scheme, with work at each substation listed in a separate line. For example, for a feeder differential protection replacement scheme relating to substations A and B, with work planned at both substations, a separate line should be entered for work at each substation even if it is part of the same Ofgem Scheme Reference. If a location is not yet known (e.g. the asset location was not specified as part of the BPDT or Final Determinations) a licensee can report the location as “unspecified” if currently unknown to facilitate the provision of a volume and intervention assumption. Licensees are required to specify the specific assets/sites as soon as future work programmes are confirmed.**3. Postcode (column C)**Enter the postcode of the substation or site. **4. Geographical Area (column D)**Where a postcode is not available, enter the name of the city or town or parish where the site or substation is, was or will be located. If unspecified in column C, then leave blank until such times as location can be confirmed.  |

# Appendices

Index

|  |  |  |
| --- | --- | --- |
| Appendix | Name of Appendix | Page No. |
| 1 | Definitions | 143 |
| 2 | Definition of Totex | 153 |
| 3 | Indirect Definition Tables | 158 |

Appendix 1 - Definitions

1.1. The purpose of this appendix is to provide definition of the terms included in these instructions and in the associated worksheets (with the exception of Totex which is defined in Appendix 2).

1.2. This appendix provides definitions that cover more than one table and more general definitions. Any word or expressions used in the Utilities Act 2000, Electricity Act 1989, the Energy Act 2004, or standard or special licence conditions of the electricity transmission licence shall have the same meaning when used in these rules, similarly for standard accounting terms, IFRS/IAS and/or UK GAAP and Companies Act 2006 definitions should be applied.

1.3. In the circumstance where no definition is given the licensee should include in explanatory notes details of the treatment it has applied and inform The Authority of the omission. Where a definition set out in this appendix is not the same as that applied by a licensee for other purposes, the definition set out herein must be used in the preparation of the RRP templates.

1.4. Except where the context otherwise requires, any reference in this appendix or in the RRP to a numbered standard or special condition (with or without a letter) or Schedule is a reference to the standard or special condition (with or without a letter) or Schedule bearing that number in the electricity transmission licence, and any reference to a numbered paragraph (with or without a letter) within such a standard or special condition is a reference to the paragraph bearing that number in the standard or special condition or Schedule of the electricity transmission licence in which the reference occurs, and reference to a Section is a reference to that Section in the standard or special conditions of the electricity transmission licence .

1.5. Where terms are defined within the licence conditions (standard or special) or other documents approved by the Authority, they are not replicated here and the user should refer to the licence condition or such other document for these definitions.

**A**

Accounting Costs

Costs as per statutory or regulatory accounts before any adjustments for non-controllable costs and atypical, provisions etc.

Accruals and Prepayments

For the purpose of determining what amounts should be excluded as non-cash items. These are only those items that are not incurred as part of the ordinary level of business activities and would be atypical. Normal business activities include normal trade accruals and prepayments and holiday pay provisions.

Affiliate IDNO

An independent distribution network operator owned by the group and operating within the group’s own electricity distribution network area

Annual iteration Process

The annual iteration process is the process of annually updating the variable (blue box) values in the price control financial model and running the model in order to publish ARt and ADJRt values for the forthcoming regulatory year.

**C**

Cash Controllable Costs

The normal ongoing cash operating costs, excluding non-recurring costs that are controllable by the transmission company.

Change in market value of investments

The change in the market value of a scheme’s investments over a period of time where the approach used to assess the market value of an asset is the same as the approach used for the purposes of a triennial valuation

Closely Associated Indirect Costs

Costs that support the operational activities. Closely associated indirect costs includes network policy (including research and development), network design and engineering, engineering management and clerical, wayleaves administration, control centre, system mapping and health and safety functions.

Customer / Capital contributions

Financial contribution received from / repaid to a customer in respect of the provision of a new connection to the transmission network.

Cyber Resilience IT costs

Cyber Resilience IT costs consist of costs that the ESO incurs to manage risks posed to the security of its IT network and information systems and to respond to any identified risks by taking appropriate and proportionate measures to enhance the cyber resilience of those network and information systems.

**D**

Direct Activities

Those activities which involve physical contact with network infrastructure assets.

INCLUDES:

* Labour cost of staff whose work involves physical contact with system assets. This can include the element of labour costs associated with trench excavation staff, craftsmen, technicians, technical engineers, administration and support staff, safety inspection, critical infrastructure inspection and environmental control, network planners and designers where a portion of their time involves physical contact with system assets, however only that portion spent on direct activities may be included. It will include downtime of staff (including but not limited to: idle, sick, non-operational training); applicable labour cost should follow their normal time allocations.
* Operational engineers working on commissioning of assets, physically changing protection settings, issuing safety documentation or liaising with the control centre are considered direct activities.
* The cost of contractors being the total charges invoiced by external contractors for the primary purpose of performing direct activities.
* The cost of materials drawn from stores or purchased and delivered to site for use in performing direct activities. In addition, this includes the cost of the materials for refurbishing system assets.
* Wayleaves, servitude and easement payments to enable the direct activity to be performed. This does not include the cost of management or administration of these.
* Related Party Margins charged by a Related Party for work performed on direct activities.
* In addition, includes, for the purposes of flooding, site surveys and non-site based costs.

Note, the direct cost of an asset will reflect the purchase, transportation and installation of the asset. We consider that the manufacturing configuration design costs i.e. “the cost of the asset leaving the factory gate” to be a legitimate purchase cost and therefore included in the direct cost of the asset. See table below for a number of worked examples to illustrate this point.

Manufacturing Configuration Design/Functional Design Table

|  |  |  |  |
| --- | --- | --- | --- |
| **Classification** | **Direct/****Indirect** | **Examples** | **Comments**  |
| **Manufacturing Configuration Design – Non-Route** | Direct | * Circuit breaker:
	+ Manufacturer design of CB
	+ Such as: design to meet TRV requirements, Fault Rating requirements, bespoke design requirements.
* Transformer:
	+ Manufacturer design of Transformer
	+ Such as: design to meet impedance requirements, fire risk requirements, bespoke design requirements.
* GIS Building Design:
	+ Structural Design
	+ Materials engineering
	+ Lighting systems
* Temperature control systems
 | The example Asset Specific Designs are those which the licensee does not have direct control over. The decisions on how to meet the specification in function design are for the manufacturer/contractor to determine.  |
|  |  |  |  |
| **Manufacturing Configuration Design – Route** | Direct | * OHL:
	+ Design of Main Body strengthening
	+ Design of Cross arm strengthening
	+ Design of Muffs, ACDs, Signage
	+ Design of Spacers
	+ Design of Dampeners
* Cabling:
	+ Design of Joint Pits
	+ Design of Jointing
	+ Design of cross bonding
 | These are specific design works which may be bespoke to the individual Tower, Pole or Cable Route. We note that this design work is for the contractors/supplier to meet the requirements of the specification which the licensee used to procure works.  |
|  |  |  |  |

Direct Costs

Expenditure incurred undertaking Direct Activities.

Directly Attributable Costs (Network Innovation)

The costs of maintain and managing Foreground Intellectual Property Rights (IPR).

**G**

Grid Supply Points (GSPs)

Grid Supply Points has the meaning as defined in the Grid Code. For clarity, in the event of exporting GSPs due to embedded generation, these should be counted as Grid Supply Points only and not as Grid Entry Points as well.

Grid Entry Points

Grid Entry Points has the meaning as defined in the Grid Code.

**I**

Indirect Activities

Activities which in most cases support work being physically carried out on transmission network infrastructure assets that could not, on their own, be classed as a direct network activity. More information and guidance on indirect activities (and direct activities) is set out in appendix 3.

Inspections

The visual checking of the external condition of system assets including any associated civil constructions such as buildings, substation surrounds, support structures, cable tunnels and cable bridges.

INCLUDES:

* Helicopter and foot patrols
* Hammer testing of poles
* High resolution photography
* All asset surveys of whatsoever nature and purpose, including asset condition surveys
* Inspection of tools (including lifting tackle inspections and pat testing)
* Reading gauges.

EXCLUDES:

* Use of diagnostic testing equipment (hammers used to test poles are not regarded as diagnostic testing equipment)
* Supervisory input to plan workloads and manage staff (include under EMCS)
* Data review except the initial recording on site (include under EMCS)
* Inspection of non-system assets (include under Property Management)
* Site surveys for flooding
* Indirect Costs
* Any of the costs associated with Repair & Maintenance.

Inspections - Foot Patrol

The inspection of overhead lines via foot patrols, carried out either as a routine activity or as a non-routine activity.

Inspections - Helicopter

The inspection of overhead lines through the use of helicopters or drones, carried out either as a routine activity or as a non-routine activity.

Investment income

The income received on scheme assets, net of investment management fees where it is deducted from investment income

Investment management expenses

Any scheme investment management expenses which are charged separately or have not been implicitly allowed for in the “Change in market value of investments” item or as a deduction from the “Investment income” item.

IT & Telecoms (Business Support)

Provision of IT services for the day-to-day service delivery.

Note: excludes costs relating to Cyber Resilience IT

IT & Telecoms (Non-operational)

Expenditure on new and replacement IT assets which are not system assets. These include Hardware and Infrastructure and Application Software Development. This includes the purchase of IT equipment that is either located away from network assets or does not directly relate to the control of those assets.

Note: excludes costs relating to Cyber Resilience IT

**L**

Lead assets

Lead assets are the main assets comprising the transmission network that are required for the safe and reliable transfer of electricity from one point on the network to another. Any assets of operating voltage 132kV or greater in the following categories are lead assets: cables, subsea cables, circuit breakers, transformers, overhead pole line, overhead tower line.

Low risk assets

Assets where the focus is on protecting capital and gaining a modest return (e.g. gilts)

**M**

Maintenance

INCLUDES:

* The activity relating to the invasive (“hands on*"*) examination of, and the undertaking of any subsequent works to repair defects on, system assets. This includes:
	+ minor repairs carried out at the same time as the maintenance visit

In addition to the examination of system assets, other activities considered as Maintenance are identified in the Refurbishment and Repairs Task Allocation Tables in Chapter 4 of this document.

EXCLUDES:

* Remote Location Generation (i.e. diesel generation costs providing permanent emergency backup on islands)
* The physical dismantlement of existing assets (at all voltage levels) where the cost of dismantlement is not chargeable to a third party and no new assets are to be installed
* Cost of electricity consumed at substations
* Supervisory input to plan workloads and manage staff (include under Engineering Management & Clerical Support)
* Data review except the initial recording on site (include under Engineering Management & Clerical Support)
* Maintenance of non-system assets (include under Property Management)
* Tree cutting and tree clearance (include under Tree Cutting)
* Indirect Costs
* Any costs resulting from physically repairing an asset that was instigated by the receipt of a trouble call.
* Any of the costs associated with inspection.

Maintenance - Protection Schemes (All Voltages)

Maintenance work on substation located protection, control and SCADA equipment, which are undertaken as independent programmes of work. This includes testing, repair and preventative maintenance. This also includes protection of conventional circuit breakers.

EXCLUDES:

* the replacement of individual relays, selector switches, protection and/or control panels.

**N**

Network rates

Prescribed rates levied on the transmission network assets as determined and set by the Valuation Office Agency (VOA) in England and Wales Electricity Supply Industry (Rateable Values) (England) Order 2005 and Scottish Assessors Association (SAA) in Scotland.

Non-lead assets

Are any assets comprising a transmission network that do not fit into the ‘lead asset’ definition plus assets built to maintain or improve flood or weather related resilience. Non-lead assets include lead type assets below 132kV operating voltage.

Non – Transmission

Costs attributable to activities other than transmission e.g. Non regulated, Gas Distribution

Non Controllable Costs

Costs not deemed to be controllable by the transmission business, transmission licence fees, and network rates

**O**

Other (Direct)

This applies to any direct costs which have not been captured under the direct definitions provided for Lead Assets; Non-Lead Assets; Civils & Preconstruction. [Note: this has been included as a data entry option in the “Asset Possibilities” list in the data template]

Ofgem Scheme Reference

A unique reference number assigned to each Licensee capital scheme. Schemes that were in Licensee’s business plan will have Ofgem Scheme Reference assigned by Ofgem. Licensees are required to assign an Ofgem Scheme Reference to any additional schemes reported in accordance with the following convention:

* Ofgem Scheme reference shall be in the format LicenseeID-SchemeID.
* SchemeID is a number assigned sequentially to uniquely identify each of the licensee’s capital schemes.

Outputs

Relates to a piece of planned work or an activity intended to achieve a distinct and measurable purpose within a specific period of time. [[10]](#footnote-11)

However, reference to outputs for the purpose of reporting does not always solely mean those as defined in the licence or Final Determinations. For cost categories where licensees have allowances but no associated outputs explicitly defined within either their licence or Final Determinations, proxy outputs may be defined to enable Ofgem to assess efficiency and delivery of value to consumers.

**P**

Physical Security Capital Expenditure

This refers to capital expenditure incurred, or expected to be incurred, by the licensee for the purposes of implementing any formal recommendation or requirement of the Secretary of State to enhance the physical security of any of the sites within the licensee’s Transmission System.

Physical Security Operating Expenditure

This refers to operating expenditure incurred, or expected to be incurred, by the licensee for the purposes of implementing any formal recommendation or requirement of the Secretary of State to enhance the physical security of any of the sites within the licensee’s Transmission System.

Project

A project may consist of one or several schemes that when taken together are intended to achieve a distinct and measurable purpose.

Project Start Year

Is defined as the date that the project commences, this can be predicated on any works being initiated (e.g. design or physical construction) or date of authorisation from investment committee.

Project Close Year

Is defined as the financial closure of the project

Project Delivery Date

Is defined as the date that all physical works are completed but which may precede the financial closure of the project.

**R**

RAV

Regulatory Asset Value

RD Zone

Revenue Driver zone

Related party

Is an affiliate, a joint venture of the licensee or of an affiliate or an associate of the licensee or of an affiliate or a relevant associate of the licensee.

Related Party Margins

The profit or loss recorded on a transaction with an affiliate being the excess or deficit on actual direct costs and indirect costs (including financing costs) fairly attributable to the transaction or the charge and the cost of providing that transaction.

Reopener

This is a type of uncertainty mechanism within the RIIO-ET2 framework. Re-openers allow Ofgem to robustly assess proposals as early as possible and allow network companies to receive additional allowances whenever there is more certainty about requirements.

Repairs

INCLUDES:

* The activity relating to the invasive (“hands on*"*) examination of, and the undertaking of any subsequent works to repair defects on, system assets. This includes:
	+ subsequent repair works undertaken to remedy defects identified by either inspection or maintenance.

In addition to the examination of system assets, other activities considered as Repair are identified in the Refurbishment and Repairs Task Allocation Tables in Chapter 4 of this document.

EXCLUDES:

* Remote Location Generation (i.e. diesel generation costs providing permanent emergency backup on islands)
* The physical dismantlement of existing assets (at all voltage levels) where the cost of dismantlement is not chargeable to a third party and no new assets are to be installed
* Cost of electricity consumed at substations
* Supervisory input to plan workloads and manage staff (include under Engineering Management & Clerical Support)
* Data review except the initial recording on site (include under Engineering Management & Clerical Support)
* Maintenance of non-system assets (include under Property Management)
* Tree cutting and tree clearance (include under Tree Cutting)
* Indirect Costs
* Any costs resulting from physically repairing an asset that was instigated by the receipt of a trouble call.
* Any of the costs associated with inspection.

Repair - Protection Schemes (All Voltages)

Repair work on substation located protection, control and SCADA equipment, which are undertaken as independent programmes of work. This includes testing, repair and preventative maintenance. This also includes protection of conventional circuit breakers.

EXCLUDES:

* the replacement of individual relays, selector switches, protection and/or control panels.

Retained Gas Distribution Networks

The 4 Gas Distribution Networks retained by National Grid

Return seeking assets

Assets which may be exposed to greater risk, but where the potential return is higher than low risk assets (e.g. equities)

Royalties Revenues

Revenue earned from intellectual property generated through eligible NIC projects

Returned Royalties Income

Revenue earned from intellectual property generated through eligible NIC projects less any Directly Attributable Costs, and that is payable to customers under the NIC, as calculated in accordance with the NIC governance document.

Retained NIC Royalties

Total royalties earned through all NIC projects to be retained by the licensee

**S**

Salary / staff costs

Includes: salaries and wages, national insurance contributions, overtime standby and other allowances, all ongoing pension costs and incremental deficit repair payments, share based schemes, and sick pay and sickness benefits.

Security (pertaining to SO):

Shall mean costs (operating and capital expenditure) for enhanced security activities as specifically directed by Department of Energy and Climate Change (“DECC”) or the Centre for the Protection of National Infrastructure (“CPNI”).

Scheme

Schemes are individual constituent elements of a project. Each scheme will refer to a planned engineering activity that is intended to achieve a distinct and measurable purpose. The purpose will be electrical in nature (e.g. MW) and/or physical in nature (e.g. construction of new assets, overhead line or underground cable, the costs of these assets are charged to all users of the NETS via TNUoS charges).

**T**

TIRG

Transmission Investment for Renewable Generation

Totex

see Appendix 2

Transmission Licence Fee

Payments by the licensee to the Authority determined in accordance with the standard licence conditions, net of any credit notes issued by the Authority in respect of such payments[[11]](#footnote-12).

**U**

Uncertainty Mechanisms (UMs)

To address the uncertain demand for network investment driven by the Net Zero goal, various UMs provide access to revenue as the need, cost, or timing of works becomes clearer. These mechanisms ensure flexibility and that consumers fund projects only when their benefits are evident.

Appendix 2 – Definition of Totex

**Introduction**

2.1. The Regulatory Asset Value (RAV) is a key building block of the price control review. RAV represents the value upon which the companies earn a return in accordance with the regulatory cost of capital and receive a depreciation allowance. Additions to the RAV are calculated as a set percentage of totex. Totex is dealt with as follows:

* an agreed percentage of Totex(see below) will be funded as slow money (i.e. as an addition to RAV)
* the remainder will be funded as fast money (i.e. which is expensed and funded in the year of expenditure)

2.2. At the end of each year of a price control, as part of the Annual Iteration Process, we publish an updated ET Price Control Financial Model (PCFM) which gives an indicative updated RAV for each licensee. In ascertaining these values it is important that the treatment of expenditure that licensees incur in this period is consistent with the principles and specific issues set out in the Final Determinations – that is, the same constituents of costs are included as Totex. We add all costs on a normal accrual’s basis. This excludes provisions, except for the actual cash utilisation thereof.

**Definition of totex**

2.3. The annual net additions to RAV will be calculated as a percentage of totex. Totex consists of all the expenditure relating to a licensee’s regulated activities with the exception of:

* all costs relating to de minimis activities;
* all costs relating to Directly Remunerated Services (with the exception of capex relating to sole use connections);
* pension deficit repair payments relating to the established deficit and for the avoidance of doubt, all unfunded early retirement deficiency costs (ERDC) post 1 April 2004;
* costs associated with specific incentive schemes;
* all statutory or regulatory depreciation and amortisation;
* profit margins from related parties (except where permitted as defined below);
* costs relating to rebranding a company’s assets or vehicles following a name or logo change;
* fines and penalties incurred by the licensee (including all tax penalties, fines and interest) except if, exceptionally Traffic Management Act costs can be shown to be efficient;
* compensation payments made in relation to standards of performance;
* bad debt costs and receipts (subject to an ex post adjustment to allowed revenues);
* any cost reporting which is not on a normal accruals basis as referred to in paragraph 1.2 above (for the avoidance of doubt, accruals to recognise the present value obligation to the defined benefit pension scheme (in accordance with International Accounting Standard 19) are excluded from totex);
* costs in relation to pass-through items, including business rates (except for business rates on non-operational buildings)
* interest, other financing and tax costs[[12]](#footnote-13) (except for business rates on non-operational buildings and stamp duty land tax); and
* legacy adjustments.
* any costs or Legal fees incurred relating to an application for a Judicial Review or an appeal to the CMA in respect of a decision made by Ofgem.[[13]](#footnote-14)

2.4. It should also be noted that:

* any change in the Totex amount for the licensee under the Totex Incentive Mechanism (TIM) is included as an adjustment to fast/ slow money;
* pension deficit repair payments relating to any incremental deficit (i.e. not part of the established deficit) are considered to be part of the licensee’s labour costs and as such are part of Totex; and
* customer contributions (which mainly relate to connection works) and other proceeds received (including from legal and insurance claims) that relate to the transmission business are treated as an offset to Totex expenditure, unless specifically subject to different treatment under the Cost and Revenue reporting RIGs.

2.5. For avoidance of doubt, in each case normal ongoing pension service costs will follow employment costs in each activity to RAV.

2.6. Costs added to RAV are all intended to refer to costs incurred by the licensee or a related party of the licensee undertaking regulated business activities. Where those costs are recharged to the licensee, they should not include any internal profit margins of the licensee or related party, except where permitted. The treatment of related party margins is set out in paragraphs 2.16 to 2.21 below.

2.7. For the avoidance of doubt costs that are eligible for a reopener mechanism will follow the Totex treatment as set out above at the time they are incurred.

**Other RAV requirements**

**Efficient costs**

2.8. Ofgem reserves the option to disallow costs from the RAV for any of the Totex expenditure if they do not relate to the regulated business or are demonstrably inefficient or wasteful. We will specifically review all costs in relation to restructuring of a company’s business or operations in relation to corporate transactions, including the associated redundancy costs to satisfy ourselves that these costs are efficient and will deliver future savings for the benefit of the consumer.

**Restated costs**

2.9. For all costs, in whatever category, activity or exclusion, where a company makes any restatement of costs, we will apply these into the year in which they were originally incurred rather than in the year of the restatement.

**Related party costs**

2.10. Related party costs are only included within Totex to the extent they represent the cost of services required by the licensee’s business. Costs for services recharged to the licensee by a related party[[14]](#footnote-15)wide will only be admissible if the licensee would otherwise have needed to carry out the service itself or procure it from a third party. We expect these services and associated costs to be itemised and justified. Such costs are only included to the extent that they satisfy the criteria regarding the prohibition on cross-subsidy in the relevant standard or standard special licence condition unless licensees already hold derogations.

2.11. All companies and related parties charging the licensee should be able to demonstrate they have a robust and transparent framework governing the attribution, allocation and inter-business recharging of revenues, expenses, assets and liabilities. There should be documented procedures to demonstrate compliance with EU Procurement directives and implementing national legislation where these apply.

2.12. We expect the network company to be able to justify the charge by reference to external benchmarking, or by reference to market-related testing, or tendering. We expect related parties to be able to support their charges by either service level agreements or contracts; and that such contracts would be finalised on a timely basis and not remain in draft for an unreasonable period[[15]](#footnote-16).

2.13. The attribution of costs relating to shared services must be on a demonstrably objective basis, not unduly benefiting the regulated company or any other company or organisation and be based on the levels of service or activity consumed by each entity. We expect licensees to document the basis on which they approve these at board level and provide evidence of this together with details of how the continuing assessment and challenge, annually takes place.

2.14. The basis should be consistent from year to year and where there are changes the licensee should both document and justify them.

2.15. The method used to attribute costs from the related party to the licensee and to activities should be transparent and the revenues, costs, profits, assets and liabilities separately distinguishable from each other.

**Related party margins**

2.16. We will exclude related party profit margins from costs added to RAV unless the related party concerned earns at least 75 per cent of its turnover from sources other than related parties and charges to the licensed entity are consistent with charges to external customers. For this purpose, we consider an entity to be a related party if it is an affiliate or related undertaking or if that entity and the network company have any other form of common ownership. A key indicator of entities being in common ownership is that they are affiliates of the ultimate controller (or controllers where there is more than one).

2.17. Where network operators utilise captive insurance companies, these shall be excluded from the related party exclusion. We will not allow any excess losses relating to these captive insurers (to the extent that they are covered by captive insurers) to be funded by customer.

2.18. When an entity ceases to be a related party, for example on a change in ultimate controller, then from the time it ceases to be a related party its margins will be allowable, if it meets the following requirement. There must be an unambiguous demonstration that its charges to the transmission business (in the original or amended contract) remain competitive and are in line with market rates, or the contract was re-tendered and that there was more than one bidder.

2.19. Whilst not precluding other demonstrations of competitiveness, we consider that an open competitive tender is likely to be the clearest indicator. In the absence of an open competitive tendering exercise, we will seek strong evidence that the terms of any contract are competitive.

2.20. Irrespective of whether the network company demonstrates competition and they no longer disallow margins, the licensee must arrange to comply with the requirements of the relevant standard or standard special licence condition (on the maintenance and provision of information). It must continue to report the former related party’s costs and margins as if it were still a related party for the remainder of the price control period. The data is required in order for us to be able to monitor performance against the price control and carry out cost analysis to inform future reviews.

2.21. Where a principal related party resource provider[[16]](#footnote-17) ceases to be a related party during a price control period, for example on the restructuring of a group, we shall continue to treat them as a related party until the end of that price control period and we will continue to disallow the margins charged. At the next price control period the margins will be allowed provided that there is unambiguous demonstration that the charges to the regulated business (in the original or amended contract) remain competitive and are in line with market rates, or that the contract is re-tendered and that there is more than one bidder.

Appendix 3 – Indirect/Direct Definition Tables

Manufacturing Configuration Design/Functional Design Table

|  |  |  |  |
| --- | --- | --- | --- |
| **Classification** | **Direct/****Indirect** | **Examples** | **Comments**  |
| **Manufacturing Configuration Design – Non-Route** | Direct | * Circuit breaker:
	+ Manufacturer design of CB
	+ Such as: design to meet TRV requirements, Fault Rating requirements, bespoke design requirements.
* Transformer:
	+ Manufacturer design of Transformer
	+ Such as: design to meet impedance requirements, fire risk requirements, bespoke design requirements.
* GIS Building Design:
	+ Structural Design
	+ Materials engineering
	+ Lighting systems
* Temperature control systems
 | The example Asset Specific Designs are those which the licensee does not have direct control over. The decisions on how to meet the specification in function design are for the manufacturer/contractor to determine.  |
| **Functional Design – Non-Route** | Indirect | * Substation Layout drawings ready for construction
	+ Specification for Circuit breakers
	+ Specification for Transformer
* Transformer layout design including:
	+ Cooler bank position
	+ Auxiliary systems position
	+ Civil design for plinth and bund
* GIS hall design:
	+ Height, width and length of GIS Hall
	+ Location of staff welfare
	+ Location of relay/control rooms
	+ Location of stores
	+ Positioning of switchgear within building.
 | The example design activities are works which the licensee has direct control over and heavily influence the short and long term efficacy of the intervention which they are planning. These decisions may have overlap and interaction with Asset specific design works, but the licensee retains control in these types of design.  |
| **Manufacturing Configuration Design – Route** | Direct | * OHL:
	+ Design of Main Body strengthening
	+ Design of Cross arm strengthening
	+ Design of Muffs, ACDs, Signage
	+ Design of Spacers
	+ Design of Dampeners
* Cabling:
	+ Design of Joint Pits
	+ Design of Jointing
	+ Design of cross bonding
 | These are specific design works which may be bespoke to the individual Tower, Pole or Cable Route. We note that this design work is for the contractors/supplier to meet the requirements of the specification which the licensee used to procure works.  |
| **Functional Design –Route** | Indirect | * OHL:
	+ Route Corridor Analysis
	+ Tower and Pole Positioning
	+ Tower Angles
	+ Vertical Clearances
	+ Tower and Construction Access
* Cables:
	+ Route Corridor Analysis
	+ Entry/exit from Substations/CSEs
	+ Cable Burial Depth
	+ Ducting Requirements
	+ Joint Bay Positioning
 | The example design activities are works which the licensee has direct control over and heavily influence the whole life costs of the route which is planned. These decisions may have overlap and interaction with Manufacturing Configuration design works, but the licensee retains control in these types of design. |

Design Definitions Table

|  |  |  |
| --- | --- | --- |
| **Design Definitions**  | **Direct/ Indirect** | **Description**  |
| *Stage 1* | Indirect | System Design level drawings which is compliant with SQSS and where applicable Grid Code |
| *Stage 2* | Indirect | Provides a Layout drawing at 3 phase level which does not include the as found environment. E.g. does not include civils related works, access related.Includes Route maps, Tower Positions, Cable Routes |
| *Stage 3* | Indirect | Provides layout drawings on the as found (or built) environment. This will include such elements as:Maintenance access checks, clash management, civils design, access design, fittings design, CSE design, Downleads design and other elements. Includes Tower types, Tower Angles, Tower access |
| *Stage 4* | Direct | Provides detailed design down to the level of design where assets are physically connected such as:BusBar clamps, expansion joints, multicores, temporary works, etc.Jumper design, cable joint pit locations, cable spacing and backfill |
| *Stage 5* | Direct | Design works which are included in the construction of assets, or specific design elements which are designed on site to account for construction designs. This includes items such as:Layout areas, Hardstanding areas for access, temporary fencing, temporary welfare etc. |

Project Management Definitions Table

|  |  |  |  |
| --- | --- | --- | --- |
| **Stage** | **Title** | **Direct/ Indirect** | **Example deliverables (not exhaustive)** |
| **Identify** (Internal) | Identify need and opportunity for the project | Indirect | * Management of system / network or asset condition studies
* Development of design management plan
* Management of any Procurement, Insurance or Legal considerations
* Development of sustainability plan
 |
| **Develop**(Internal) | Develop the project through to planning submission | Indirect | * Management of project plan / milestones
* Management of design /engineering team (internal or external)
* Management of tender process
* Management of business case preparation
* Management of risk register
* Management of planning applications and community consultations processManagement of design/development contracts or early contractor involvement contracts (i.e. functional design)
* Management of contracts
* Management of risk registers, health and safety plans
 |
| **Refine**(Internal) | Refine the design, engage with the supply chain and secure funds | Indirect | * Management of project plan / milestones
* Management of tender process
* Management of work instructions development
* Management of manufacturing design process
* Management of planning applications including discharge of consents
* Management of contracts
* Management of risk registers, health and safety plans
 |
| **Execution**(Internal) | Execution of the design, i.e. build and energise the asset | Indirect | * Management of contracts
* Management of risk registers, health and safety plans
* On-site supervision and technical guidance.
* Quality checks on work undertaken.
* Organising network access and outages
* Arranging energisation of asset
 |
| **Handover**(Internal) | Handover the asset to operations and monitor conditions through the defect period. | Indirect | * Management of commissioning plan
* Management of handover plan
* Management of closure report
* Management of engagement with operations
* Management of defects process
* Management of lessons learnt process
 |
| **Identify, develop, design and refine**(External) | Identify need, develop and refine the project | Indirect | * Management of bid / tender process where appropriate
* Management of project plan / milestones
* Management of risk registers, health and safety plans
* Management of on-site works, including GI, marine surveys, preliminary works etc
* Management of work instructions and clarifications with client
* Management of client
* Management of interfaces with other contractors
* Management of sub-contractors
* Management of materials and placing of orders
* Management of plant and machinery
* Management of manufacturing design process
* Management of any preparatory or preliminary works
* Management of planning applications including discharge of consents
 |
| **Execution and handover**(External) | Execution of the design and handover i.e. build and energise and handover the asset | Direct | * Management of contracts
* Management of risk registers, health and safety plans
* Management of client
* Management of subcontractors
* Management of materials and placing of orders
* Management of plant and machinery
* Management of interfaces with other contractors
* Management of On-site construction works including civils, electrical engineering, site set up
* Quality checks on work undertaken.
* Management of commissioning plan
* Management of handover plan
* Management of closure report
* Management of defects process
 |

1. Totex is provisional as it may be adjusted as a result of subsequent efficiency reviews or for the correction of any errors either after the 31 July or in subsequent years. [↑](#footnote-ref-2)
2. Pension Regulatory Instruction and Guidance Version 3.0: <https://www.ofgem.gov.uk/publications/decision-modify-regulatory-financial-performance-reporting-rfpr-and-pension-regulatory-instructions-and-guidance-rigs-riio1> [↑](#footnote-ref-3)
3. delivery of outputs in line with the original ‘baseline’ assumptions but where the method employed by the network company differs in some regard. [↑](#footnote-ref-4)
4. For the following categories: Local Enabling (Entry), Local Enabling (Exit), Wider Works, Local Enabling (Exit - Sole Use), Local Enabling (Entry - Sole Use), TSS Infrastructure, Replacement, Refurb\_Major, Refurb\_Minor and Decommissioning. [↑](#footnote-ref-5)
5. For the following categories: Spares, Black Start, Losses, Non-Operational capex, Network Operating Costs (e.g. Inspections), Indirect costs (CAI and BS) and Other Costs within the price control (e.g. Physical security). [↑](#footnote-ref-6)
6. The impact of RPEs is captured as a single data entry adjustment in the A8\_allowance worksheets. [↑](#footnote-ref-7)
7. SIF Governance Document: <https://www.ofgem.gov.uk/publications/sif-governance-document> [↑](#footnote-ref-8)
8. A typical example of this relates to where their ‘connection’ involves both connection (referred to as “A1”) and infrastructure assets (referred to as “H1”). In this case the infrastructure assets are represented by an OHL (the most economic technical solution) which is necessary to integrate the connection assets associated with a wind farm (for example) to the Main Interconnected Transmission System. Due to the (anticipated) longer timescales associated with planning consents for an OHL, the customer chooses to be ‘connected’ by an underground cable to the MITS. In these cases, the customer will pay the difference between the actual cost of the installed solution (cable) and the design cost of the most economical solution (OHL). Historically, this has had to be through Capital Contributions. [↑](#footnote-ref-9)
9. This included columns F (Spares), G (Black Start), H (Losses), J (Non-Op capex), L to R (NOC categories), T (CAI) and U (BSC). [↑](#footnote-ref-10)
10. NOTE: Post settlement we may update the text to reflect output categorisation e.g. safety, reliability, availability, environment, customer satisfaction, connections and wider works. [↑](#footnote-ref-11)
11. Further detail on the licence fee cost recovery principles can be found in the following document available from Ofgem website: <https://www.ofgem.gov.uk/publications/licence-fee-cost-recovery-principles-2021> [↑](#footnote-ref-12)
12. Tax costs include corporation tax, capital gains tax, recoverable valued added tax and network rates [↑](#footnote-ref-13)
13. Notwithstanding the above, Ofgem shall pay all legal fees and cost awarded against it by the Judicial review body and the CMA. [↑](#footnote-ref-14)
14. A related party is a term used to cover both Affiliate and Related Undertakings as defined in Standard Licence Condition 1 for electricity transmission and standard special licence condition for gas transportation [↑](#footnote-ref-15)
15. Whilst not defined, we expect licensees to demonstrate to our satisfaction why a period in excess of 6 months was reasonable [↑](#footnote-ref-16)
16. A principal related party resource provider is one that has a contract to operate or manage a substantial part of a licensee's day-to-day operations, and that the licensee entered into the contract before or as part of the arrangements for a change in ultimate controller, or controllers, where there is more than one [↑](#footnote-ref-17)