

PR5 and PR6 TSO Opex Cost Assessment

CRU

27 June 2025



FINAL REPORT

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EXECUTIVE SUMMARY

This report provides CEPA's review and analysis of the Price Review 5 (PR5) and Price Review 6 (PR6) operating expenditure (opex) submissions made by EirGrid as Transmission System Operator (TSO) for the years 2021-2030. A summary of the findings from the review are provided below in Table 1.

Table 1: Executive summary

TSO Opex (€m, 2024 prices)	Ex Ante PR5 Allowance	PR5 Outturn	Ex Post PR5 Allowance	PR6 Request	PR6 Allowance	PR6 Allowance to PR5 Outturn Variance		PR6 Allowance to PR6 Request Variance	
						Total	%	Total	%
Staff costs ¹	207.3	189.0	189.0	430.6	330.6	141.6	75%	-96.3	-22%
Staff related costs ¹		11.5	11.5	22.0	18.6	7.1	61%	-3.2	-15%
Contractor	9.8	40.4	40.4	120.7	83.6	43.2	107%	-37.1	-31%
Telecommunications	32.4	27.5	27.5	39.9	38.9	11.4	41%	-1.0	-3%
Premises	34.6	32.4	32.4	46.0	38.9	6.4	20%	-7.1	-16%
IT Costs	47.5	43.9	43.9	138.0	117.7	73.8	168%	-20.3	-15%
Insurance	1.8	4.5	4.5	4.8	4.5	0.08	2%	-0.3	-5%
Public engagement	15.9	11.3	11.3	11.3	11.3	-0.02	-0%	-	-
Professional services	25.0	42.1	42.1	130.5	100.3	58.2	138%	-30.1	-23%
Grid Maintenance & Client Engineering	3.9	5.0	5.0	6.7	5.5	0.39	8%	-1.4	-20%
Rates	3.5	3.1	3.1	2.9	2.9	-0.17	-6%	-	-
Promotion of research	2.7	2.5	2.5	12.6	7.3	5.0	202%	-5.1	-41%
Intercompany - Payroll recharges	-18.2	-27.5	-27.5	-15.9	-15.9	11.6	-42%	-	-
PR5 Reporting Requirement	0.9	-	-	-	-	-	-	-	-
Total Controllable Opex	367.2	385.7	385.7	950.3	744.2	358.5	93%	-206.1	-21%

Source: CEPA analysis.

Based on our ex post assessment, we recommend that the TSO recover its PR5 Outturn expenditure in full. Our recommended PR6 allowance totals €744.2m, which represents an increase of €358.5m, or 93%, relative to the PR5 Outturn expenditure. Relative to the PR6 request, our recommendation is €206m lower, or 21% less.

We are proposing to introduce a reopener mechanism for Staff and Staff related opex in PR6. Through this mechanism the TSO will have the ability to access an additional €80.2m of allowed opex resulting in a high case controllable opex allowance of €824.4m as compared to the baseline allowance of €744.2m as summarised in Table

¹ We are proposing a reopener mechanism for Staff and Staff related costs, which is explained further in Section 3.2.3. Furthermore, Staff and Staff related costs were allowed as one single cost category in the PR5 Final Determinations.

2 below. This increase has been estimated by allowing the requested FTE amounts, as will be discussed in Section 3. The high-case allowance of €824.4m is €125.7m (13.2%) lower than the TSO's request of €950.3m.

Table 2: TSO baseline allowance and high case allowance

TSO Opex (€m, 2024 prices)	Baseline allowance	High case allowance
Total Controllable Opex	744.2	824.4

Source: CEPA analysis

While we have proposed a targeted reopener mechanism for Staff and Staff related costs, the annual reopener window that will apply under the PR6 Agile Investment and Monitoring Framework (AIMF) does not preclude the TSO for seeking variations to its baseline opex allowance for other purposes. The requirements for triggering such a reopener are set out in the CRU's regulatory framework document, but at a high-level will require the TSO to demonstrate the need, additionality and cost confidence / efficiency of its request.

As is discussed in the CRU's regulatory framework document, the proposed high case allowance is not intended to be a hard cap on the additional opex allowance that can ultimately be released via the AIMF. There is no cap on the allowed revenue that CRU may ultimately approve based on proposals that are brought forward by the TSO under the AIMF. The high case is rather a statement of intent of the envelope of TSO opex – based on current known information – that can be accessed via the AIMF.

It should be noted that there may be some small inconsistencies in summed values in this report due to rounding errors. Furthermore, where there are differences due to rounding between this paper and the rounded values that have been across the CRU's Draft Determination papers, the values in the CRU's papers should be taken to be the recommended allowances.

1. INTRODUCTION

EirGrid carries out the function of Transmission System Operator (TSO). This report sets out the TSO's operational expenditure (opex) over the PR5 (2021 to 2025) and PR6 (2026 to 2030) periods.

The review considers the costs, systems processes, and initiatives of the TSO over PR5 and identifies key issues to be considered in PR6. The report then reviews the TSO's proposals for expenditure in PR6 and makes recommendations on the level of expenditure, outputs and, if applicable, a regulatory framework to be allowed by the Commission for Regulation of Utilities (CRU).

1.1. DATA SOURCES AND ASSUMPTIONS

The review has been informed by EirGrid's Business Plan submission, Business Plan Questionnaire (BPQ) data table and supporting information papers. Further information was also provided through workshops and engagements between the CRU and EirGrid, and in response to Supplementary Questions (SQs) that were raised.

Unless otherwise stated, all prices within this document are expressed as real prices at 2024 price levels, based on the Harmonised Index of Consumer Prices (HICP).

Again, unless otherwise stated, all recommended PR6 allowances set out in this document are before the application of Real Price Effects (RPEs) and Ongoing Efficiency (OE). Please refer to CEPA's PR6 Inflation trends and OE paper (CRU202593) for our proposals on RPEs and OE and CRU's PR6 Summary paper (CRU202586), which sets out PR6 allowances before and after the application of RPEs and OE.

1.2. OUR APPROACH

Our approach is structured into two parts: the PR5 lookback assessment and the PR6 look forward assessment. Our approach to the review can be described in two parts:

- A 'bottom-up' ex post assessment (or 'lookback' assessment) of network companies' PR5 allowances and PR5 outturn expenditure, as well as output delivery, and efficiency throughout PR5; and
- A 'bottom-up' ex ante assessment (or 'look forward' assessment) of network companies' forecast costs, planned delivery, and efficiency for PR6.

For the PR5 lookback assessment, we evaluate the TSO's performance against the allowances and associated outputs, where appropriate, set by the CRU. Specifically, our focus is on whether there was an underspend or overspend during the period against PR5 allowances and what were the drivers and/or justification for this. We also consider whether any overspends were due to inefficiencies or if underspends were the result of under delivery of outputs, or efficiency gains.

For the PR6 look forward assessment, we have utilised an analytical approach commonly known as 'base-trend-step' to estimate PR6 allowances. This three-step approach relies on a long-established regulatory precedent for setting future allowances on the basis of the latest available evidence on actual outturn costs. This methodology is described in more detail below.

1.2.1. PR5 Lookback

In the PR5 lookback, we evaluate the TSO's performance against the allowances and associated outputs, where appropriate, set by the CRU. We also assess whether any overspend was the result of inefficiencies, or if an underspend reflected under-delivery or genuine efficiency gains.

The objective of this review is to evaluate the TSO's performance in meeting the outputs required by the CRU during PR5, and to determine whether the costs incurred in achieving these outputs were efficient and aligned with expectations.

The Opex allowance set by the CRU is divided into controllable and non-controllable Opex. Controllable Opex refers to costs that are within management's control, while non-controllable Opex pertains to costs considered

outside of management's control and, therefore, passed through to network charges via the annual revenue review process.

Our comparison of allowed versus actual Opex is approached from two key perspectives:

- For any reported differences between actual and allowed Opex, we have conducted a detailed analysis of the evidence submitted by the TSO to explain variances in outputs and costs. This analysis aims to assess whether any underspend results from efficiency gains or under-delivery of outputs.
- For any reported overspend, we assess whether the TSO has demonstrated that the costs are efficient or the result of over-delivery of outputs.

1.2.2. PR6 Look forward: Base-Trend-Step Methodology

For the PR6 look forward assessment, we recommend an allowance for the period using a base-trend-step methodology to estimate the controllable opex. Below is a high-level overview of our approach; a full description can be found in the Overview Document. Our method is both well established and transparent, and it specifically addresses the unique challenges involved in assessing and setting efficient costs.

Introduction

The TSO does not have any direct domestic comparators against which its costs could be benchmarked:

- The separation of responsibilities between the TSO and TAO is relatively unique by international standards.
- In principle, the TSO could be benchmarked against international comparators. However, such international comparators typically operate under quite different regulatory, governance and operational environments, which means that it is currently difficult to place much weight on the results of such benchmarking to set the TSO's cost allowance. For example, the electricity system operator (ESO) in Great Britain was established as an independent entity within the National Grid group in April 2019. However, there are important differences between the EirGrid TSO and GB ESO roles, and how they are remunerated under the regulatory regime. Independent system operators exist in other countries (e.g. parts of the USA and Australia) but they tend to be publicly owned and/or regulated on a not-for-profit basis.

Based on the above, we consider that a top-down benchmarking approach would be difficult to implement at present and could give misleading results. As a result, we have set out an approach that builds upon the bottom-up assessment that was taken in PR5. For each cost category, we have applied an analytical approach that is commonly known as base-trend-step. As the name suggests, the approach consists of three analytical steps:

- identifying an efficient base level of opex that forms the starting point for future costs;
- projecting a forward trend in costs based on cost drivers and other assumptions; and
- identifying any step changes to scope that would result in changes to costs (positive or negative) that are additional to the trend.

Step 1: Approach to setting the PR6 base

This step establishes an efficient starting point for the PR6 opex allowance. Establishing an efficient cost base is important to ensure that outturn inefficiencies or forecasting uncertainties for the latter years of PR5 are not implicitly rolled over into the PR6 control period. Additionally, our understanding of the base is that it represents the fixed, recurring costs necessary to maintain a current level of operations.

There are a number of challenges involved in setting the base for the TSO. In its business plan submissions, the TSO has outlined several changes and events that resulted in an increase of outturn costs during PR5. An example for this would be the Security of Supply Programme which increased Contractor and Professional services costs. The TSO has requested that the base is set on their best 2024 forecast estimate at the time of TSO's business plan submission, with an additional increase meant to reflect values from 2025. These costs are intended to reflect the business-as-usual (BAU) operational costs from PR5 and are assumed to provide a coherent base for PR6.

However, as they have already been inflated by unforeseen and non-recurring events, we do not consider them a reliable starting point. The base should instead reflect the fundamental costs required to sustain operations.

Our preferred approach is to set the base on actual outturn costs incurred in by the licensee, and then adjust for new volumes of activity and new outputs through the trend and step. Additionally, we aim for our base to reflect BAU costs. Consequently, if costs grew (or declined) due to unexpected and unforeseen events, that we consider will not take place again, then we should correct for those factors in order to correctly reflect BAU costs.

We believe that the average of 2023 and 2024 is the best starting point for measuring the base, and this is mainly for three reasons. First, we aim to avoid year or year volatility, which refers to fluctuations in costs that may occur in a given year due to unforeseen factors, and are not a true reflection of BAU activities. This suggests that using more than one year is necessary to estimate the base. Second, we want to use up-to-date values, meaning we aim outturn values that are as close to the start of the PR6 period as possible. For this reason, we have prioritised using outturn years from 2023 onwards. The underlying assumption is that the closer the actual values are to the start of PR6, the better they will reflect BAU costs associated with BAU activities. Finally, we want to use actual, realised costs. This means we prefer to consider costs that the TSO has already incurred, avoiding forecasts unless there are clear reasons to use them. For these reasons, unless specified otherwise, our default base for the TSO will be the average of years 2023 and 2024.

On a case-by-case basis, we have adjusted our default approach to setting the base where there is evidence to suggest that the approach set out above could represent an inappropriate base for PR6. This has been informed by our ex post review of the TSO's opex over PR5. For example, there are cases, such as Professional services or Contractor costs, where we do not consider PR5 outturn costs are an accurate reflection of what BAU costs will be looking into PR6. Therefore, in cases such as these, we have adjusted the base.² Finally, where the TSO's proposed base is lower than our assessed base, our default position is to select the TSO's proposed base (this is commonly known as a 'ratchet'). This is consistent with the approach that has been taken at PR5 and in previous price reviews.

Step 2: Applying a trend projection

After establishing the base, we forecast how efficient costs may evolve over PR6. The cost projection for PR6 could be based on identifying relevant cost drivers for the category of costs. We define a trend adjustment as the growth in unit costs and volume of an underlying cost driver, which is independent of any step-change, programme, or structural change, as well as the unit cost increases captured by RPEs or OE improvements.

The nature of the TSO's business means that costs are not typically directly related to cost drivers, such as energy volumes or the number of connected customers. This is supported by the TSO's PR5 and PR6 submissions, which highlighted that it considers costs such as telecoms, premises, IT, insurance, grid maintenance, and rates as fixed costs relative to the continuing operation of the company. Our analysis identified only two variables can be clearly linked to a cost driver: staff and staff-related costs, both of which are tied to the number of FTEs. Even in this case the cost driver is an internal driver under the control of the TSO as opposed an external cost driver related to the intrinsic features of the network / electricity system.³

It is important to note that some costs submitted by the TSO as trends in its business plan submission have in our assessment been reinterpreted as steps. This applies when no clear cost driver is identified by the TSO, meaning we cannot determine volume growth or unit cost growth. In such cases, the only appropriate approach is to treat these costs as steps, following the framework outlined in the section below.

As noted above, our trend projection for individual cost categories exclude any RPEs or OE. We provide our views on RPEs and OE in a separate report.

² For example, in some cases, we have adjusted the PR5 outturn to be more aligned with costs in the CRU's PR5 allowance.

³ Such as energy demand or customer connections.

Step 3: Identifying step changes

The final step in our approach is to identify whether there are any changes in the outputs the TSO is expected to deliver in PR6 that are not captured by the trend. In general, step-changes will account for new initiatives and requirements faced by the TSO during PR6. For example, a one-off change in regulatory scope may increase or decrease opex. Similarly, the decision to switch from funding an activity through an opex solution rather than a capex solution could be accounted for in a step change. Step changes can be positive (i.e. increase efficient opex) or negative (i.e. reduce efficient opex).

This step in our methodology is based on our evaluation of the TSO's business plan against the following criteria and gateways:

- **Need:** is there clear evidence that there is expected to be a change in the activities or costs incurred by the TSO? Have the aims and objectives of the step-change been set out? Has it been clearly aligned to the strategic objectives the CRU has set out for PR6? We apply a pass / fail criterion to this gateway.
- **Mapping to the BPQ submission:** has the TSO clearly mapped the step-change to its BPQ? We apply a pass / fail criterion to this gateway.
- **Additionality:** has it been clearly demonstrated that the costs associated with the proposed step-change are additional relative to the base level of opex? This question is not equivalent to asking whether the initiative / project is new or unique. For example, a brand-new IT application could replace an existing application in such a way that there is no additional cost to the consumer. Therefore, we assess whether the TSO demonstrated that existing resources are fully exhausted and additional resources are required to deliver the proposed step-change. A cost challenge of up to 25 percent is applied if we conclude that the TSO has not demonstrated additionality.
- **Cost confidence / customer value / efficiency:** has it been clearly demonstrated that the costs associated with the step-change are efficient? Have other options been explored that could achieve the same outcome? What metrics have been used to test that the requested costs are efficient? Has the TSO provided evidence that costs have been market-tested or benchmarked? Is there a cost build-up for the proposed step? Is there a clear demonstration of customer value associated with the outcomes of the step-change? Was a range of options considered? A qualitative judgement is required in cases where there is a lack of benchmarking data available to assess cost efficiency - for example, if the activity has not been delivered by the TSO before and/or comparators are not available. A cost challenge of up to 25 percent is applied in these cases where we conclude that the TSO has not demonstrated cost efficiency and customer value of the step-change.

The first two gateways are pass / fail. This means that if we do not consider that the need for a step-change has been clearly set out, or if the TSO has not clearly mapped the step-change to the BPQ, our recommendation is that the step-change is not included in the allowance the CRU sets. The latter two gateways can have a partial pass, with up to a 25 percent cost challenge applied at each gateway.

It is important to recognise that in the context of a price review, the obligation is on the TSO to demonstrate the need, additionality, and efficient level of forecast step changes in expenditure. The adjustments we make in the final two gateways, however, should also not be viewed purely as an efficiency challenge. Rather than a binary pass-fail system for these gateways, the adjustments we have applied are intended to signal to the TSO during the PR6 consultation process that further information and evidence is needed to establish that the additional level of funded expenditure should be included in the allowances. This means that where sufficient evidence and information can be provided by the TSO as part of its response to the PR6 consultation, we would expect to revisit the adjustments we have made in these two final gateways.

Lastly, for certain cost categories linked to or driven by non-network capex, there are cases where we apply a challenge equivalent to the additionality and efficiency challenge in our assessment. This approach involves taking the capex challenge that has been proposed by GHD in their non-network capex assessment and applying a proportion of this to opex, based on an assumption that opex is less elastic than capex. In other words, if a capex programme is reduced, while this might be expected to also reduce opex, certain operational and managerial costs

may be expected to remain fixed and less subject to change. Where we have made such adjustments, they serve as a consolidated equivalent to the additionality and efficiency challenge in our methodology.⁴

1.2.3. Scope of analysis

In this report we perform an ex post assessment of the costs the TSO incurred during PR5, and an ex ante assessment of recommended allowances for PR6. We only provide a recommendation for costs within the controllable opex category and so report the TSO's current BPQ forecasts for non-controllable costs in presenting proposals for the ex-ante opex allowances for PR6.

1.3. REPORT STRUCTURE

The rest of this report is structured as follows:

- In Section 2, we provide our ex post review of the TSO's PR5 outturn opex as part of our lookback exercise, our assessment of the TSO's performance, our recommendations in terms of any disallowances to outturn expenditure and the implications for the ex ante setting of PR6 allowances; and
- In Section 3, we provide our review of the TSO's PR6 requested opex as part of our look forward exercise. Our assessment is based on the base-trend-step approach and this section is structured on that basis. We provide our recommendations in terms of challenges or adjustments to the TSO's PR6 request, and the supporting rationale for this.

⁴ The detail on these challenges can be found in Section 3.7.3.

2. REVIEW OF PR5 OPERATING EXPENDITURE

2.1. OVERVIEW OF PR5 OPEX

This section of the report reviews the reported TSO PR5 (2021 to 2025) opex and compares this outturn against the TSO's PR5 opex allowances, as determined by the CRU in the PR5 Decision Paper. The 2021 to 2023 performance and cost data are based on actual recorded values, while the 2024 and 2025 performance and cost data are based on the latest available forecast data.

Our PR5 analysis involves a detailed examination of which costs were over- or underspent, and the reasons for the differences between the outturn expenditure and the allocated allowance for the period. The largest absolute variances are primarily due to two categories: Contractor and Professional services, which were overspent by €30.6 million (312%) and €17.1 million (68%) respectively. As will be discussed in Sections 2.3 and 3.3 this overspend was driven by an increased number of outputs the TSO was required to deliver, alongside challenges in recruitment and retention of internal employees.

Table 3 presents an overview of the TSO's actual and forecast outturn costs for PR5, and the PR5 allowance. For PR5, the CRU allowed €367.2m and the TSO's forecast outturn by the end of 2025 is expected to be €385.7m. This represents a 5.1% overspend relative to the allowed costs.

Table 3: Summary of PR5 Opex Outturn costs and Allowances

TSO Opex (€m, 2024 prices)	2021	2022	2023	2024	2025	PR5 Total			
	Actual	Actual	Actual	Forecast	Forecast	Allowed	Outturn	Variance	
								€m	%
Staff and staff related costs	36.9	37.9	39.9	39.4	46.4	207.3	200.5	-6.8	-3.3%
Contractor	5.7	6.2	8.2	10.1	10.2	9.8	40.4	30.6	312%
Telecommunications	5.7	5.1	5.3	5.6	5.9	32.4	27.5	-4.9	-15.0%
Premises	5.8	5.7	5.8	7.4	7.8	34.6	32.4	-2.2	-6.4%
IT Costs	7.0	8.2	8.7	10.0	10.0	47.5	43.9	-3.6	-7.6%
Insurance and Compensations	0.9	0.8	1.0	0.8	1.0	1.8	4.5	2.7	155%
Public engagement	2.2	1.7	2.2	3.0	2.3	15.9	11.3	-4.6	-28.9%
Professional services	8.5	8.9	10.3	7.0	7.4	25.0	42.1	17.1	68%
Grid Maintenance & Client Engineering	0.9	0.6	1.0	1.2	1.3	3.9	5.0	1.1	26.9%
Rates	0.7	0.6	0.6	0.6	0.6	3.5	3.1	-0.4	-11.9%
Promotion of research	0.3	0.4	0.3	0.8	0.8	2.7	2.5	-0.2	-9.0%
Intercompany- Payroll recharges	-5.0	-5.1	-5.9	-5.8	-5.8	-18.2	-27.5	-9.3	-51%

TSO Opex (€m, 2024 prices)	2021	2022	2023	2024	2025	PR5 Total			
	Actual	Actual	Actual	Forecast	Forecast	Allowed	Outturn	Variance	
								€m	%
PR5 reporting requirement ⁵	-	-	-	-	-	0.9	-	-0.9	-
Total Controllable	69.5	71.0	77.2	80.1	87.9	367.2	385.7	18.6	5.1%
Direct costs ⁶	1,001.0	818.9	1,071.6	654.6	866.5	1,124.1	4,412.5	3,288	292%
Total Non-Controllable	1,001.0	818.9	1,071.6	654.6	866.5	1,124.1	4,412.5	3,288	292%
Exceptional Items	5.6	123.3	442.7	477.2	519.9	-	1,568.8	-	-
Exceptional Items	5.6	123.3	442.7	477.2	519.9	-	1,568.8	-	-
Total	1,076.1	1,013.3	1,591.5	1,211.9	1,474.3	1,491.3	6,367.0	4,875.7	327%

Source: EirGrid, TSO Business Plan Questionnaire.

2.2. STAFF AND STAFF RELATED COSTS

Staff and staff related costs as a category includes basic salaries, bonuses and profit related pay, social security and pension costs.

2.2.1. Comparison of PR5 Outturn vs Allowance

Table 4 compares the PR5 outturn, actual and forecast, against the PR5 allowance for staff and staff related costs. Staff and staff related costs saw an underspend of €6.8m (3.3%).

The PR5 allowances were estimated using an assumption of 286 full-time equivalents (FTEs) as a base. On top of this base, a step-change was applied in order to address a number of programmes such as Sustainability and Decarbonisation, Operate, Develop and Enhance the Grid and Market, and Engage for Better Outcomes for All.

Table 4: Staff and staff related costs in PR5

TSO Opex (€m, 2024 prices)	2021	2022	2023	2024	2025	PR5 Total			
	Actual	Actual	Actual	Forecast	Forecast	Allowed	Outturn	Variance	
								€m	%
Staff and staff related costs	36.9	37.9	39.9	39.4	46.4	207.3	200.5	-6.8	-3.3%

Source: EirGrid, TSO Business Plan Questionnaire.

We can see from the table above, that the TSO forecasts an underspend in Staff and Staff related costs. Based on the TSO's BPQ and responses to supplementary questions, we understand this underspend of €6.8m, or 3.3% less, was driven by a change in pension arrangements, and recruitment and retention challenges.⁷ Challenges in hiring

⁵ A PR5 reporting allowance was received, but it was not spent in PR5.

⁶ This Direct Costs total includes TAO payments. In Section 2.14 we clarify that we should exclude them from the final total.

⁷ During PR4, there was a 6% underspend in Staff and staff-related outturn costs compared to the allowance. This reduction was mainly due to two factors: the removal of annual company performance awards and the shift from a defined benefit to a defined contribution pension scheme, both of which helped lower unit costs. Source: CEPA/GHD (2020), Consultancy Support for Electricity Transmission Revenue Controls (2016-2025): Price Review 4 and 5, TSO and TAO Historic Opex and Capex.

internal FTEs, combined with the need for increased output from the TSO, also led to a greater reliance on external contractors to ensure critical deliverables were met on time.⁸ Some examples of these increased outputs include the Capacity Market Auctions, which doubled in frequency during PR5, and a higher volume of IT changes due to the growing complexity of data, driven by the increasing amount of renewables integrated into the grid.

2.2.2. Our Assessment

Over PR5, Staff and Staff Related costs are forecast to rise by 25% between the 2021 outturn and the 2025 forecast outturn. The largest increase, driven by a rise in FTEs, is expected to materialise in 2025. A similar pattern was observed during PR4, where the largest cost increase for staff and staff related costs occurred in the final two years of the period.

As we have seen in the previous section, the underspend has been driven by recruitment and retention challenges. Therefore, we do not consider this underspend to be the result of efficiency gains.

2.2.3. Conclusion

Recruitment and retention challenges justify the variance, and thus it is recommended to accept the PR5 outturn opex.

2.3. CONTRACTORS

Contractor costs represents expenditure related to the outsourcing of staff or services.

2.3.1. Comparison of PR5 Outturn vs Allowance

Table 5 shows that during PR5, Contractor outturn costs were €40.4m, while the total allowance was of €9.8m. This represents an overspend of €30.6m, or 312%.

Table 5: Contractor costs in PR5

TSO Opex (€m, 2024 prices)	2021	2022	2023	2024	2025	PR5 Total			
	Actual	Actual	Actual	Forecast	Forecast	Allowed	Outturn	Variance	
								€m	%
Contractor	5.7	6.2	8.2	10.1	10.2	9.8	40.4	30.6	312%

Source: EirGrid, TSO Business Plan Questionnaire.

The overspend on contractors was driven not only by challenges in recruiting internal FTEs but also by unforeseen events, such as the Security of Supply programme. These events required immediate action from the TSO, and the fastest way to deliver outputs while facing recruitment issues was to rely on external resources.

The increased reliance on external labour has had a compounding effect, as external resources are significantly more expensive than internal FTEs. Relying on external resources can also risk introducing inefficiencies due to the procurement and training of contractors who work for short periods. The TSO recognises that this dynamic is neither sustainable nor efficient, which is why it proposes that the focus for PR6 will shift toward more robust recruitment and retention methods.

2.3.2. Our Assessment

Increases in Contractor costs were driven by both atypical events and a rise in output demands from the TSO. While increasing use of external resources is not viewed as a sustainable long-term solution, due to higher unit costs and the risk of loss of retained knowledge within the organisation, we do not consider this expenditure to be

⁸ Although no explicit hiring target was set, the base number of FTEs for PR5 was 286, while the total estimated FTEs over the period amounted to 329.

inefficient. Given the recruitment challenges, the increased output requirements, and the atypical events faced by the TSO, we consider the use of external resources to have been an appropriate temporary response.

2.3.3. Conclusion

The TSO provided credible explanation for the increase in PR5 outturn. Therefore, we recommend these additional costs to be allowed.⁹

2.4. PROFESSIONAL SERVICES

Professional Services refers to costs linked to the outsourcing of services.

2.4.1. Comparison of PR5 Outturn vs Allowance

Table 6 shows that during PR5 Professional Services outturn costs were €42.1m, while the total PR5 allowance was of €25.0m. This represents an overspend of €17.1m, or 68%.

Table 6: Professional services costs in PR5

TSO Opex (€m, 2024 prices)	2021	2022	2023	2024	2025	PR5 Total			
	Actual	Actual	Actual	Forecast	Forecast	Allowed	Outturn	Variance	
								€m	%
Professional services	8.5	8.9	10.3	7.0	7.4	25.0	42.1	17.1	68%

Source: EirGrid, TSO Business Plan Questionnaire.

Similar to Contractor costs, this overspend was driven by a combination of challenges in the recruitment of internal FTEs, but also by the same atypical events described in Section 2.3.2.

2.4.2. Our Assessment

As with our assessment of Contractor costs (see section 2.3.2), we would not view increasing the use of external resources as a sustainable long-term solution for the effective and cost efficient operation of the TSO business. However, given the constraints the TSO faced in relation to internal staffing, alongside the increased output required from the organisation, we consider the overspend in this cost category during PR5 to have been appropriate. Accordingly, we do not regard these costs as inefficient.

2.4.3. Conclusion

The TSO provided credible explanation for the increase in PR5 outturn. Therefore, we recommend these additional costs to be allowed.¹⁰

2.5. TELECOMS

Cost of telecommunications systems and equipment which are used in the operation of the network.

2.5.1. Comparison of PR5 Outturn vs Allowance

Table 7 compares the PR5 outturn, actual and forecast, against the PR5 allowance for Telecoms costs. The TSO has forecast a total outturn of €27.5m in Telecoms costs compared to an allowance of €32.4m, which represents an underspend of €4.9m, and a 15% reduction.

⁹ Although the TSO offered a credible explanation for the cost increase, this does not imply the costs reflect a minimum recurring level of expenditure necessary to maintain operations. Section 3.3 explores this in further detail.

¹⁰ Although the TSO offered a credible explanation for the cost increase, this does not imply the costs reflect a minimum recurring level of expenditure necessary to maintain operations. Section 3.3 explores this in further detail.

Table 7: Telecoms costs in PR5

TSO Opex (€m, 2024 prices)	2021	2022	2023	2024	2025	PR5 Total			
	Actual	Actual	Actual	Forecast	Forecast	Allowed	Outturn	Variance	
								€m	%
Telecoms	5.7	5.1	5.3	5.6	5.9	32.4	27.5	-4.9	-15%

Source: EirGrid, TSO Business Plan Questionnaire.

The TSO has indicated that it has underspent in this category are primarily due to either a delay in programmes or due to a lower outturn in forecast connections:¹¹

- New Connections: The number of new connections was lower than forecasted, meaning fewer telecoms circuits were required which led to a reduction in opex.
- Operational IP: the TSO had projected the migration to an operational IP network with the support of ESB Networks (ESBN), but the project was delayed due to COVID-19 and resourcing constraints.
- Corporation Technology: the TSO intended to relocate its corporate data centres to co-located facilities, but the project was delayed.
- ENTSO-E Migration: the TSO is working with ENTSO-E on the new data highway, but the project was delayed due to the TSO's request for additional capital allowances under the reopening mechanism.

2.5.2. Our Assessment

The underspend during PR5 has been driven by delays, some linked to the COVID-19 pandemic. It was also driven by a lower outturn in forecast connections. This means that the lower expenditure is not linked to an efficiency gain.

2.5.3. Conclusion

We do not consider the underspend to have been driven by efficiency gains, nor do we consider the costs incurred were inefficient. The underspend appears to have been primarily driven by factors external to the business.

2.6. PREMISES

This cost category includes costs related to premises maintenance, such as the rent of The Oval building.

2.6.1. Comparison of PR5 Outturn vs Allowance

Table 8 compares the PR5 outturn, actual and forecast, against the PR5 allowance for Premises costs. The TSO has forecast a total outturn of €32.4m in Premises costs compared to an allowance of €34.6m, which represents an underspend of €2.2m, and a 6.4% reduction.

Table 8: Premises costs in PR5

TSO Opex (€m, 2024 prices)	2021	2022	2023	2024	2025	PR5 Total			
	Actual	Actual	Actual	Forecast	Forecast	Outturn	Allowed	Variance	
								€m	%
Premises	5.8	5.7	5.8	7.4	7.8	34.6	32.4	-2.2	-6.4%

Source: EirGrid, TSO Business Plan Questionnaire.

¹¹ The rationale for the in-depth explanation behind the variation between the allowance and the outturn is based on Supplementary Question, CRU-SQ-EirGrid-176.

This difference was primarily driven by two factors. First, a saving of approximately €4.3 million was secured through a rent-free period in exchange for foregoing an upcoming break clause in the lease for The Oval building. Second, there was an overspend resulting from the increased catering provision introduced after COVID-19.

2.6.2. Our Assessment

The decrease in spending has been a direct result of a break clause which allowed the TSO to enter a rent-free period for their offices. Therefore, our assessment is that these savings are not the result of efficiency gains, but, at the same time, we do not consider this expenditure to have been inefficient.

2.6.3. Conclusion

Less Premises costs are justified as a rent break clause was activated during PR5. We therefore consider that the variance is explained and we recommend accepting the PR5 outturn.

2.7. IT COSTS

The costs in this category encompass a range of services, including support for both hardware and software estates, licensing for application upgrades, and the implementation of patch and security updates. Additionally, the costs cover software upgrades, fault coverage for hardware, and support for the operational service desk.

2.7.1. Comparison of PR5 Outturn vs Allowance

Table 9 compares the PR5 outturn, actual and forecast, against the PR5 allowance for IT costs. The TSO has forecast a total outturn of €43.9m in IT costs compared to an allowance of €47.5m, which represents an underspend of €3.6m, and a 7.6% reduction.

Table 9: IT costs in PR5

TSO Opex (€m, 2024 prices)	2021	2022	2023	2024	2025	PR5 Total			
	Actual	Actual	Actual	Forecast	Forecast	Allowed	Outturn	Variance	
								€m	%
IT Costs	7.0	8.2	8.7	10.0	10.0	47.5	43.9	-3.6	-7.6%

Source: EirGrid, TSO Business Plan Questionnaire.

The underspend in IT costs can be attributed to two main factors. First, a managed service provided by Version1 was initially included in the allowed IT opex costs but was later reclassified as a contractor expense. Second, IT costs were reduced due to delays in the delivery of IT Capex programmes, with the majority of this reduction believed to stem from delays in the DS3 programme.

2.7.2. Our Assessment

The underspend in this cost category has not been driven by an inefficiency gain, but rather by delays and reclassifications of costs. Furthermore, we have no evidence to consider that the costs incurred in during PR5 have been inefficient.

2.7.3. Conclusion

The TSO has justified the lower expenditure in IT costs due to delays in IT Capex programmes, as well as a reclassification of IT costs. Consequently, we recommend accepting the TSO's PR5 outturn.

2.8. GRID MAINTENANCE AND CLIENT ENGINEERING

Grid Maintenance and Client Engineering comprises costs related to client-facing engineering services necessary for non-contestable connections.

2.8.1. Comparison of PR5 Outturn vs Allowance

Table 10 compares the PR5 outturn, actual and forecast, against the PR5 allowance for Grid Maintenance and Client Engineering costs. The TSO has forecast a total outturn of €5.0m in Grid maintenance and client engineering costs compared to an allowance of €3.9m, which represents an overspend of €1.1m, and a 26% increase.

Table 10: Grid maintenance and client engineering costs in PR5

TSO Opex (€m, 2024 prices)	2021	2022	2023	2024	2025	PR5 Total			
	Actual	Actual	Actual	Forecast	Forecast	Allowed	Outturn	Variance	
								€m	%
Grid maintenance and client engineering	0.9	0.6	1.0	1.2	1.3	3.9	5.0	1.1	26%

Source: EirGrid, TSO Business Plan Questionnaire.

Grid Maintenance and Client Engineering encompass client-facing engineering services necessary for non-contestable connections. Due to the increased volume of these connection requests over the course of PR5, the outturn has surpassed the allocated allowance.

2.8.2. Our Assessment

Based on the information provided, we do not consider the overspend to have been inefficient.

2.8.3. Conclusion

We do not consider the overspend to have been inefficient.

2.9. RATES

2.9.1. Comparison of PR5 Outturn vs Allowance

Table 11 compares the PR5 outturn, actual and forecast, against the PR5 allowance for Rates costs. The TSO has forecast a total outturn of €3.1m in Rates costs compared to an allowance of €3.5m, which represents an underspend of €0.4m, and a 11.9% decrease.

Table 11: Rates costs in PR5

TSO Opex (€m, 2024 prices)	2021	2022	2023	2024	2025	PR5 Total			
	Actual	Actual	Actual	Forecast	Forecast	Allowed	Outturn	Variance	
								€m	%
Rates	0.7	0.6	0.6	0.6	0.6	3.5	3.1	-0.4	-11.9%

Source: EirGrid, TSO Business Plan Questionnaire.

2.9.2. Our Assessment

We do not consider these costs to have been incurred inefficiently.

2.9.3. Conclusion

We accept the presented costs as we do not consider the expenditure during PR5 to have been inefficient.

2.10. PROMOTION OF RESEARCH

2.10.1. Comparison of PR5 Outturn vs Allowance

Table 12 compares the PR5 outturn, actual and forecast, against the PR5 allowance for Promotion of Research costs. The TSO has forecast a total outturn of €2.5m in Promotion of Research costs compared to an allowance of €2.7m, which represents an underspend of €0.2m, and a 9.0% decrease.

Table 12: Promotion of research costs in PR5

TSO Opex (€m, 2024 prices)	2021	2022	2023	2024	2025	PR5 Total			
	Actual	Actual	Actual	Forecast	Forecast	Allowed	Outturn	Variance	
								€m	%
Promotion of research	0.3	0.4	0.3	0.8	0.8	2.7	2.5	-0.2	-9.0%

Source: EirGrid, TSO Business Plan Questionnaire.

2.10.2. Our Assessment

The Promotion of Research category is influenced by various external factors, such as the availability of partners, the specification of research topics, and funding requirements driven by the scope of the research, among others. Given these drivers, we do not consider the costs incurred in during PR5 to have been inefficient.

2.10.3. Conclusion

We do not consider the outturn costs to have been inefficient, and accept the TSO's outturn costs.

2.11. INSURANCE

2.11.1. Comparison of PR5 Outturn vs Allowance

Table 13 compares the PR5 outturn, actual and forecast, against the PR5 allowance for Insurance costs. The TSO has forecast a total outturn of €4.5m in Insurance costs compared to an allowance of €1.8m, which represents an overspend of €2.7m, and a 155% increase.

Table 13: Insurance costs in PR5

TSO Opex (€m, 2024 prices)	2021	2022	2023	2024	2025	PR5 Total			
	Actual	Actual	Actual	Forecast	Forecast	Allowed	Outturn	Variance	
								€m	%
Insurance	0.9	0.8	1.0	0.8	1.0	1.8	4.5	2.7	155%

Source: EirGrid, TSO Business Plan Questionnaire.

2.11.2. Our Assessment

The TSO's insurance costs are sourced externally, and post-COVID, there has been a general increase in insurance premiums, which was neither anticipated nor accounted for in the initial allowance. As a result, we do not consider the overspend to be inefficient.

2.11.3. Conclusion

We accept the TSO's forecasted costs, as we do not consider the overspend to be inefficient.

2.12. PUBLIC ENGAGEMENT

Public Engagement encompasses a broad range of activities, including public relations, advertising, social media, grants, sponsorships, conferences, and events.

2.12.1. Comparison of PR5 Outturn vs Allowance

Table 14 compares the PR5 outturn, actual and forecast, against the PR5 allowance for Public Engagement costs. The TSO has forecast a total outturn of €11.3m in Public Engagement costs compared to an allowance of €15.9m, which represents an underspend of €4.6m, and a 28.9% decrease.

Table 14: Public engagement costs in PR5

TSO Opex (€m, 2024 prices)	2021	2022	2023	2024	2025	PR5 Total			
	Actual	Actual	Actual	Forecast	Forecast	Allowed	Outturn	Variance	
								€m	%
Public engagement	2.2	1.7	2.2	3.0	2.3	15.9	11.3	-4.6	-28.9%

Source: EirGrid, TSO Business Plan Questionnaire.

2.12.2. Our Assessment

The COVID-19 pandemic, along with the increased use of virtual tools for online engagements and meetings, has shifted the dynamics of this cost category. Additionally, there has been a shift from traditional advertising to a greater reliance on social media, which has contributed to a reduction in costs. Consequently, this underspend is the result of savings driven by largely exogenous factors and drivers.

2.12.3. Conclusion

We accept the TSO's proposed costs, as we consider them to be efficient.

2.13. INTERCOMPANY – PAYROLL RECHARGES

The intercompany recharges consist of facilities, payroll and corporate recharges between the TSO and the other companies in the EirGrid group.

2.13.1. Comparison of PR5 Outturn vs Allowance

Table 15 compares the PR5 outturn, actual and forecast, against the PR5 allowance for Intercompany Payroll Recharges costs. The TSO has forecast a total outturn of -€27.5m in Intercompany Payroll Recharges costs compared to an allowance of -€18.2m, which represents an underspend of €9.3m, and a 50% decrease.

Table 15: Intercompany Payroll Recharges costs in PR5

TSO Opex (€m, 2024 prices)	2021	2022	2023	2024	2025	PR5 Total			
	Actual	Actual	Actual	Forecast	Forecast	Allowed	Outturn	Variance	
								€m	%
Intercompany Payroll Recharges	-5.0	-5.1	-5.9	-5.8	-5.8	-18.2	-27.5	-9.3	-50%

Source: EirGrid, TSO Business Plan Questionnaire.

2.13.2. Our Assessment

The increase in FTE numbers across other companies within the EirGrid Group has resulted in higher payroll and corporate recharges than initially anticipated. However, since Intercompany Payroll Recharges are evaluated on an annual basis, forecasting these costs over a five-year period may lead to inaccuracies. For the PR5 submission, these costs were projected based on the 2019 forecast. Given the TSO experienced savings within this category, we accept the submitted costs.

While we agree with the use of regulatory precedent in evaluating these costs, we believe it will be more accurate to use actual costs for forecasting into PR6, rather than relying on forecasted values, given that these costs are reassessed annually. Therefore, instead of using the 2025 forecast to estimate the PR6 allowance, we will base our estimate on the average outturn of 2023—the latest full set of actual costs available for PR5—and include 2024,

which is partially composed of actual costs. Overall, we do not deem the costs incurred in PR5 as inefficient, as they rely on external factors outside of the control of the TSO.

2.13.3. Conclusion

We accept the TSO's forecasted costs, as we consider them efficient.

2.14. DIRECT COSTS¹²

Table 16 compares the PR5 outturn, actual and forecast, against the PR5 allowance for Non-Controllable costs. The TSO has forecast a total outturn of €4,412.5m in Non-Controllable costs compared to an allowance of €1,124.1m, which represents an overspend of €3,288m, and a 292% increase.

Table 16: Direct costs in PR5

TSO Opex (€m, 2024 prices)	2021	2022	2023	2024	2025	PR5 Total			
	Actual	Actual	Actual	Forecast	Forecast	Allowed	Outturn	Variance	
								€m	%
Inter TSO Compensation	2.8	3.5	11.6	4.5	3.7	12.3	26.0	13.7	111%
TAO Payment	346.1	224.2	295.2	325.1	319.9	-	1,510.4	1,510	-
CORESOS subscription	0.8	0.9	0.9	1.0	1.3	3.3	4.9	1.6	48.1%
Interconnector services	2.8	1.5	1.7	1.0	1.0	4.8	8.0	3.2	65.7%
CER Levy	1.3	1.8	2.2	2.2	3.0	5.8	10.5	4.8	82.6%
DUoS costs	3.7	3.7	5.4	8.4	6.9	19.0	28.1	9.1	47.6%
Ancillary Services	161.5	194.5	252.1	245.4	280.7	1,078.9	1,134.3	55.4	5.1%
PSO	482.1	388.8	502.5	67.0	250.0	-	1,690.4	1,690	-
Total Direct Costs	1,001.0	818.9	1,071.6	654.6	866.5	1,124.1	4,412.5	3,288	292%

Source: EirGrid, TSO Business Plan Questionnaire.

The two largest sources of the variance between the outturn and allowance for Direct costs are the Public Service Obligation (PSO) charge and the TAO Payment, with increases of €1,699 million and €1,516 million, respectively.

The PSO is a levy applied to all final electricity consumers in Ireland, used to fund government schemes supporting the construction and operation of renewable electricity sources.¹³ The increase during PR5 occurred because it was not initially included as part of the allowances throughout the period. On the other hand, the TAO Payment cost category refers to pass through costs associated with the TAO's allowed revenues.¹⁴ The TAO payments had not been included in the PR5 allowances, and it will also not be included in the final non-controllable opex value. This is because the TAO payments reflect the TAO's allowed revenues.

¹² In the TSO BPQ, these costs are called "Direct costs", and are considered to be Non-Controllable.

¹³ CRU (2024), Decision Paper: Public Service Obligation Levy 2024/25. Available at: https://cruie-live-96ca64acab2247eca8a850a7e54b-5b34f62.divio-media.com/documents/2024-25_PSO_Final_Decision_Paper_CRU202477.pdf

¹⁴ To compare and validate, the TAO yearly allowed revenues can be found in the following documents produced by the CRU: [Allowed Revenues 2021](#), [Allowed Revenues 2022](#), [Allowed Revenues 2023](#), [Allowed Revenues 2024](#), [Allowed Revenues 2025](#).

2.15. EXCEPTIONAL/ATYPICAL COSTS

Table 17 shows the composition of Exceptional costs incurred in by the TSO throughout PR5. These costs were not included in the PR5 Final Determination Allowance.¹⁵

Table 17: Exceptional costs in PR5

TSO Opex (€m, 2024 prices)	2021	2022	2023	2024	2025	PR5 Total			
	Actual	Actual	Actual	Forecast	Forecast	Allowed	Outturn	Variance	
								€m	%
Unrecovered Stage 1 project costs	2.5	-	-	-	-	-	2.5	2.5	-
Dublin SoS ¹⁶	3.0	-	-	-	-	-	3.0	3.0	-
IIDM costs	0.1	-	-	-	-	-	0.1	0.1	-
Offshore	-	4.3	8.1	17.7	26.5	-	56.6	56.6	-
Security of Supply	-	113.5	420.4	442.8	337.3	-	1,314.0	1,314.0	-
Celtic Debt Service costs	-	5.5	9.1	10.3	17.4	-	42.4	42.4	-
SONI Governance	-	-	1.6	3.5	1.0	-	6.1	6.1	-
NRAA	-	-	0.6	0.3	0.5	-	1.4	1.4	-
Cloud IT	-	-	2.4	2.6	2.0	-	7.0	7.0	-
Innovation and Hydrogen	-	-	0.4	-	-	-	0.4	0.4	-
Cyber	-	-	-	-	1.9	-	1.9	1.9	-
OTP & TAO TSO Data Exchange	-	-	-	-	1.1	-	1.1	1.1	-
LDES	-	-	-	-	1.2	-	1.2	1.2	-
CSRD	-	-	-	-	1.0	-	1.0	1.0	-
Hybrids	-	-	-	-	1.3	-	1.3	1.3	-
FASS funding costs	-	-	-	-	-	-	-	-	-
CEP	-	-	-	-	128.7	-	128.7	128.7	-

¹⁵ These costs were allowed through in-period variations to allowances.

¹⁶ SoS stands for Security of Supply.

TSO Opex (€m, 2024 prices)	2021	2022	2023	2024	2025	PR5 Total			
	Actual	Actual	Actual	Forecast	Forecast	Allowed	Outturn	Variance	
								€m	%
Total Exceptional Items	5.6	123.3	442.7	477.2	519.9	-	1,568.8	1,568.8	-

Source: EirGrid, TSO Business Plan Questionnaire.

2.15.1. Security of Supply

The largest contributing cost category to Exceptional Items has been Security of Supply, which amounted to €1,314m throughout the PR5 period. As Ireland increases the share of renewable generation in its system, the variability in supply capacity can create generation risks.¹⁷ This, combined with the decommissioning of older generation plants, led the TSO to identify a capacity shortfall in 2021.¹⁸

In response to the capacity shortfall, the CRU, with the consent of the Minister for the Environment, Climate and Communications, directed the TSO to procure additional capacity through Temporary Emergency Generation (TEG). In 2021, the request was to procure 300MW,¹⁹ followed by an additional 250MW in 2022. These procurements represent the largest cost within the Security of Supply category.²⁰

The first procurement exercise resulted in contracts for 191MW at North Wall (ESB) in 2022,²¹ and in 2022, a further 50MW were procured from Huntstown (Huntstown Power Company Limited). The second procurement tranche led to contracts for 258MW at Shannonbridge (ESB) and 150MW at Tarbert (SSE Generation Ireland Limited).²² The procured TEG units began to come online in December 2023, starting with 191MW from Northwall. This was followed by 150MW from Tarbert in 2024, and later, 258MW from Shannonbridge.²³ Additionally, the TSO sought the Retaining of Existing Units (REU), which involved extending the operational life of older units until new capacity could replace them.²⁴

We recommend the CRU allow these costs for two reasons. First, under the direction of the CRU, the TSO conducted a public procurement process for the Temporary Emergency Generation units, which account for the majority of the Security of Supply costs. Second, the costs incurred during these procurement exercises were largely driven by the cost structures of the generators, factors over which the TSO has limited control. While we do not have sufficient information to confirm if there may have been opportunities to reduce the costs of the interventions, we also have no evidence to suggest they were not.

¹⁷ CRU (2021), CRU Information Paper: Security of Electricity Supply – Programme of Actions. Available at: <https://cruie-live-96ca64acab2247eca8a850a7e54b-5b34f62.divio-media.com/documents/CRU21115-Security-of-Electricity-Supply--Programme-of-Actions.pdf>

¹⁸ EirGrid (2021), All-Island Generation Capacity Statement. Available at: <https://cms.eirgrid.ie/sites/default/files/publications/208281-All-Island-Generation-Capacity-Statement-LR13A.pdf>

¹⁹ The initial procurement exercise was for 200MW, and then the CRU directed the procurement of an additional 100MW, leading to the 300MW for 2021.

²⁰ For PR5, TEG costs amounted to €1,249.8m.

²¹ E-Tenders (2021), Requirement for Temporary Emergency Generation – 200MW. Available at: <https://irl.eu-supply.com/ctm/Supplier/PublicPurchase/197182/1/0>

²² E-Tenders (2022), Requirement for Temporary Emergency Generation – 450MW. Available at: <https://irl.eu-supply.com/ctm/Supplier/PublicPurchase/231173/1/1>

²³ EirGrid (August 15th, 2024), Security of Supply – SoS Quarterly Report

²⁴ CRU (2023), CRU Information Note: Electricity Security of Supply Programme of Work Update. Available at: https://cruie-live-96ca64acab2247eca8a850a7e54b-5b34f62.divio-media.com/documents/CRU202317_Electricity_Security_of_Supply_Programme_of_Work_Update_February_2023.pdf

2.16. SUMMARY OF PR5 EX POST RECOMMENDATIONS

Table 18 summarises our recommendations on our ex post assessment. As we can see, we have not disallowed any costs, as we have not identified sources of inefficient expenditure.

Table 18: Summary of PR5 Opex Outturn costs and Allowances

TSO Opex (€m, 2024 prices)	PR5 Allowance	PR5 Outturn	Ex post PR5 Allowance	Variance	
				€m	%
Staff and staff related costs	207.3	200.5	200.5	-	-
Contractor	9.8	40.4	40.4	-	-
Telecommunications	32.4	27.5	27.5	-	-
Premises	34.6	32.4	32.4	-	-
IT Costs	47.5	43.9	43.9	-	-
Insurance and Compensations	1.8	4.5	4.5	-	-
Public engagement	15.9	11.3	11.3	-	-
Professional services	25.0	42.1	42.1	-	-
Grid Maintenance & Client Engineering	3.9	5.0	5.0	-	-
Rates	3.5	3.1	3.1	-	-
Promotion of research	2.7	2.5	2.5	-	-
Intercompany- Payroll recharges	-18.2	-27.5	-27.5	-	-
PR5 reporting requirement ²⁵	0.9	-	-	-	-
Total Controllable	367.2	385.7	385.7	-	-

Source: EirGrid, TSO Business Plan Questionnaire.

While we have not identified any instances of costs being inefficiently incurred, we consider that certain costs incurred during PR5 may not provide a reliable base for the ex ante assessment of allowances for PR6.

For example, contractor and professional services costs were overspent during PR5, but this was due to specific circumstances impacting the TSO in PR5 (see Sections 2.3 and 0). We accept the full outturn for these categories; however, this should not be interpreted as an endorsement of these costs as fixed or recurring. Where costs increased during PR5 in response to particular challenges, our acceptance does not imply that these elevated levels should form the starting point for the next period, particularly if the underlying drivers of the overspend have been resolved. A more detailed assessment will be presented in the following sections.

²⁵ This cost category does not apply for PR6.

3. REVIEW OF PR6 OPERATING EXPENDITURE

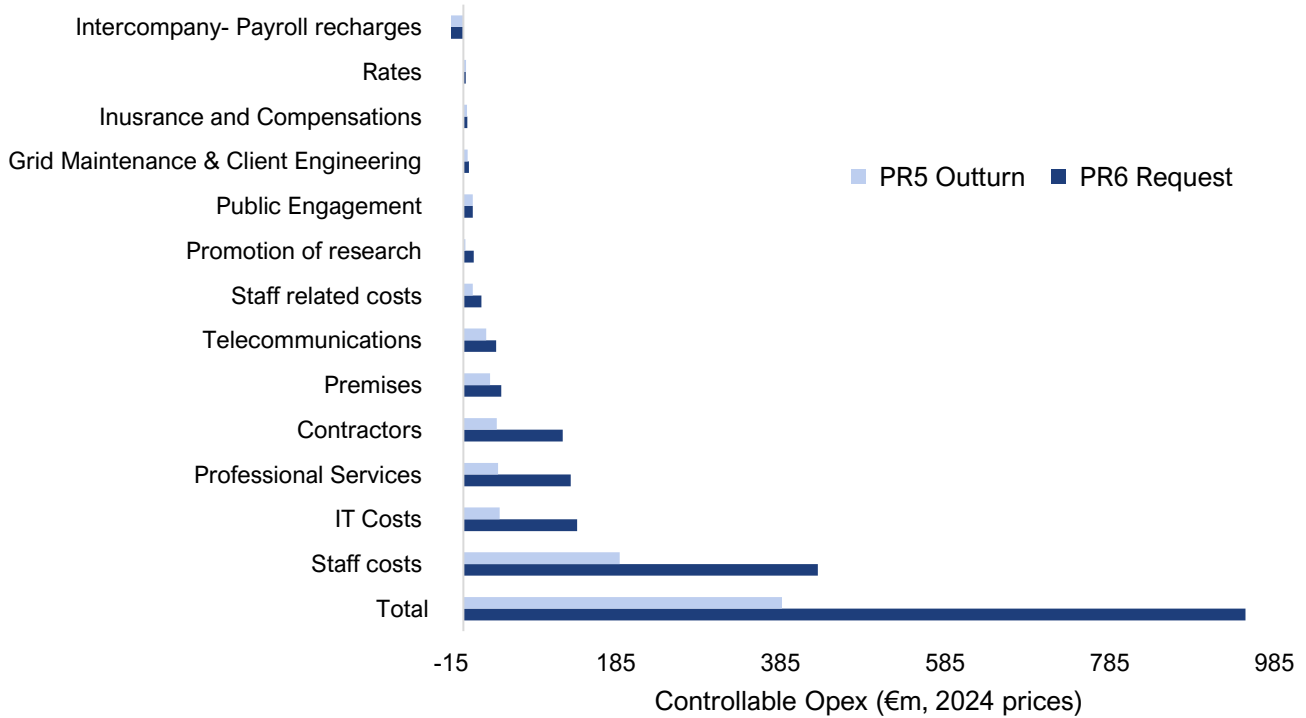
3.1. OVERVIEW OF THE TSO'S PR6 REQUEST

The objective of the CRU in setting allowed opex is to ensure that the TSO can deliver the outputs that are required by customers while challenging the licensee to perform at an efficient level. This should result in setting the TSO challenging but realistic targets and incentives.

In this section of the report, we review the TSO's requested opex for the PR6 period and develop our independent proposals for the opex allowance for the period from 2026 to 2030.

The TSO's proposal for the PR6 period (when including controllable and non-controllable opex) represents a 12.2% increase relative to PR5 outturn. The PR5 outturn is forecasted to be €6,367m, while the PR6 request is €7,142.6m. This creates a total difference of €775.5m. The largest part of this difference, €564.5m, is due to an increase in controllable opex, which is expected to rise from €385.7m in the PR5 outturn to €950.3m in the PR6 request (as illustrated in Figure 1).

Figure 1: Controllable Opex PR5 Outturn and PR6 Request



Source: CEPA analysis, TSO Business Plan Questionnaire

This increase in controllable opex, which is the focus of our assessment, is mostly driven by four cost categories. In sum, the following four cost categories make up 89.3%²⁶ out of the total difference between the PR5 outturn in controllable opex relative to the PR6 request:

- Staff costs: The difference between the PR5 outturn and the PR6 request is €241.6m, which represents a 127.8% increase.

²⁶ The sum of the differences between the PR5 outturn and the PR6 request for Staff costs, IT costs, Contractor, and Professional services amounts to €504.2m, which represents the 89% relative to the total difference in controllable opex of €564.5m.

- IT costs: The difference between the PR5 outturn and the PR6 request is of €94.1m, which represents a 214.7% increase.
- Contractor: The difference between the PR5 outturn and the PR6 request is of €80.2m, which represents a 198.3% increase.
- Professional Services: The difference between the PR5 outturn and the PR6 request is of €88.3m, which represents a 209.9% increase.

The table below provides a more detailed breakdown of the TSO's PR6 opex request, including controllable and non-controllable components.

Table 19: Overview of the TSO's PR6 Request and PR5 Outturn

TSO Opex (€m, 2024 prices)	PR5 Outturn	PR6 Request	Variance	
			€m	%
Staff costs	189.0	430.6	241.6	127.8%
Staff related costs ²⁷	11.51	22.0	10.4	90.8%
Contractor	40.4	120.7	80.2	198.3%
Telecommunications	27.5	39.9	12.4	45.1%
Premises	32.4	46.0	13.6	42.1%
IT Costs	43.9	138.0	94.1	214.7%
Insurance and Compensations	4.5	4.8	0.3	6.7%
Public engagement	11.3	11.3	-0.02	-0.2%
Professional services	42.1	130.5	88.3	209.9%
Grid Maintenance & Client Engineering	5.0	6.7	1.7	35.2%
Rates	3.1	2.9	-0.17	-5.6%
Promotion of research	2.5	12.6	10.1	409.0%
Intercompany- Payroll recharges	-27.5	-15.9	11.6	42.3%
Total Controllable Opex	385.7	950.3	564.5	146.4%
Direct costs ²⁸	4,412.5	5,446.9	1,034.4	23.4%
Total Non-Controllable Opex	4,412.5	5,446.9	1,034.4	23.4%
Exceptional Items	1,568.8	745.4	-823.4	-52.5%
Exceptional Items	1,568.8	745.4	-823.4	-52.5%
Total Opex	6,367.0	7,142.6	775.52	12.2%

Source: EirGrid, TSO Business Plan Questionnaire

²⁷ For the PR5 lookback, we refer to the category 'Staff and staff-related costs', as it was presented in that format for the PR5 allowances. However, in the PR5 outturn and PR6 request, these elements are reported as separate line items. Therefore, in our PR6 look forward assessment, we present the variables individually to reflect this distinction.

²⁸ These total costs include TAO payments. TAO payments are costs recovered by EirGrid, which are then transferred to the TAO, and which the TAO pays in return. These revenues are recovered through tariffs only once by EirGrid.

3.2. STAFF AND STAFF RELATED COSTS

3.2.1. PR6 base: staff and staff related costs

We have set the PR6 base for staff and staff related costs according to the following three steps:

- We identified an appropriate base in terms of FTEs;
- We identified an appropriate base FTE unit-cost; and
- We constructed the staff and staff related cost base as a product of the FTE and FTE unit-cost bases.

This approach gave us the flexibility to separately identify trends in FTEs and in FTE unit-costs in order to construct an appropriate base cost for the TSO.

Based on information provided by the TSO, we set the base number of FTEs equal to the level forecast by the TSO for 2025. The TSO's estimated base is based on actual costs up to May 2024, which are then modified upwards to reflect further approved vacancies and a newly negotiated pay deal between 2024 and 2026. Furthermore, the TSO clarified that in January 2025 they hired an additional 30 FTEs.²⁹ Taking into account that 408 FTEs was the estimate for 2024, we use the 447 FTEs from 2025 as our base value. On top of this, considering the wage adjustment that was meant to take place after 2024, we use the reported 2025 average FTE unit-cost value.

Consequently, we reach a base of 447 FTEs at a unit-cost of €98,238 for staff costs.³⁰ We use the same FTE base for staff related costs, and we take the unit-cost of €5,511, again corresponding to the reported rate in 2025. This leads to forecast costs in Table 20, which displays a yearly comparison between our recommended opex base and the TSO's base request. Throughout the PR6 period, we estimate a reduction relative to the requested base for Staff costs of €20.0m, and of €1.0m for Staff Related costs.

Table 20: PR6 Base for Staff and Staff related costs

TSO Opex (€m, 2024 prices)		2026	2027	2028	2029	2030	PR6 Total
CEPA assessment	Staff costs	43.9	43.9	43.9	43.9	43.9	219.6
	Staff related costs ³¹	2.5	2.5	2.5	2.5	2.5	12.5
TSO Submission	Staff costs	47.9	47.9	47.9	47.9	47.9	239.5
	Staff related costs	2.7	2.7	2.7	2.7	2.7	13.5
Difference	Staff costs	-4.0	-4.0	-4.0	-4.0	-4.0	-20.0
	Staff related costs	-0.2	-0.2	-0.2	-0.2	-0.2	-1.0

Source: CEPA analysis, TSO Business Plan Questionnaire.

³⁰ This is the unit cost value from 2025 in 2024 prices. This unit cost accounts for a range of costs, including basic salaries.

³¹ The yearly values have been rounded to one decimal place, which accounts for the difference between the total PR6 value and the sum of the individual yearly figures.

In our PR5 ex post analysis, we observed that the total expected outturn for the PR5 period for Staff and Staff Related costs is €200.5m. Our forecasted base for these two cost categories will be of €231.88m for PR6. The difference in values is explained by our taking 2025 values, which capture a wage increase applied from 2024 onwards, and an increase in recruitment in FTEs towards the end of PR5.

3.2.2. PR6 trend: staff and staff related costs

We do not identify a trend for this cost category (see Section 3.15).

3.2.3. PR6 step: staff and staff related costs

Introduction

For Staff and Staff related costs, we have assessed the TSO's FTE step request rather than the cost request. This is because both a trend and a step change were proposed in the TSO's BPQ, with the trend reflecting a mix of unit cost (e.g., wage rate changes) and volume growth. Under our methodology we only recognise a step change in staff costs when FTE growth is linked to structural changes or specific programmes. Therefore, we have isolated the volume component of the trend and reinterpreted it as a step change. As a result, FTE growth for PR6 is evaluated as a step change, while unit cost growth is analysed separately as part of our RPEs report.

As Figure 2 (overleaf) and Table 21 show, the TSO's FTE request for 2030 is a total of 872 FTEs, which relative to the 447 FTEs from 2025, represents a 95% increase. In contrast our recommended values are based on 703 FTEs by 2030, which represents a 57% increase relative to 2025.

Table 21: TSO FTE evolution over time

TSO FTEs	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
CEPA assessment	-	-	-	-	-	596	670	694	702	703
FTEs										
TSO submission	311	337	373	408	447	722	825	860	870	872
Difference	-	-	-	-	-	-126	-155	-166	-168	-169

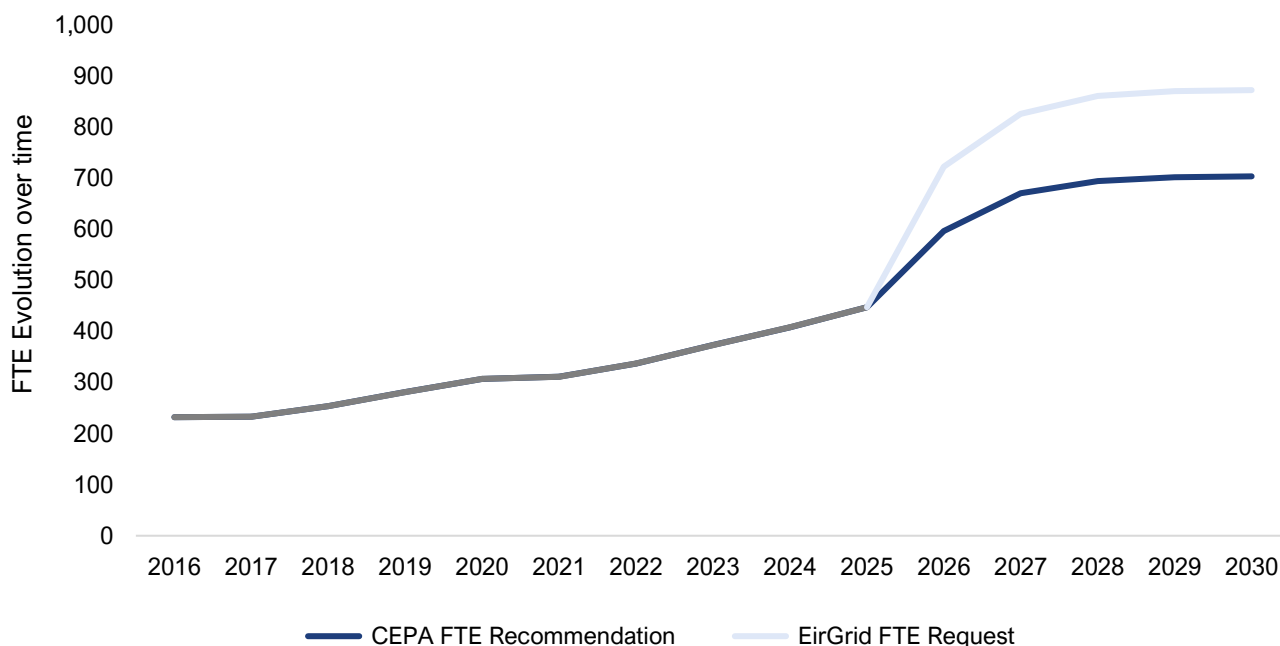
Source: CEPA analysis, TSO Business Plan Questionnaire.

Our proposed reduction in FTEs, while still providing a significant step up in staff costs compared to the base, reflects that we currently lack sufficiently detailed information to assess how the TSO's requested levels of FTEs are built up and are expected to be utilised across the business. As discussed below, we have undertaken a programme-by-programme assessment how the forecast FTEs have been allocated across PR6 and have identified several areas where we do not consider the TSO's forecast step change has been sufficiently justified.

As more of a top-down reference point for assessing the TSO's forecast increase in FTEs in PR6, we also reviewed Ofgem's Draft Determination in response to the GB NESO's recent Business Plan 3 (BP3) request which will run from 1 April 2025 until 31 March 2026. In its BP3, NESO has proposed an increase of 1,771 FTEs across both capex and opex, rising from 1,113 – the BP2 FTE number, the business plan period that ran from 2023 to 2025 – to 2,884, representing a 159% increase.

Two key observations emerge from this. First, NESO's FTE levels for the current BP2 period are broadly in line with the scale of the TSO's request by 2030.³² Second, the NESO, along with the TSO, is seeking a significant increase in its FTE requirements to deliver on the requirements and complexities of transforming the electricity system.

Figure 2: TSO's FTE evolution over time, CEPA FTE recommendation, and the TSO FTE request



Source: CEPA analysis, TSO Business Plan Questionnaire.

Ofgem's recent draft determination on the BP3 has focused not on challenging the NESO's activities themselves, but on seeking further clarity regarding the level of resources allocated to each activity.

Ofgem concludes in its assessment that “[w]hilst the additional cost and FTE information [provided by the NESO] is sufficiently detailed, it does not provide the justification required in line with the Business Plan Guidance requirements for us to fully assess value for money of NESO's BP3. We have therefore requested that NESO provide further justification for the proposed costs and FTE resource. This should focus on significant deviations between NESO's final BP3 proposals and the previous BP2 submission for BP3 costs.”³³

Ofgem concludes that it is therefore too early for it to provide assurance that the NESO delivering the plan to the costs proposed would meet or exceed its expectations for value for money.

We have reached similar conclusions with the TSO's PR6 staff cost proposals. Whilst there is a clear need for a significant expansion of the organisation to support a range of activities and network need in PR6 we are not able to conclude that the proposed level and allocation of resources will reflect value for money for the Irish consumer. We propose to continue engaging with the TSO ahead of the CRU's Final Determinations on these issues and would welcome further information to support our assessment. Specifically, we would welcome information on how the FTEs were estimated, and the outputs they are expected to deliver.

To obtain our modelled step costs, we multiply the assumed FTEs per year with the 2025 FTE unit cost, and then subtract our modelled base.³⁴

Our final FTE numbers reflect a build up from the TSO's allocation of FTEs per programme, and specific challenges where the TSO has not sufficiently justified the build-up. The applied challenges reflect our assessment of need,

³² In this comparison we include capex and opex together. By 2030, EirGrid requested 872 FTEs for opex, and 167 FTEs for capex (1,039 in total).

³³ Ofgem (2024), Business Plan 3 Draft Determinations – National Energy System Operator, March 31st 2025. Available at: [here](#).

³⁴ As noted above, this unit cost is €98,236 per FTE for staff costs and €5,511 for staff related costs.

additionality and efficiency, and cost challenges to non-network capex related programmes that might be expected to have a knock on opex impact. Our disaggregated build-up of FTEs for the period is shown in Table 22. The subsections which follow set out the basis on which we have formed these proposals.

Table 22: PR6 FTE step change, request and forecast

TSO FTEs		2026	2027	2028	2029	2030
Delivery Roadmap Programme FTEs	CEPA assessment	62	75	83	87	89
	TSO submission	73	89	98	103	105
TSO Trans-formation	CEPA assessment	43	96	107	108	108
	TSO submission	62	137	154	156	155
Capability catch-up	CEPA assessment	43	51	56	58	59
	TSO submission	63	74	82	85	86
Current vacancies	CEPA assessment	-	-	-	-	-
	TSO submission	77	77	77	77	77
Workplace cost estimations	CEPA assessment	1.1	1.1	1.1	1.1	1.1
	TSO submission	2	2	2	2	2

Source: CEPA analysis, TSO Business Plan Questionnaire.

Delivery Roadmap for PR6

The TSO's FTEs from the Delivery Roadmap for PR6 are programmes to address the five strategic objectives set out by the CRU for the PR6 period, which are to deliver infrastructure at pace, enhance system efficiency, ensure compliance with security of supply standards, to drive smarter, flexible, more digitally enabled networks, and customers at the heart of business planning and decision making.

The TSO set out seven objectives to address these goals: (i) digital transformation, (ii) technology resilience and modernisation, (iii) cyber security, (iv) power system capability enhancement, (v) TSO DSO coordination, (vi) Celtic Operational Readiness Programme, and (vii) Control Centre Infrastructure.³⁵

As part of a supplementary question response, the TSO has mapped its FTE step-change for the 'Delivery Roadmap for PR6' to these PR6 programmes. In the large part we have accepted this mapping and the TSO's justification for why additional FTEs are needed for these programmes. However, we understand that these programmes are linked to non-network capex the TSO has also forecast in its BPQ. Given that GHD has proposed a series of challenges to non-network capex components of these programmes, we have mirrored this challenge to the TSO's opex to reflect that we would expect some reduction in opex if capex components of the programmes are reduced.

³⁵ Taken from Section 8 of EirGrid's Look forward document from the Business Plan Submission.

Specifically, we take GHD's proposed non-network capex cost challenge (in % terms), and apply half of it to the opex FTE element of Delivery Roadmap Programme, on the basis we would not expect the opex to be fully elastic to reductions in non-network capex components of the programmes.^{36 37}

While these cost challenges to the Delivery Roadmap for PR6 programmes follow GHD's proposed challenges, linked to non-network capex, they also reflect where supporting information is missing from the TSO's submissions to justify the proposed staff costs for each programme. Consistent with our assessment of the TSO Transformation and Capability Catch-up programmes (see below), the case for need and additionality is articulated throughout TSO's the submission. However, specific estimates and justification for FTE levels remain unclear. We would therefore welcome further detail on how the FTE figures, broken down by programme, were derived.³⁸

TSO Transformation and Capability Catch-Up

TSO Transformation and Capability Catch-up are the two programmes that represent the largest step change in FTEs and opex in PR6. The TSO has faced various recruitment and retention challenges, which it argues has contributed to a capability gap in PR5. Furthermore, the requirements on business have been heavily impacted by legislative and policy direction of the Irish government and the EU, creating a drive towards decarbonising power systems and maintaining system resilience. The TSO Transformation programme is intended to support the TSO with building and operating a resilient and renewable power system, and the Capability Catch-Up programme to expand core functions to support these goals, as well as closing the pre-existing resourcing gap.³⁹

At high-level level, it is clear for both programmes that there is a need for their implementation, to allow the TSO to support Ireland and EU decarbonisation goals and policies, and to tackle a recruitment and retention challenge necessary to deliver said goals. For this reason, the need gateway for the additional FTEs is satisfied.

For most sub-programmes within the TSO Transformation and Capability Catch-up, the question of additionality has also been addressed. In the large part, the TSO has clarified that it cannot deliver the programme related outputs with the current level of resourcing and operations. However, we still apply an additionality challenge of 7.7% on average for TSO Transformation and 10.0% for Capability Catch-up.⁴⁰ While the TSO has detailed the requirements and sub-programmes, we have had issues in reconciling elements of the TSO's request, and ensuring that the requests are fully additional to existing FTEs. We have chosen to apply these challenges because, while the TSO clearly outlined the need, it did not demonstrate that existing resources had been exhausted or that additional resources were fully necessary to deliver the step-change.

For both programmes, we have also applied a 25% challenge at the final cost confidence / efficiency gateway. This reflects that no alternatives for the forecast expenditure were explained in the TSO's business plan submission, nor have there been metrics used to show that the costs it proposes to incur are expected to be efficient.⁴¹ Given the degree of step-up in FTEs that the TSO has forecast, we also have some concerns regarding the confidence of the TSO being able to deliver this level of recruitment. These issues in the round, mean we apply the maximum cost challenge under our framework at this final gateway. We would expect to revisit our conclusion should the TSO be able to provide further supporting information to increase confidence in the FTE requirements and deliverability.

³⁶ For information on our interpretation of this challenge see Section 1.2.2.

³⁷ GHD's challenges, and our re-interpretation of them, are as follows. Cybersecurity: 20% from GHD challenge, 10% from CEPA challenge; TSO Digital Transformation: 20% from GHD challenge, 10% from CEPA challenge; Technology Resilience and Modernisation: 20% from GHD challenge, 10% from CEPA challenge; TSO/DSO Coordination: 20% from GHD challenge, 10% from CEPA challenge; Power System Capability Enhancement: 50% from GHD challenge, 25% from CEPA challenge; Control Centre Infrastructure: 10% from GHD challenge, 5% from CEPA challenge.

³⁸ Further information on our assessment of Delivery Roadmap for PR6 programmes can be found in Appendix B.

³⁹ Taken from Section 7 of EirGrid's Look forward document from the Business Plan Submission.

⁴⁰ The additionality challenges shown here are a result of doing a simple average of the challenges to each sub-programme that comprises the TSO Transformation and Capability Catch-up.

⁴¹ The need, additionality, and cost efficiency challenge for TSO Transformation and Capability Catch-up are based on the 'Aggregated Opex FTE Drivers SQ' submitted by EirGrid.

Current vacancies

The TSO's request proposed a base of 524 FTEs, while the projected figure for 2025 is 447 FTEs, a difference of 77 FTEs attributed to vacancies. However, since we are already using the forecasted 447 FTEs as the base, we interpret these additional 77 FTEs as a step-change. No justification was provided in the TSO's submission regarding the role (need), additionality, or efficiency for these vacancies, and so we apply a fail challenge at the first gateway. As a result, these additional FTEs are not included in our step allowance.

The TSO provided additional information indicating that 30 FTEs had already been hired by January 2025. However, it was not clarified whether these hires are included within the 447 FTEs projected for 2025 or if they form part of the 77 additional vacancies referenced separately. This is in the context of a projected 407 FTEs for 2024. Our interpretation is that the 30 new hires bring the 2025 figure, as of January, to 437, and that these are part of the original TSO projection to reach 447 by year-end. This forms part of our rationale for using the 447 projection as our baseline and for treating the additional 77 FTEs as a step change. We would therefore welcome further clarification from the TSO regarding its current actual FTE levels for 2025.

Workplace cost estimations

These 2 additional FTEs fall under the category 'Workplace cost estimations'. It was explained by the TSO in its submissions that these additional FTEs represent additional labour for Health and Safety.⁴² We acknowledge this explanation as satisfactory for the need gateway. But since additionality and efficiency were not addressed, we apply a 25% challenge at both gateways.

Summary - Staff and Staff related costs (step)

After obtaining the FTE values for the step change, we estimate the requested and the forecast costs as:

$$Costs_t = (FTE_t - FTE_{2025}) * Unit\ cost_{2025};$$

where t represents a year within PR6, and where unit costs are expressed in €/unit. Table 23 summarises the step change on this basis. We note that the TSO submission line is not explicitly shown in the TSO BPQ, and is our own estimation based on the difference between the total request for each year minus the 2025 forecast outturn.

Table 23: TSO step change for staff and staff related costs⁴³

TSO FTEs		2026	2027	2028	2029	2030	PR6
Staff costs	CEPA assessment	14.7	21.9	24.3	25.0	25.2	111.1
	TSO submission	29.6	42.4	45.7	46.6	46.8	211.1
	Difference	-14.9	-20.5	-21.4	-21.6	-21.6	-100.0
Staff related costs	CEPA assessment	0.8	1.3	1.4	1.4	1.4	6.3
	TSO submission	1.9	1.6	2.3	1.8	2.1	9.6
	Difference	-1.1	-0.4	-0.9	-0.4	-0.7	-3.4

⁴² This was addressed during the workshop held on March 25th 2025.

⁴³ We note that the steps shown in this table are estimated by subtracting the 2025 staff and staff-related costs from the costs of each subsequent PR6 year. This approach was necessary because the sum of the base, trend, and step values submitted by the TSO does not match the total requested amount.

Source: CEPA analysis, TSO Business Plan Questionnaire.

As the table above shows, our assessment and proposed allowance for TSO Staff costs in PR6 is €111.1m, which is €100m less than the requested €211.1m by the TSO. For Staff Related costs, we recommend an allowance of €6.4m, which is €3.4m less than the requested €9.6m. Our proposed cost challenges reflect, in the round, that currently the TSO has not provided a recruitment and resourcing strategy that fully justifies the step change in costs and FTEs that are currently forecast in the BPQ.

Reopener for additional in-period staff and staff related costs

To avoid limiting the TSO's ability to achieve key strategic objectives in PR6, we propose an opex reopener under the Agile Investment and Monitoring Framework (AIMF) that would allow the TSO to access additional allowances for Staff and Staff Related costs during PR6, if certain conditions are met. This will enable the TSO to secure the resources needed to deliver essential outputs. We propose this reopener will consist of a two-step framework, designed to ensure that additional allowances are provided once the TSO demonstrates progress towards its recruitment goals and has a clear plan for how the FTEs will be used.

Below, we set out the proposed steps necessary for the TSO to access additional allowances in-period for staff and staff related costs. This process can be triggered at any time during PR6 via the proposed annual reopener window.

Step 1: achievement of recruitment goals

In order to trigger additional allowances in staff costs, the TSO will be expected to demonstrate that it is on track with meeting its recruitment goals. This is driven by the fact that the TSO has faced various headwinds in recruitment and retaining employees, according to their PR6 submission.

Consequently, our proposal is that, before requesting additional staff cost allowances to cover the costs of additional FTEs, the TSO will need to demonstrate it has hired at least 60% of the assumed FTEs in the baseline ex ante allowances at the start of the price control period. For example, if at the beginning of PR6 10 additional FTEs were assumed in setting staff cost allowances for 2027, the TSO will need to demonstrate it has recruited, in net terms, at least 6 FTEs (60% of 10) before requesting further allowances for staff and staff related costs.⁴⁴

Step 2: linking FTE to programmes and outputs

Once Step 1 has been completed, the TSO will advance to Step 2 of the reopener framework. Here, we would expect the TSO to provide a clear link between the requested FTEs and specific programmes and outputs. For larger programmes, such as TSO Transformation and Capability Catch-Up, we would expect the TSO to provide granular information around the specific activities the FTEs are meant to carry out, such as:⁴⁵

- EU, GB and Net Zero Transformation in PR6,
- Long Duration Energy Storage Procurement,
- Capacity Remuneration Mechanism post-2027,
- Development Operations.

This will require an explanation and mapping of FTEs required per task, outputs expected from those tasks, and how the number of requested FTEs was estimated.

Provided that the TSO provides a submission that demonstrates a clear link between the additional FTEs and the strategic objectives / outputs for PR6, our assumption is that the CRU would approve the additional staff and staff related opex. Our assumption is that the additional allowed staff costs through the reopener would be based on an allowed unit rate per FTE to help ensure that the reopener is as mechanistic as possible.

⁴⁴ By net FTEs we refer to the difference between new recruits and employees leaving the company.

⁴⁵ This is a non-exhaustive list of activities, it is meant to illustrate the level of granularity we would expect for Step 2.

The CRU would then be expected to review the incurred outturn costs as part of the ex post review which will provide the TSO with the opportunity to receive a variation to its allowances if its outturn costs exceed the assumptions that underpin the ex ante allowances including any reopener.

Potential additional allowances through the FTE reopener

As our framework allows the TSO to access additional opex allowances to expand its FTE count, we outline here how these costs may evolve.

We estimate a high case allowance for Staff and Staff Related costs, which can be accessed by the reopener, which is determined by the TSO's FTE request and a unit cost per FTE set at €98,236. Table 24 indicates that for PR6 in aggregate, this estimated high case allowances would be based on staff costs of €407.8m, €77.2m above the proposed baseline allowance of €430.6m.

Table 24: Baseline allowance and high case allowance for staff costs

TSO FTEs	2026	2027	2028	2029	2030	PR6
CEPA total baseline	58.6	65.8	68.2	68.9	69.1	330.6
Uplift via reopeners	12.4	15.3	16.3	16.6	16.6	77.2
Staff costs						
CEPA baseline plus reopeners (high case)	71.0	81.1	84.5	85.5	85.7	407.8
TSO submission	73.47	86.27	89.63	90.53	90.73	430.6
Difference	-2.5	-5.2	-5.1	-5.0	-5.0	-22.8

Source: CEPA analysis

In Table 25 we outline the high case allowance for Staff Related costs on an equivalent basis.

Table 25: Baseline allowance and high case allowance for staff related costs⁴⁶

TSO FTEs	2026	2027	2028	2029	2030	PR6
CEPA total baseline	3.3	3.7	3.8	3.9	3.9	18.6
Uplift via reopeners	0.7	0.3	0.9	0.3	0.6	3.0
Staff related costs						
CEPA baseline plus reopeners (high case)	4.0	4.0	4.7	4.2	4.5	21.4
TSO submission	4.3	4.0	4.7	4.2	4.5	21.9
Difference	-0.3	-	-	-	-	-0.5

⁴⁶ Yearly values on this table have been rounded, which is why yearly values do not exactly match the totals.

Source: CEPA analysis

3.2.4. Summary of staff and staff related costs recommendations

In Table 26 we show our total recommendation for PR6 Staff costs. This amounts to €330m, €141m (74%) more than the €189m PR5 outturn.

Table 26: Summary of PR6 recommendations for Staff costs

TSO FTEs	2026	2027	2028	2029	2030	PR6
CEPA base assessment ⁴⁷	43.9	43.9	43.9	43.9	43.9	219.6
CEPA step assessment	14.7	21.9	24.3	25.0	25.2	111.1
Staff costs CEPA total baseline assessment	58.6	65.8	68.2	68.9	69.1	330.6
TSO submission	73.47	86.27	89.63	90.53	90.73	430.6
Difference	-14.9	-20.5	-21.4	-21.6	-21.6	-100.0

Source: CEPA analysis, TSO Business Plan Questionnaire.

In , prior to any reopener.

Table 27, we show our total recommendation for PR6 staff related costs. This amounts to €18.55m, €3.4m (15%) less than the requested total of €21.9m, prior to any reopener.

Table 27: Summary of recommendations for Staff Related costs⁴⁸

TSO FTEs	2026	2027	2028	2029	2030	PR6
CEPA base assessment	2.5	2.5	2.5	2.5	2.5	12.3
CEPA step assessment	0.8	1.2	1.3	1.4	1.4	6.2
Staff related costs CEPA total baseline assessment	3.3	3.7	3.8	3.9	3.9	18.6
TSO submission	4.4	4.0	4.8	4.2	4.6	21.96
Difference	-1.1	-0.4	-0.9	-0.4	-0.7	-3.4

Source: CEPA analysis, TSO Business Plan Questionnaire.

⁴⁷ Values have been rounded to one decimal place.

⁴⁸ Values in this table have been rounded to one decimal place.

3.3. CONTRACTORS

3.3.1. PR6 base: Contractors

As discussed in Section 2, Contractor costs increased significantly in PR5 and exceeded the PR5 allowance by €30.6m. The increases in Contractor costs were driven by both unforeseen events and a rise in demanded outputs from the TSO. Since more internal resources are expected to be hired in PR6, we do not expect the use of additional external resources to meet increased outputs will be as necessary moving forward. Furthermore, unforeseen events in PR5, such as the Security of Supply programme, may not be as prevalent during PR6. For these reasons, we propose a downward adjustment to the base cost for Contractor costs.

We adjust the base, starting from 2023/2024 outturn, to reflect values closer to the CRU's PR5 allowance, as once we account for unforeseen events and recruitment challenges, we do not expect the base for Contractor costs to remain at similar levels throughout PR6. Furthermore, there is insufficient information explaining the significant increase in costs over PR5 in the TSO's submissions. This lack of clarity further supports our decision to apply a downward adjustment to the PR6 base.

Since we do not account for atypical events in PR6, and given that internal FTEs are expected to grow significantly in PR6 (see Section 3.2.3), if we were to use PR5 outturn values as our base, we consider there is a risk we obtain a cost base that would not be a true reflection of BAU / fixed recurring costs. We apply the following steps to calculate the base cost, consistent with the approach we apply for Professional Services.

- First, we estimated the outturn average contractor costs for years 2023 and 2024 which is our default approach for setting the base (€9.2m).
- Second, we estimated the average yearly difference between PR5 Outturn Contractor costs and the PR5 Allowance. The total difference is €30.6m, which implies an annual difference of €6.1m in PR5.
- Third, we calculated the difference between €9.2m and €6.1m, €3.0m, which we use as an adjusted base cost.⁴⁹

Our total estimated PR6 base cost is €15.2m, €60.8m less than the requested €76.0m, as shown in Table 28.

Table 28: PR6 Base for Contractor costs⁵⁰

TSO Opex (€m, 2024 prices)		2026	2027	2028	2029	2030	PR6 Total
	CEPA assessment	3.0	3.0	3.0	3.0	3.0	15.2
Contractor	TSO Submission	15.2	15.2	15.2	15.2	15.2	76.0
	Difference	-12.2	-12.2	-12.2	-12.2	-12.2	-60.8

Source: CEPA analysis, TSO Business Plan Questionnaire.

While the difference between the TSO's submission and our base assessment appears large, we are seeking to only capture BAU costs in the base; an estimate of fixed / BAU ongoing recurring costs, which requires adjusting for the recruitment challenges and unforeseen events in PR5 which may not continue in PR6.

However, similar to the approach we adopt for professional services costs, we take the difference between our proposed base and the TSO's submission and treat it as a requested step change. This will be reflected in Section 3.3.3, where we treat the €60.8m variation as a proposed step and evaluate its justification using our three stage gateway process, as discussed below.

⁴⁹ Values rounded to one decimal point.

⁵⁰ The yearly values have been rounded to one decimal place, which accounts for the difference between the total PR6 value and the sum of the individual yearly figures.

3.3.2. PR6 trend: Contractors

We do not identify a trend for this cost category (see Section 3.15).

3.3.3. PR6 step: Contractors

We have categorised contractor cost step-changes into four groups: costs the TSO submitted as a required step change (1), costs associated with additional programmes (2), steps we consider are included within the TSO's requested base (relative to a BAU cost) (3), and the TSO's trend submission, which we treat as a step (4).

First, we add up all forecast contractor costs associated with the TSO's Delivery Roadmap for PR6 programmes. This total gives us the row 'Step from programmes' in Table 29 below. Second, we take the TSO's requested step allowance for contractor costs and subtract the step that can be attributed to these programmes. This approach allows us to determine a 'net' step from the TSO submission that is independent of PR6 Delivery Roadmap programmes.

As we have discussed in Section 3.3.1, contractor base costs are intended to capture an estimate of BAU / fixed recurring costs. The TSO's requested base costs in contrast appear include a step-change in the forecast. The TSO's proposed base for PR6 was, on average for the period, €15.2m, when the average outturn for PR5 was €8.1m. This implies that the TSO's proposed base does not reflect fixed, recurring costs to maintain a basic level of operations, but rather includes a step change for changing activities as well. On this basis we separate step this from the base, as the difference between the TSO's requested base cost, and our base estimate for PR6.⁵¹

The TSO also submitted a trend adjustment for this cost category. However, since the TSO does not identify a specific cost driver for this activity, we treat this request as a step adjustment. This forms the final element of costs we have assessed as a step adjustment, as summarised in the Table 2929 below.

Overall, our assessment is that the total step adjustment we have identified in the TSO's BPQ has not been justified and our proposal is to set a baseline allowance of €68.5m, a €37m reduction from the TSO's request.

Table 29: PR6 step change for contractors⁵²

TSO Opex (€m, 2024 prices)	2026	2027	2028	2029	2030	PR6 Total
CEPA assessment	13.6	14.1	13.9	13.5	13.3	68.5
Contractor step change costs						
TSO request for step adj. (1)	2.0	2.1	2.1	2.2	2.2	10.6
Step from programmes (2)	0.7	0.9	1.0	1.0	1.1	4.7
Implied TSO step from base (3)	12.2	12.2	12.2	12.2	12.2	60.8
TSO request for trend adj. (4)	6.2	6.6	6.2	5.3	5.0	29.3
Total step	21.1	21.8	21.5	20.7	20.5	105.5
Difference	-7.5	-7.7	-7.6	-7.2	-7.2	-37.0

Source: CEPA analysis, TSO Business Plan Questionnaire.

⁵¹ Since our base estimation is €3.03m and the requested base €15.2m, the difference between these two values leads to €12.17m per annum, or €60.8m in total (see Table 28).

⁵² The yearly values have been rounded to one decimal place, which accounts for the difference between the total PR6 value and the sum of the individual yearly figures.

For the 'Step from programmes' line, we apply a non-network capex driven challenge, mirroring the challenge GHD has applied within the Delivery Roadmap programmes. We apply the same percentage reductions in opex that are applied to the staff cost and IT related components of these programmes, which reflect a proportion (typically 50%) of the cost challenge that GHD has proposed in non-network capex.

The remaining part of the identified step adjustment in the TSO's request is then assessed using our gateway framework of need, additionality, and cost confidence / efficiency. Firstly, we understand that contractor costs are expected to rise during PR6 due to the increased responsibilities and outputs required of the TSO, which in turn drives FTE growth. As a result, the proposed value successfully meets the need gateway challenge.

The TSO has stated that contractor costs will need to grow due to programmes associated with the Delivery Roadmap for PR6.⁵³ However, the proposed additional costs are not clearly linked to the business plan submission, and as discussed above, based on information submitted by the TSO we have separately accounted for the step change in programme costs. This indicates that the requested step change may not be fully additional to programme related costs forecast by the TSO. Therefore, we apply an additionality challenge of 15%.

Thirdly, no benchmarking or cost assurance exercise was submitted for the proposed cost increase, nor was there a clear explanation of how these additional costs would deliver value to consumers (e.g., translated into output). Additionally, we have not received clarification on how these costs were estimated (cost build up) by the TSO. For these reasons, we apply a cost efficiency challenge of 25%.

For these reasons, our forecast for PR6 is of €68.4m, relative to a total step request of €105.9m.

3.3.4. Summary of Contractor costs recommendations

In Table 30, we outline our recommendation for PR6 contractor costs. Overall, our assessment leads to a total of €83.6m, €37.0m less than the requested €120.7m.

Table 30: Summary of recommendations for contractor costs⁵⁴

Contractor costs		2026	2027	2028	2029	2030	PR6
	CEPA base assessment	3.0	3.0	3.0	3.0	3.0	15.2
	CEPA step assessment	13.6	14.1	13.9	13.5	13.3	68.4
Contractor	CEPA total assessment	16.64	17.15	16.98	16.51	16.37	83.6
	TSO submission	24.1	24.8	24.5	23.7	23.5	120.7
	Difference	-7.5	-7.6	-7.6	-7.2	-7.1	-37.0

Source: CEPA analysis, TSO Business Plan Questionnaire.

⁵³ The programmes are TSO Cybersecurity, TSO Digital Transformation, TSO Technology Resilience and Modernisation, TSO-DSO Coordination, TSO Power System Capability Enhancements, TSO Celtic Operational Readiness Programme, and TSO Control Centre Infrastructure. This is addressed in SQ Answer 'Aggregated Opex SQ'.

⁵⁴ The yearly values have been rounded to one decimal place, which accounts for the difference between the total PR6 value and the sum of the individual yearly figures.

We note that the proposal is still an increase above the outturn contractor costs in PR5, a period where the TSO has had to manage a series of unforeseen events and increasing output demands on the business, some of which may not endure in PR6 but may be replaced by new programmes.

3.4. PROFESSIONAL SERVICES

3.4.1. PR6 base: Professional Services

As observed in our PR5 ex post analysis,⁵⁵ Professional Services costs increased significantly in PR5 with outturn costs exceeding the forecast that underpinned the PR5 ex-ante allowance.

This growth was driven by both unforeseen events, such as the Security of Supply programme, and the need for the TSO to deliver increasing outputs, all while facing recruitment and retention challenges. This led to an overall increase in professional services costs of €17.1m.

As the increase in professional services was driven by atypical factors, and internal workforce constraints, we do not consider it is appropriate to use recent outturn values to set the base cost, particularly as recruitment and retention challenges are accounted for in proposed staff cost allowances through ambitious recruitment goals (see Section 3.2.3). This would imply that several of the tasks and pressures in PR5 covered by professional services, should (all else equal) reduce in PR6 as the TSO's internal FTEs grow.⁵⁶

Consistent with the approach we apply to contractor costs, we apply the following steps to calculate a starting base cost for professional services:

- First, we estimated the outturn average from years 2023 and 2024, which is our default approach for setting the base (€8.6m).⁵⁷
- Second, we estimated the average yearly difference between the forecast PR5 Outturn and the PR5 Allowance. The total difference is €17.1m, which implies an annual difference of €3.4m.
- Third, we calculated the difference between €8.6m and €3.4m, which led to an adjusted base of €5.2m

On this basis, our estimated PR6 base cost is €26.1m, €13.9m lower than the TSO request of €40.0m, as summarised in Table 31.

Similar to Contractor costs, while the difference between the TSO's submission and our base cost assessment appears large, we are seeking to capture only BAU costs in the base; an estimate of fixed / BAU ongoing recurring costs, which requires adjusting for the recruitment challenges and unforeseen events in PR5 which may not continue in PR6 (putting to one side that there may be a range of new activities that need to be delivered by the TSO but arguably are better treated as a step change requirement in opex).

The TSO's proposed base cost is higher than the reported outturn of the latter years of PR5. Consequently, we choose to treat the difference between the TSO's request for the base and our estimation of the base as part of the requested step (see Section 3.4.3). Our assessment of this implied step adjustment is set out in the subsection on the step adjustment to Professional Services below.

⁵⁵ See Section 2.2.

⁵⁶ In the TSO PR6 Look forward Report, it is implied that the increase in internal FTEs should reduce the reliance on external labour costs, such as Professional services and Contractor. The quote may be found on page 153 of the report: "...we believe our resource mix needs to change between now and 2030. We need to ramp up the hiring of permanent staff and reduce the size of our contingent workforce. Doing so will have the advantage of reducing the overall average FTE cost and would mean retention of invaluable human capital."

⁵⁷ See Section 1.2.2 for more details on the choice of our default base.

Table 31: PR6 Base for Professional Services costs

TSO Opex (€m, 2024 prices)		2026	2027	2028	2029	2030	PR6 Total
Professional services ⁵⁸	CEPA assessment	5.2	5.2	5.2	5.2	5.2	26.1
	TSO Submission	8.0	8.0	8.0	8.0	8.0	40.0
	Difference	-2.8	-2.8	-2.8	-2.8	-2.8	-13.9

Source: CEPA analysis, TSO Business Plan Questionnaire.

3.4.2. PR6 trend: professional services

We do not identify a trend for this cost category (see Section 3.15).

3.4.3. PR6 step: Professional Services

Overall, the Professional Services step-change has been analysed using the same approach as the Contractor costs step change. Like Contractor costs, we have categorised the requested step change in Professional Services as an explicit step request by the TSO (1), step from programmes (2), a step derived from the TSO's base cost forecast (see discussion above) (3), and our reallocation of a TSO proposal for a trend adjustment as a step (4).

Each of the steps is summarised in the table below.

Table 32: PR6 step change for professional services⁵⁹

TSO Opex (€m, 2024 prices)		2026	2027	2028	2029	2030	PR6 Total
Professional services	CEPA assessment	15.8	15.5	14.2	14.3	14.4	74.2
	TSO request for step adj. (1)	1.9	0.7	0	0	0	2.7
	Step from programmes (2)	7.7	10.1	10.3	10.0	10.3	48.3
	Implied TSO step from base (3)	2.8	2.8	2.8	2.8	2.8	13.9
	TSO request for trend adj. (4)	10.6	8.6	7.1	7.7	7.5	41.5
	Total step	23.0	22.2	20.2	20.5	20.6	106.4
Difference	-7.2	-6.7	-6.0	-6.2	-6.2	-32.3	

Source: CEPA analysis, TSO Business Plan Questionnaire.

The row labelled 'TSO request for step adjustment (1)' is the TSO's explicit request for a step increase in professional services. This row represents the difference between the requested step, and the sum of Professional services costs which have been reported by the TSO as related to the PR6 Delivery Roadmap programmes. The row labelled step from programmes (2) are the professional service costs that the TSO has directly attributed to the PR6 Delivery Programmes which account for all of the step increase in the latter part of PR6.

⁵⁸ The yearly values have been rounded to one decimal place, which accounts for the difference between the total PR6 value and the sum of the individual yearly figures.

⁵⁹ The yearly values have been rounded to one decimal place, which accounts for the difference between the total PR6 value and the sum of the individual yearly figures.

The 'Implied TSO step from base' (3) represents the difference between our assumed base cost and the TSO's reported base request in its submission.⁶⁰

For the 'Step from programmes' request, we apply a non-network capex related challenge (on the basis reduced capex will also reduce opex), mirroring the challenge GHD has applied within the Delivery Roadmap programmes, albeit we only apply a proportion of the challenge GHD propose (typically 10%). This is consistent with the approach that we apply for staff and contractor cost components of the Delivery Roadmap programmes.

We analyse the remaining part of our estimated step adjustment request using our gateway framework of need, additionality, and cost confidence / efficiency. We understand Professional Services costs are expected to rise during PR6 due to the increased responsibilities and outputs required of the TSO relative to a historical steady state / BAU run-rate, which in turn drives FTE growth and greater professional services requirements within the TSO business. As a result, the need for a step change relative to our base is justified.

As with Contractor costs, the TSO has stated Professional Services costs will need to grow due to programmes associated with the Delivery Roadmap for PR6. However, the proposed additional costs are not clearly linked to the business plan submission, and as discussed above, based on information submitted by the TSO we have separately accounted for the step change in programme costs (as part of component (2) of the step change). This indicates that the requested step change across the forecast cost may not be fully additional to the programme related costs forecast by the TSO. Therefore, we apply an additionality challenge of 15%.

Finally, no benchmarking or cost assurance exercise was submitted for the proposed cost increase, nor was there a clear explanation of how these additional costs would deliver value to consumers (e.g., translated into output). Additionally, we have not received clarification on how these costs were estimated (cost build up) by the TSO. For these reasons, we apply a cost efficiency challenge of 25%.

For these reasons, our forecast for PR6 is of €80.0m, relative to a total step request of €106.4m.

3.4.4. Summary of Professional Services recommendations

In Table 33, we outline our total recommendation for PR6 Professional Services costs. Our assessment yields a total of €100.3m, €30.1m less than the requested €130.5m.

Table 33: Summary of professional services recommendations⁶¹

TSO Opex (€m, 2024 prices)		2026	2027	2028	2029	2030	PR6
	CEPA base assessment	5.2	5.2	5.2	5.2	5.2	26.1
	CEPA step assessment	15.8	15.5	14.2	14.3	14.4	74.2
Professional services	CEPA total assessment	21.1	20.7	19.4	19.5	19.6	100.3
	TSO submission	28.2	27.3	24.7	24.9	25.3	130.5
	Difference	-7.1	-6.6	-5.3	-5.4	-5.7	-30.1

Source: CEPA analysis, TSO Business Plan Questionnaire.

⁶⁰ This is calculated as the difference between our estimated base of €5.22m per year and the €8.0m from the TSO's request.

⁶¹ The yearly values have been rounded to one decimal place, which accounts for the difference between the total PR6 value and the sum of the individual yearly figures.

3.5. TELECOMS

3.5.1. PR6 base: Telecoms

Our PR5 ex post analysis (see Section 2.3), showed there was an underspend of the IT allowance in PR5 due to delays driven by external factors such as COVID-19 and delays in external drivers that impact TSO IT costs. Given that we do not anticipate these delays in PR6, our interpretation is that the allowance is a better reflection of BAU costs than the outturn. Consequently, we apply the following steps to estimate the base.

- First, we estimated the outturn average for 2023 and 2024 (€5.4m). We use the default approach to choose the years, as we have not found specific reasons for choosing a different base year.
- Second, we estimated the average yearly difference between the PR5 Outturn and the PR5 Allowance, a difference in total of -€4.9m, which implies an annual difference of -€1.0m.
- Third, we calculated the difference between €5.4m and -€1.0m, which led to an adjusted modelled base cost of €6.4m.⁶²

However, as the TSO's own request was a PR6 base cost of €5.9m per annum, we adopt this as the basis of our recommendation, taking the lower value of our modelled cost vs. the BPQ request.

Our proposed base for the PR6 period is therefore €29.5m, as shown in Table 34.

Table 34: PR6 Base for Telecoms costs

TSO Opex (€m, 2024 prices)		2026	2027	2028	2029	2030	PR6 Total
	CEPA assessment	5.9	5.9	5.9	5.9	5.9	29.5
Telecoms	TSO Submission	5.9	5.9	5.9	5.9	5.9	29.5
	Difference	-	-	-	-	-	-

Source: CEPA analysis, TSO Business Plan Questionnaire.

3.5.2. PR6 trend: Telecoms

We do not identify a trend for this cost category (see Section 3.15).

3.5.3. PR6 Step: Telecoms

The TSO's submitted Telecoms cost step request totals €10.40m over PR6. The primary justification for this step increase is set out in Annex 1.03 of the TSO's PR6 Business Plan Submission: Technology Resilience and Modernisation Business Case. In general, the TSO's submission supports and justifies the need and the additionality of the proposed step change in forecast Telecoms opex.

Given Telecoms, alongside IT and Premises costs, are related to non-network capex activities the TSO has proposed in its business plan submission, we have considered the request for these costs, which typically fall under the programmes the TSO proposes to put in place during PR6, alongside non-network capex.

⁶² Values rounded to one decimal point.

As GHD have proposed a series of challenges to the non-network capex components of the TSO's programme costs⁶³, including telecoms, we mirror these in our proposals for opex.

In particular, the Telecoms step is part of the Technology Resilience and Modernisation Business Case. GHD has proposed a 20% challenge for this programme. For steps related to programmes associated with non-network capex, we apply half of the challenge proposed by GHD. This is based on our assumption that opex costs may not vary proportionally with reductions in non-network capex. Furthermore, given the novel nature of this programme, we expect there to be a certain degree of uncertainty in the accuracy of the projection of these costs.⁶⁴

Consequently, our forecast for Telecoms is 10% lower than the TSO's submission. Overall, this means we are proposing a small reduction to the TSO's overall business plan request.

Table 35: PR6 step change for Telecom costs⁶⁵

TSO Opex (€m, 2024 prices)		2026	2027	2028	2029	2030	PR6 Total
	CEPA assessment	1.4	1.9	2.0	2.0	2.1	9.4
Telecoms	TSO submission	2.0	2.0	2.1	2.1	2.2	10.4
	Difference	-0.6	-0.1	-0.1	-0.1	-0.1	-1.0

Source: CEPA analysis, TSO Business Plan Questionnaire.

3.6. PREMISES

3.6.1. PR6 base: Premises

Similar to telecoms, our PR5 ex post analysis (see Section 2.6) showed an underspend of the allowance on premise costs. This underspend was driven by factors that we do not anticipate may continue in PR6,⁶⁶ and therefore we consider recent outturn costs may not be the best reflection of BAU costs. We apply the following steps to calculate a base cost intended to reflect BAU / ongoing recurring costs associated with this category.

- First, we estimated the outturn average for 2023 and 2024 (€6.6m).
- Second, we estimated the average yearly difference between the PR5 Outturn and the PR5 Allowance, a difference of -€2.2m, which implies a yearly difference of -€0.4m.
- Third, we calculated the difference between €6.6m and -€0.4m, which led to an adjusted (modelled) base cost of €7.0m.

As we shown in Table 36, our proposed base for PR6 is of €35.1m (or €7.0m per annum). This represents a €5.4m reduction compared to the TSO's request of €40.5m.

⁶³ By 'programme' we refer to the following business cases found in EirGrid's Business Plan Submission: TSO Cybersecurity, TSO Digital Transformation, TSO Technology Resilience and Modernisation, TSO-DSO Coordination, TSO Power System Capability Enhancements, TSO Celtic Operational Readiness Programme, and TSO Control Centre Infrastructure.

⁶⁴ Further information on our assessment of Delivery Roadmap for PR6 programmes can be found in Appendix B.

⁶⁵ Values rounded to one decimal point.

⁶⁶ See Section 2.6 for further discussion. The underspend was the result of securing a rent-free period at The Oval building, agreed in exchange for waiving an upcoming break clause in the lease.

Table 36: PR6 Base for Premises costs

TSO Opex (€m, 2024 prices)		2026	2027	2028	2029	2030	PR6 Total
	CEPA assessment	7.02	7.02	7.02	7.02	7.02	35.1
Premises	TSO Submission	8.1	8.1	8.1	8.1	8.1	40.5
	Difference	-1.08	-1.08	-1.08	-1.08	-1.08	-5.38

Source: CEPA analysis, TSO Business Plan Questionnaire.

3.6.2. PR6 trend: Premises

We do not identify a trend for this cost category (see Section 3.15).

3.6.3. PR6 step: Premises

For the Premises cost category, the TSO did not propose a specific change but submitted a trend request. Since our interpretation of a trend requires identifying a clear cost driver we interpret the trend as a step. As the TSO's request is not justified in its submission, we have not adopted this increase in our proposal.

There is reason to expect a step change in Premises costs due to new programmes, more specifically the Control Centre Infrastructure programme.⁶⁷ As a result, we use the Premises costs submitted in the TSO annex on this programme as our starting point for our step adjustment. However, consistent with Telecoms costs, we apply a proportion (5%) of the cost challenge to Control Centre Infrastructure program GHD has recommended for the non-network capex component of the programme (10%).⁶⁸

This leads to the proposed step adjustment in Table 37. Our forecast for the PR6 period is of €3.7m, against a requested step (from the Control Centre Infrastructure programme) of €3.9m.

Table 37: PR6 step change for Premises costs⁶⁹

TSO Opex (€m, 2024 prices)		2026	2027	2028	2029	2030	PR6 Total
	CEPA assessment	0.5	0.9	0.9	0.7	0.8	3.7
Premises	Step from Programmes⁷⁰	0.5	0.9	0.9	0.8	0.8	3.9
	Difference	-	-0.1	-0.1	-	-	-0.2

Source: CEPA analysis, TSO Business Plan Questionnaire.

⁶⁷ See 1.07 Annex 7 - TSO Control Centre Infrastructure Business Case from EirGrid's Business Plan Submission.

⁶⁸ Further information on our assessment of Delivery Roadmap for PR6 programmes can be found in Appendix B.

⁶⁹ Values are rounded to one decimal point.

⁷⁰ We do not include 'TSO Submission' in this table because the TSO did not explicitly submit a step-change for premises costs.

3.7. IT Costs

3.7.1. PR6 base: IT costs

In line with premises and Telecoms, the allowance for IT costs was underspent by the TSO in PR5. Our PR5 ex post (see Section 2.7) indicated that the underspend was driven by delays and an internal accounting reallocation of costs. This suggests the outturn expenditure the TSO incurred in PR5, may not be an accurate reflection of what BAU costs may look like going forward into PR6.

We apply the following steps to calculate a PR6 base cost consistent with the approach that we apply for telecoms and premises opex:

- First, we estimated the outturn average from years 2023 and 2024 (€9.3m).
- Second, we estimated the average yearly difference between the PR5 Outturn and the PR5 Allowance, a difference of -€3.6m, which implies an annual difference of -€0.7m.
- Third, we calculated the difference between €9.3m and -€0.7m, which led to an adjusted (modelled) base cost of €10.0m.

However, as the TSO's own request was a PR6 base cost of €10.0m we adopt as the basis of our recommendation, taking the lower value of our modelled cost vs. the BPQ request. As Table 38 shows, our proposed base for PR6 is of €50.0m. This is equal to the TSO's request.

Table 38: PR6 Base for IT costs

TSO Opex (€m, 2024 prices)		2026	2027	2028	2029	2030	PR6 Total
	CEPA assessment	10.0	10.0	10.0	10.0	10.0	50.0
IT costs	TSO Submission	10.0	10.0	10.0	10.0	10.0	50.0
	Difference	-	-	-	-	-	-

Source: CEPA analysis, TSO Business Plan Questionnaire.

3.7.2. PR6 trend: IT costs

We do not identify a trend for this cost category (see Section 3.15).

3.7.3. PR6 step: IT costs

The TSO requested both a trend and step adjustment in its IT opex. The TSO do not identify a specific cost driver to justify the trend. Furthermore, the need for the IT costs trend is not justified. For this reason, we reinterpret the trend as a step, and have not allowed the increase on the basis the need has not been justified.

The TSO has separately identified a step change request for additional IT costs related to the programmes Cybersecurity, TSO Digital Transformation, Technology Resilience and Modernisation, TSO/DSO Coordination, Power System Capability Enhancement, and Control Centre Infrastructure.

Consistent with the approach that we have taken in other cost categories, while the TSO has generally justified the need for these programmes, GHD's assessment of the non-network capex component of the programmes proposes a series of cost challenges on the basis that the programme costs have not been sufficiently justified and/or they are in an early stage of development, in which case the GHD recommendation is provide a baseline allowance that is consistent with an initial development budget for the programme. Furthermore, we apply a

challenge given the novel nature of several of the programmes, which introduces a degree of uncertainty around the cost confidence and whether the proposed values will hold the proposed levels throughout PR6.⁷¹

We mirror these challenges in our opex assessment by applying a proportion of the GHD non-network capex challenge to the forecast opex component of these programmes.⁷² This leads to the proposed step adjustment in Table 39 of €67.7m, €5.8m lower than the €73.5m request from the TSO.

Table 39: PR6 step for IT costs⁷³

TSO Opex (€m, 2024 prices)		2026	2027	2028	2029	2030	PR6 Total
	CEPA assessment	8.5	14.9	15.2	14.4	14.7	67.7
IT Costs	TSO Submission	8.5	17.2	17.3	15.2	15.3	73.5
	Difference	-	-2.3	-2.1	-0.8	-0.6	-5.8

Source: CEPA analysis, TSO Business Plan Questionnaire.

3.8. GRID MAINTENANCE AND CLIENT ENGINEERING

3.8.1. PR6 base: Grid Maintenance and Client Engineering

Our ex post analysis (see Section 2.8.2) indicates that the expenditure incurred during PR5 was largely driven by factors for which we do not anticipate will change materially in PR6. Therefore, we estimate our base cost using our standard approach, which is to take the average outturn cost of 2023 and 2024. On this basis, as shown in Table 40, our base cost estimate is €5.4m. This is €1.1m lower than the €6.5m TSO proposal.

Table 40: PR6 Base costs for Grid maintenance and Client Engineering costs⁷⁴

TSO Opex (€m, 2024 prices)		2026	2027	2028	2029	2030	PR6 Total
	CEPA assessment	1.1	1.1	1.1	1.1	1.1	5.4
Grid maintenance and client engineering	TSO Submission	1.3	1.3	1.3	1.3	1.3	6.5
	Difference	-0.2	-0.2	-0.2	-0.2	-0.2	-1.1

Source: CEPA analysis, TSO Business Plan Questionnaire.

⁷¹ Further information on our assessment of Delivery Roadmap for PR6 programmes can be found in Appendix B.

⁷² Overall, our challenges for each of the programmes are as follows: Cybersecurity: 20% from GHD challenge, 10% from CEPA challenge; TSO Digital Transformation: 20% from GHD challenge, 10% from CEPA challenge; Technology Resilience and Modernisation: 20% from GHD challenge, 10% from CEPA challenge; TSO/DSO Coordination: 20% from GHD challenge, 10% from CEPA challenge; Power System Capability Enhancement: 50% from GHD challenge, 25% from CEPA challenge; Control Centre Infrastructure: 10% from GHD challenge, 5% from CEPA challenge.

⁷³ Values are rounded to one decimal point.

⁷⁴ Values are rounded to one decimal point.

3.8.2. PR6 trend: Grid Maintenance and Client Engineering

We do not identify a trend for this cost category (see Section 3.15)

3.8.3. PR6 Step: Grid Maintenance and Client Engineering

As shown in Table 41, no step change has been requested by the TSO for this category of cost. Therefore, we have set this value to zero.

Table 41: PR6 step change for grid maintenance and client engineering

TSO Opex (€m, 2024 prices)		2026	2027	2028	2029	2030	PR6 Total
	CEPA forecast	-	-	-	-	-	-
Grid Maintenance & Client Engineering	TSO Submission	-	-	-	-	-	-
	Difference	-	-	-	-	-	-

Source: CEPA analysis, TSO Business Plan Questionnaire.

3.9. RATES

3.9.1. PR6 base: Rates

As we concluded in our lookbook review (see Section 2.9.2), rates are a cost item that not fully within the control of the TSO. Furthermore, there is no evidence that would suggest that the PR5 outturn will differ from the BAU costs for rates that might be expected in PR6. To estimate the base, we take the average of the outturn for years 2023 and 2024. This results in the same estimate as the TSO's BPQ request.

Table 42: PR6 Base costs for Rates⁷⁵

TSO Opex (€m, 2024 prices)		2026	2027	2028	2029	2030	PR6 Total
	CEPA assessment	0.6	0.6	0.6	0.6	0.6	2.9
Rates	TSO Submission	0.6	0.6	0.6	0.6	0.6	2.9
	Difference	-	-	-	-	-	-

Source: CEPA analysis, TSO Business Plan Questionnaire.

3.9.2. PR6 trend: Rates

We do not identify a trend for this cost category (see Section 3.15).

⁷⁵ Values are rounded to one decimal point.

3.9.3. PR6 Step: Rates

As shown in Table 43, no step change has been requested for Rates. Therefore, we have set this value to zero.

Table 43: PR6 step change for rates

TSO Opex (€m, 2024 prices)		2026	2027	2028	2029	2030	PR6 Total
	CEPA assessment	-	-	-	-	-	-
Rates	TSO Submission	-	-	-	-	-	-
	Difference	-	-	-	-	-	-

Source: CEPA analysis, TSO Business Plan Questionnaire.

3.10. PROMOTION OF RESEARCH

3.10.1. PR6 base: Promotion of Research

Based on our PR5 lookback analysis (see Section 2.10.2), the expenditure the TSO has incurred in cost category has been influenced by a range of external factors. Our best estimate of what a BAU / recurring cost may look like for PR6 is the outturn cost in recent years. We use the average outturn of years 2023 and 2024 to estimate the base cost, and we take the lowest value between the request and our forecast. Our estimate of the Promotion of Research PR6 base is €2.5m. This is €1.5m lower than the TSO's request of €4.0m.

Table 44: PR6 Base costs for Promotion of research⁷⁶

TSO Opex (€m, 2024 prices)		2026	2027	2028	2029	2030	PR6 Total
	CEPA assessment	0.5	0.5	0.5	0.5	0.5	2.5
Promotion of research	TSO Submission	0.8	0.8	0.8	0.8	0.8	4.0
	Difference	-0.3	-0.3	-0.3	-0.3	-0.3	-1.5

Source: CEPA analysis, TSO Business Plan Questionnaire.

3.10.2. PR6 trend: Promotion of Research

We do not identify a trend for this cost category (see Section 3.15).

3.10.3. PR6 step: promotion of research

The TSO has requested a step adjustment of €8.6m throughout PR6. We acknowledge that the TSO has provided information on the need for further costs on innovation and research in their SQs, and for this, this step-change

⁷⁶ Values are rounded to one decimal point.

passes the need gateway.⁷⁷ However, no further information on additionality nor cost efficiency was provided, therefore we apply a 25% challenge on both stages.

Table 45: PR6 step change for Promotion of Research

TSO Opex (€m, 2024 prices)		2026	2027	2028	2029	2030	PR6 Total
	CEPA assessment	0.9	0.9	1.0	1.0	1.0	4.8
Promotion of research	TSO Submission	1.6	1.6	1.8	1.8	1.8	8.6
	Difference	-0.7	-0.7	-0.8	-0.8	-0.8	-3.8

Source: CEPA analysis, TSO Business Plan Questionnaire.

3.11. INSURANCE

3.11.1. PR6 base: Insurance

Our lookback analysis (see Section 2.11) identified that insurance costs have increased throughout PR5 driven by a general increase in insurance costs and tightening of the market post-COVID. Since there is no evidence to suggest that these headwinds will reduce in PR6, we derive our base cost estimate on the average outturn of years 2023 and 2024. As shown in Table 46, our estimated PR6 base cost on this basis is €4.6m. This is €0.42m lower than the €5.0m requested by the TSO.

Table 46: PR6 Base costs for Insurance⁷⁸

TSO Opex (€m, 2024 prices)		2026	2027	2028	2029	2030	PR6 Total
	CEPA assessment	0.9	0.9	0.9	0.9	0.9	4.6
Insurance	TSO Submission	1.0	1.0	1.0	1.0	1.0	5.0
	Difference	-0.1	-0.1	-0.1	-0.1	-0.1	-0.4

Source: CEPA analysis, TSO Business Plan Questionnaire.

3.11.2. PR6 trend: Insurance

We do not identify a trend for this cost category (see Section 3.15).

3.11.3. PR6 step: Insurance

As shown in Table 47 no step change has been requested by the TSO for Insurance costs. Therefore, we have set this value to zero.

⁷⁷ This refers to the SQ answer Aggregated Opex FTE Drivers SQ.

⁷⁸ Values are rounded to one decimal point.

Table 47: PR6 step change for insurance costs

TSO Opex (€m, 2024 prices)		2026	2027	2028	2029	2030	PR6 Total
	CEPA assessment	-	-	-	-	-	-
Insurance	TSO Submission	-	-	-	-	-	-
	Difference	-	-	-	-	-	-

Source: CEPA analysis, TSO Business Plan Questionnaire.

3.12. PUBLIC ENGAGEMENT

3.12.1. PR6 base: Public Engagement

In PR5, the COVID-19 pandemic, alongside the increased use of virtual tools for online engagement, changed the dynamics of this cost category. This change drove an underspend in this category during PR5. Since we expect this context to be the new status quo, we believe that using the outturn of years 2023 and 2024 will work as a reflection of what may be expected as BAU costs for PR6. After estimating the average outturn of 2023 and 2024, we choose the lowest value between our estimation and the TSO's request.

Table 48: PR6 Base costs for Public engagement⁷⁹

TSO Opex (€m, 2024 prices)		2026	2027	2028	2029	2030	PR6 Total
	CEPA assessment	2.3	2.3	2.3	2.3	2.3	11.3
Public engagement	TSO Submission	2.3	2.3	2.3	2.3	2.3	11.3
	Difference	-	-	-	-	-	-

Source: CEPA analysis, TSO Business Plan Questionnaire.

Table 48 shows our forecast Public Engagement base values for PR6, which will be €11.5m.

3.12.2. PR6 trend: Public Engagement

We do not identify a trend for this cost category (see Section 3.15).

3.12.3. PR6 Step: Public Engagement

As shown in Table 49, no step change has been requested for Public Engagement. Therefore, we have set this value to zero.

⁷⁹ Values are rounded to one decimal point, which is why the sum of the yearly values does not exactly match the totals.

Table 49: PR6 step change for Public Engagement costs

TSO Opex (€m, 2024 prices)		2026	2027	2028	2029	2030	PR6 Total
	CEPA assessment	-	-	-	-	-	-
Public Engagement	TSO Submission	-	-	-	-	-	-
	Difference	-	-	-	-	-	-

Source: CEPA analysis, TSO Business Plan Questionnaire.

3.13. INTERCOMPANY – PAYROLL RECHARGES

3.13.1. PR6 base: Intercompany – Payroll Recharges

Our lookback review (see Section 2.13) identified that forecasting costs in this category is challenging for a five-year period. Furthermore, we cannot anticipate whether the underlying factors that drove variation in these recharges in PR5 will continue. On this basis we align our assumption of Intercompany – Payroll Recharges base for PR6 with the TSO's request of -€15.9m.

Table 50: PR6 Base costs for Intercompany - Payroll Recharges⁸⁰

TSO Opex (€m, 2024 prices)		2026	2027	2028	2029	2030	PR6 Total
	CEPA assessment	-3.2	-3.2	-3.2	-3.2	-3.2	-15.9
Intercompany – Payroll recharges	TSO Submission	-3.2	-3.2	-3.2	-3.2	-3.2	-15.9
	Difference	-	-	-	-	-	-

Source: CEPA analysis, TSO Business Plan Questionnaire.

3.13.2. PR6 trend: Intercompany – Payroll Recharges

We do not identify a trend for this cost category (see Section 3.15).

3.13.3. PR6 step: Intercompany – Payroll Recharges

As shown in Table 51, no step change has been requested for Intercompany – Payroll Recharges by the TSO. Therefore, we have set this value to zero.

⁸⁰ Values are rounded to one decimal point.

Table 51: PR6 step change for Intercompany - Payroll Recharges

TSO Opex (€m, 2024 prices)	2026	2027	2028	2029	2030	PR6 Total
CEPA assessment	-	-	-	-	-	-
Intercompany – Payroll recharges						
TSO Submission	-	-	-	-	-	-
Difference	-	-	-	-	-	-

Source: CEPA analysis, TSO Business Plan Questionnaire.

3.14. PR6 BASE SUMMARY

In Table 52 we outline our estimated base cost against the TSO's request for PR6. Our proposal is €398.8m, whereas the TSO's request was equivalent to €502.8m, although this in part reflects that costs that the TSO has reported as base, we have included and assessed as PR6 step adjustments. Our proposed base represents a 20.7% reduction relative to the TSO's request.

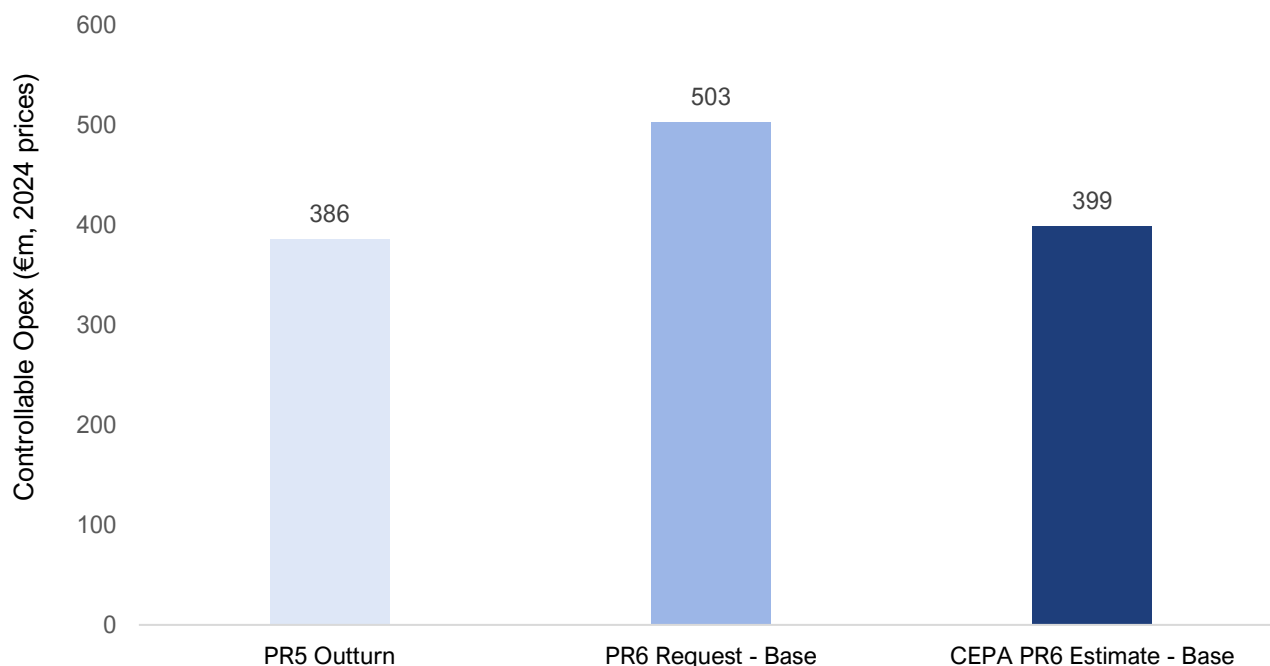
Table 52: PR6 Base Summary

TSO Opex (€m, 2024 prices)	CEPA assessment	TSO submission	Variance	
			€m	%
Staff costs	219.6	239.5	-19.9	-8.3%
Staff related costs	12.5	13.5	-1.2	-8.7%
Contractor	15.2	76.0	-60.8	-80.0%
Telecommunications	29.5	29.5	-	-
Premises	35.1	40.5	-5.4	-13.3%
IT Costs	50.0	50.0	-	-
Insurance	4.6	5.0	-0.4	-8.3%
Public engagement	11.3	11.3	-	-
Professional services	26.1	40.0	-13.9	-34.7%
Grid Maintenance & Client Engineering	5.4	6.5	-1.1	-17.2%
Rates	2.9	2.9	-	-
Promotion of research	2.5	4.0	-1.3	-33.4%
Intercompany- Payroll recharges	-15.9	-15.9	-	-
Total Base	398.6	502.8	-104.2	-20.7%

Source: CEPA analysis, TSO Business Plan Questionnaire.

As context to our forecast values, Figure 3 compares our PR6 base estimate with the TSO' PR6 base request and the actual outturn costs incurred by the TSO during PR5. Our base estimate of €398.8m is in line with the PR5 outturn, whereas the TSO's proposed base represents a 30% increase. The base is meant to reflect the fixed, recurring costs required to maintain operations, and we consider our estimate more aligned with this objective. The difference between our estimate and the PR5 outturn is primarily due to our use of 2025 staff costs and FTEs as the base, as these represent the most significant and rapidly growing cost for the TSO over the PR5 period.

Figure 3: PR5 Outturn against CEPA PR6 Base estimate and the TSO's PR6 Request



Source: CEPA analysis, TSO Business Plan Questionnaire.

3.15. PR6 TREND SUMMARY

After establishing the base, we have estimated how efficient costs may evolve over PR6. This forecast is based on identifying relevant cost drivers for each category. We define trend as the growth in unit costs and the volume of an underlying cost driver, provided it is independent of any step-change, programme, or structural change.

As discussed in previous subsections, we have not identified a clear cost driver for a trend adjustment in most cost categories for the TSO. The only exception is staff and staff related costs, which can be linked to FTEs as an underlying driver.⁸¹ However, our interpretation of these costs is influenced by two key factors. First, while the number of FTEs is expected to grow significantly during PR6, this is primarily driven by specific programmes (see Section 3.2.3), rather than a trend scaling of particular operations. As a result, rather than a trend, the requirement for an adjustment to the base cost is more related to factors that we consider as a step adjustment in our framework. Second, the TSO has identified a cost trend in staff costs related to forecast wage pressures during PR6. While this is a cost trend, we account for this separately as part of the RPE adjustment separate to this report.

Some cost trends, such as IT costs and Premises, have a trend associated to them in the TSO's submission. However, since we do not identify a clear cost driver for these cases, we have chosen to treat the trend request within our step assessment. As a result, overall we apply no trend adjustment in our TSO opex assessment.

3.16. PR6 STEP SUMMARY

In Table 53, we summarise our recommended step adjustments PR6 which amount to €345.5m. As discussed in previous subsections, the step adjustments related to a range of new programmes, and/or structural changes, within the TSO business but in a key driver is the PR6 Delivery Roadmap programmes. The cost challenges that we

⁸¹ Although as discussed above, FTEs are not an external cost driver, in contrast say to number of connections.

have applied for draft determination in many cases also reflect reductions to these programmes to mirror the challenges that GHD has proposed to the non-network capex component of these programmes.

Table 53: PR6 Step Summary⁸²

TSO Opex (€m, 2024 prices)	CEPA assessment	Does this category have a reopener? ⁸³
Staff costs	111.1	Yes
Staff related costs	6.3	Yes
Contractor	68.5	No
Telecommunications	9.4	No
Premises	3.7	No
IT Costs	67.7	No
Insurance	-	No
Public engagement	-	No
Professional services	74.2	No
Grid Maintenance & Client Engineering	-	No
Rates	-	No
Promotion of research	4.8	No
Intercompany- Payroll recharges	-	No
Total Step	345.6	-

Source: CEPA analysis, TSO Business Plan Questionnaire.

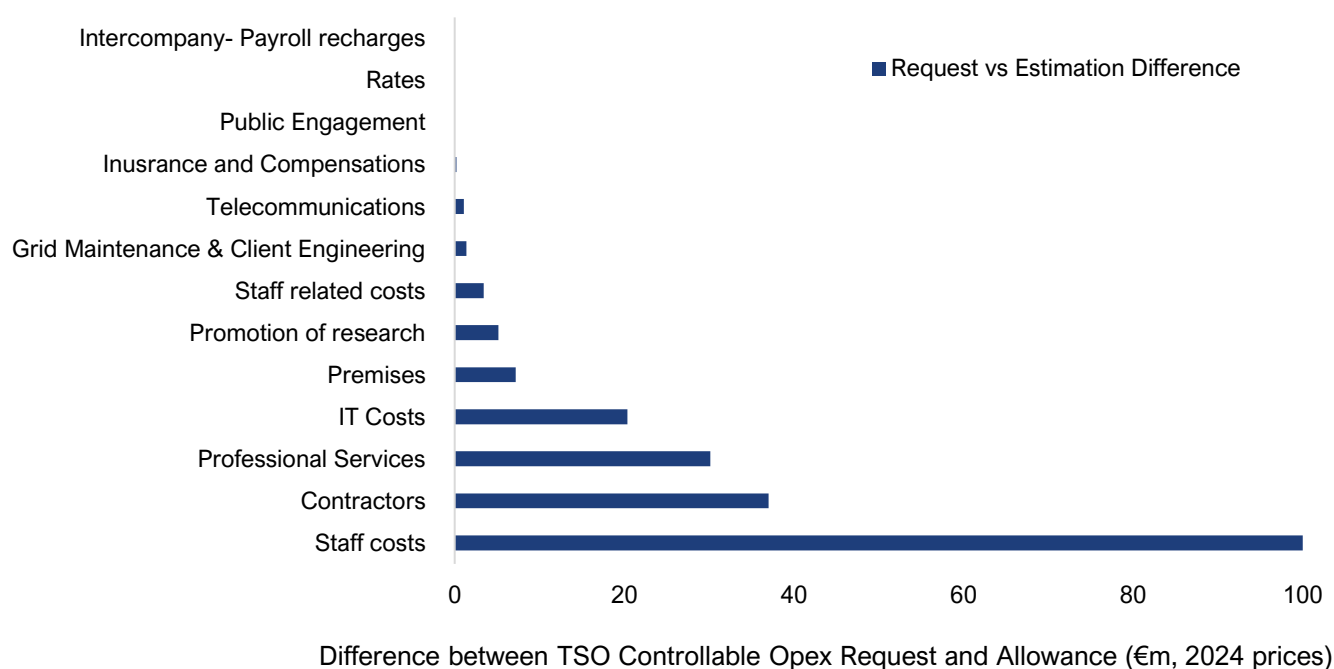
3.17. SUMMARY OF RECOMMENDATIONS

Appendix A presents our overall assessment of both the controllable and non-controllable opex forecasts for PR6 before the application of RPEs and OE. Our proposed baseline allowance controllable opex in PR6 is €744.2m, €358.6m (or 93%) higher than the PR5 Outturn expenditure of €385.7m. Our proposal is 21% less than the PR6 Request of €950.3m. As we can see from **Error! Reference source not found.**, the largest source of difference between the TSO's request and the recommended allowance originates from Staff costs. This difference is approximately €100m and represents almost half of the difference. In recognition of this difference, we have proposed that the TSO will have a reopener framework to access additional funding when needed (see Section 3.2.3).

⁸² We do not include the TSO's step request in this table, as our interpretation of the step varies across different variables.

⁸³ The reopener quantities are estimated as part of the step.

Figure 4: Differences between PR6 request and allowances per cost category



Source: CEPA analysis.

Through this reopener mechanism the TSO will have the ability to access an additional €80.2m of allowed opex resulting in a high case controllable opex allowance of €824.4m as compared to the baseline allowance of €744.2m as shown below, using the same FTE unit cost we have used to estimate a baseline allowance.

Table 54: TSO baseline allowance and high case allowance

TSO Opex (€m, 2024 prices)	Baseline allowance	High case allowance
Total Controllable Opex	744.2	824.4

Source: CEPA analysis

While we have proposed a targeted reopener mechanism for staff and staff related costs, the annual reopener window that will apply under the PR6 AIMF does not preclude the TSO for seeking variations to its baseline opex allowance for other purposes. The requirements for seeking such a reopener are set out in the CRU's regulatory framework document, but at a high-level will require the TSO to demonstrate the need, additionality and cost confidence / efficiency of its request.

As is discussed in the CRU's regulatory framework document, the proposed high case allowance is not intended to be a hard cap on the additional opex allowance that can ultimately be released via the AIMF. There is no cap on the allowed revenue that CRU may ultimately approve based on proposals that are brought forward by the TSO under the AIMF. We understand the high case is rather a statement of intent of the envelope of TSO opex – based on current known information – that can be accessed via the AIMF.

Appendix A SUMMARY OF ALLOWANCE PROPOSALS FOR PR6

TSO Opex (€m, 2024 prices)	2026	2027	2028	2029	2030	Totals						
						PR6 Allowance	PR5 Outturn	PR6 Request	PR6 Allowance to PR5 Outturn variance		PR6 Allowance to PR6 Request variance	
									€m	%	€m	%
Staff costs ⁸⁴	58.6	65.8	68.2	68.9	69.1	330.6	189.0	430.6	141.6	75%	-100.0	-23%
Staff related costs ⁸⁵	3.3	3.7	3.8	3.9	3.9	18.6	11.5	22.0	7.0	61%	-3.5	-16%
Contractor	16.6	17.1	17.0	16.5	16.4	83.6	40.4	120.7	43.2	107%	-37.0	-31%
Telecommunications	7.3	7.8	7.9	7.9	8.0	38.9	27.5	39.9	11.3	41%	-1.1	-3%
Premises	7.5	7.9	7.9	7.8	7.8	38.9	32.4	46.0	6.4	20%	-7.2	-16%
IT Costs	18.5	24.9	25.2	24.4	24.7	117.7	43.9	138.0	73.8	168%	-20.4	-15%
Insurance	0.9	0.9	0.9	0.9	0.9	4.5	4.5	4.8	0.08	2%	-0.2	-5%
Public engagement	2.3	2.3	2.3	2.3	2.3	11.3	11.3	11.3	-0.02	-0%	-	-
Professional services	21.1	20.7	19.4	19.5	19.6	100.3	42.1	130.5	58.2	138%	-30.1	-23%
Grid Maintenance & Client Engineering	1.1	1.1	1.1	1.1	1.1	5.5	5.0	6.7	0.39	8%	-1.4	-20%
Rates	0.6	0.6	0.6	0.6	0.6	2.9	3.1	2.9	-0.17	-6%	-	-
Promotion of research	1.4	1.4	1.5	1.5	1.5	7.3	2.5	12.6	5.0	202%	-5.1	-41%
Intercompany - Payroll recharges	-3.2	-3.2	-3.2	-3.2	-3.2	-15.9	-27.5	-15.9	11.6	-42%	-	-
Total Controllable Opex	136.0	151.0	152.5	152.2	152.6	744.2	385.7	950.3	358.6	93%	-206.0	-21%
Inter TSO Compensation	3.7	3.7	3.7	3.7	3.7	18.5	26.0	18.5	-7.5	-28%	-	-
TAO Payment ⁸⁶	364.1	408.3	452.4	496.7	540.9	2,262.4	1,510.4	2,262.4	752.0	49.8%	-	-
CORESOS subscription	1.3	1.3	1.3	1.3	1.3	6.5	4.9	6.5	1.6	33.4%	-	-
Interconnector services	1.0	1.0	1.0	1.0	1.0	5.0	8.0	5.0	-3.0	-37%	-	-

⁸⁴ This cost category has a reopener mechanism. Further details can be found in Section 3.2.3.

⁸⁵ This cost category has a reopener mechanism. Further details can be found in Section 3.2.3.

⁸⁶ TAO payments are costs recovered by EirGrid, which are then transferred to the TAO, and which the TAO pays in return. These revenues are recovered through tariffs only once by EirGrid.

TSO Opex (€m, 2024 prices)	2026	2027	2028	2029	2030	Totals							
						PR6 Allowance	PR5 Outturn	PR6 Request	PR6 Allowance to PR5 Outturn variance		PR6 Allowance to PR6 Request variance		
									€m	%	€m	%	
CER Levy	3.0	3.0	3.0	3.0	3.0	15.0	10.5	15.0	4.5	42.7%	-	-	
Ongoing service charge	-	-	-	-	-	-	-	-	-	-	-	-	
DUoS costs	6.9	6.9	6.9	6.9	6.9	34.5	28.1	34.5	6.4	22.8%	-	-	
Ancillary Services	280.7	1.5	1.5	1.5	1.5	286.7	1,134.3	286.7	-847.6	-74%	-	-	
ENTSO-E Fees	-	-	-	-	-	-	-	-	-	-	-	-	
PSO	250.0	250.0	250.0	250.0	250.0	1,250.0	1,690.4	1,250.0	-440.4	-26%	-	-	
FASS	-	370.5	381.8	403.5	412.5	1,568.3	-	1,568.3	1,568.3	-	-	-	
Total Direct/Non-controllable costs	910.7	1,046.2	1,101.6	1,167.6	1,220.8	5,446.9	4,412.5	5,446.9	1,034.4	23.4%	-	-	
Unrecovered Stage 1 project costs	-	-	-	-	-	-	2.5	-	-2.5	-100%	-	-	
Costs incurred addressing Dublin Security of Supply	-	-	-	-	-	-	3.0	-	-3.0	-100%	-	-	
IIDM costs	-	-	-	-	-	-	0.1	-	-0.1	-100%	-	-	
Offshore	-	-	-	-	-	-	56.6	-	-56.6	-100%	-	-	
Security of Supply	274.0	219.0	83.9	23.2	-	600.1	1,314.0	600.1	-713.9	-54%	-	-	
Celtic Debt Service costs	25.0	4.7	-	-	-	29.7	42.4	29.7	-12.7	-30%	-	-	
SONI Governance	-	-	-	-	-	-	6.1	-	-6.1	-100%	-	-	
NRAA	-	-	-	-	-	-	1.4	-	-1.4	-100%	-	-	
Cloud IT	-	-	-	-	-	-	7.0	-	-7.0	-100%	-	-	
Innovation and Hydrogen	-	-	-	-	-	-	0.4	-	-0.4	-100%	-	-	
Cyber	-	-	-	-	-	-	1.9	-	-1.9	-100%	-	-	
OTP & TAO TSO Data Exchange	-	-	-	-	-	-	1.1	-	-1.1	-100%	-	-	
LDES	-	-	-	-	-	-	1.2	-	-1.2	-100%	-	-	
CSRD	-	-	-	-	-	-	1.0	-	-1.0	-100%	-	-	

TSO Opex (€m, 2024 prices)	2026	2027	2028	2029	2030	Totals							
						PR6 Allowance	PR5 Outturn	PR6 Request	PR6 Allowance to PR5 Outturn variance		PR6 Allowance to PR6 Request variance		
									€m	%	€m	%	
Hybrids	-	-	-	-	-	-	1.3	-	-1.3	-100%	-	-	
FASS funding costs	2.0	0.9	0.9	0.9	0.9	5.6	-	5.6	5.6	-	-	-	
CEP	22.0	22.0	22.0	22.0	22.0	110.0	128.7	110.0	-18.7	-15%	-	-	
Total Exceptional Items	323.0	246.6	106.8	46.1	22.9	745.4	1,568.8	745.4	-823.4	-52%	-	-	
Total Opex	1,369.7	1,443.8	1,360.9	1,365.9	1,396.3	6,936.5	6,367.0	7,142.6	569.5	8.9%	-206.1	-2.8%	

Source: CEPA analysis, TSO Business Plan Questionnaire.

Appendix B DELIVERY ROADMAP FOR PR6 PROGRAMME CHALLENGES

Table 55 below outlines the rationale behind the varying degrees of challenge applied across programmes. While the challenges are informed by GHD’s proposal, the reasoning behind them is based on our own independent assessment.

Table 55: Summary of challenges for PR6 Delivery Roadmap Programmes

Programme	Need	Additionality	Cost confidence / customer value / efficiency	GHD challenge	CEPA challenge
Redacted					
TSO Digital Transformation	<p>This programme is designed to develop the capabilities needed to meet the objectives set out in the Clean Energy Package, the Open Data Directive, the Corporate Sustainability Reporting Directive, and broader government priorities.</p> <p>The primary driver for this initiative is the increasing integration of renewable energy sources and the growing electrification of the energy system. This transition necessitates</p>	<p>The TSO’s current digital capabilities are insufficient to support the effective decarbonisation of the energy network. This could result in non-compliance with existing directives and lead to operational inefficiencies.</p> <p>We do not apply a challenge at this stage.</p>	<p>The cost build up is mostly derived from Staff costs, Professional Services, and IT Costs/Cloud Opex costs.</p> <p>While the last three cost categories have been benchmarked from similar initiatives, we note that this is the set up of a new programme, where inefficiencies as part of the initial launch may arise. Therefore, the cost confidence in that these costs will be at these levels is unclear at this point. Also, we note that the</p>	20%	10%

Programme	Need	Additionality	Cost confidence / customer value / efficiency	GHD challenge	CEPA challenge
	<p>enhanced digital capabilities to effectively manage a more dynamic and complex power system.</p> <p>The need gateway for this programme is passed.</p>		<p>benchmark data has not been made available.</p> <p>Furthermore, Staff costs represent a 22% of the Opex costs for this programme (including Cloud Opex). However, the explanation for the proposed FTE levels is unclear.</p> <p>We apply a challenge stemming from this stage, as a way to signal that costs may evolve in a different way for a novel programme such as this, and to seek further information on how FTE values were estimated for this particular programme.</p>		
Technology Resilience and Modernisation	<p>This programme originates from the TSO's need to implement stable and safe IT solutions that support the reliable operation of the power system. It aims to meet both current and emerging obligations under EU policy, including procurement legislation and the Network and Information Systems Security Directive (NIS2). In addition, it contributes to the broader goal of supporting renewable energy targets.</p> <p>The need gateway for this programme is passed.</p>	<p>This programme is intended to enhance security of supply standards and enable the TSO to adopt new grid technologies, thereby optimising the use of existing infrastructure. It would also strengthen the TSO's capacity to integrate a broader range of IT solutions into its operations.</p> <p>Given these results cannot be achieved with existing resources, the additionality gateway is passed with no challenge.</p>	<p>The opex profile for this programme primarily comprises Staff costs, Telecommunications, IT costs, Contractor support, Professional services and Cloud opex.</p> <p>While costs such as IT costs, Telecommunications and Professional services are informed by existing vendor agreements and benchmarked data from similar initiatives, it remains uncertain how these costs may evolve over the course of PR6, particularly for a new programme. Also, we note that the benchmark data has not been made available.</p> <p>Staff costs, which represent 19% of the total opex (including Cloud opex, have not yet been accompanied by a clear explanation of how internal resource requirements were determined.</p> <p>We are therefore applying a challenge at this stage, primarily from a cost confidence perspective and to encourage further clarity on the estimation of internal resource needs.</p>	20%	10%
TSO/DSO Coordination	<p>An improvement in TSO/DSO coordination is mandated by the Clean Energy Package, the Climate Action Plan, and broader government</p>	<p>To achieve decarbonisation targets while maintaining security of supply, enhanced coordination between the transmission</p>	<p>Similarly to other programmes in this section, opex is composed of Staff costs, Professional fees, Hardware/Software costs and Licences.</p>	20%	10%

Programme	Need	Additionality	Cost confidence / customer value / efficiency	GHD challenge	CEPA challenge
	<p>policies. This programme will be essential in the context of a growing number and diversity of generation and demand connections. In addition, as more renewable energy is integrated into the network, proactive engagement between the System Operators will be increasingly important to help maintain security of supply.</p> <p>The need gateway for this programme is passed.</p>	<p>and distribution systems will be required.</p> <p>This level of coordination represents an objective that cannot be met with existing resources.</p> <p>As such, the additionality gateway for this programme is considered to be passed, and no challenge is applied at this stage.</p>	<p>The latter three categories have been estimated using benchmarked data from similar initiatives or current market prices for relevant technologies. However, as this represents a step change in activity not previously delivered by the TSO, and in the absence of visibility over the benchmark data, further information would be helpful to assess the confidence level in these cost estimates over PR6.</p> <p>In addition, for Staff costs, it is not currently clear how the proposed FTE levels were determined. Further detail on how these resources were estimated, ideally from a bottom-up perspective, would be welcomed.</p> <p>We therefore apply a challenge at this gateway to reflect these points.</p>		
<p>Power System Capability Enhancement</p>	<p>This programme supports the decarbonisation targets set by the Irish Government and the EU. It includes the development of new capabilities to facilitate infrastructure reinforcement and the connection of new assets. In addition, it would enhance the TSO's operational forecasting by enabling greater accuracy in the evaluation of short-term demand and renewable energy forecasts.</p> <p>The need gateway for this programme is passed.</p>	<p>This programme would support the resilience of the power system while managing increasing levels of variable, non-synchronous renewable energy.</p> <p>It also includes key elements such as the enablement of hybrid connections, integration of flexible network devices, and an upgrade to the outage management system.</p> <p>As these objectives are new and cannot be achieved with existing resources, the additionality gateway is considered to be passed, and no challenge is applied.</p>	<p>As with other programmes, opex costs for this initiative fall into three main categories: Staff costs, Professional services and IT costs.</p> <p>While the latter two are informed by benchmarked data, the underlying details of these benchmarks have not been provided. We would welcome further information on the sources used to support these estimates.</p> <p>In addition, staffing projections include 23 FTEs by 2026 and 41 by 2030, making this one of the largest proposed increases in internal resources among the PR6 Delivery Roadmap programmes. However, the basis for these estimates has not yet been outlined, which raises questions around the level of cost confidence associated with these figures. Further detail on how these resource levels were determined would therefore be helpful.</p> <p>We therefore apply a challenge at this stage.</p>	<p>50%</p>	<p>25%</p>

Programme	Need	Additionality	Cost confidence / customer value / efficiency	GHD challenge	CEPA challenge
Control Centre Infrastructure	<p>The expansion of the TSO's responsibilities is driven by the Climate Action Plan, as well as new control room security requirements under the NIS2 and CER Directives. These obligations, together with the upcoming expiration of the Emergency Control Centre (ECC) lease, support the case for additional expenditure.</p> <p>The need gateway is passed.</p>	<p>The current utilisation of the control room desks, combined with increasing requirements to be met for the Climate Action Plan and scheduled integration with Europe by 2027 justify the additionality gateway.</p> <p>We therefore do not apply an additionality challenge at this stage.</p>	<p>For this cost category, the main components are Staff related costs, Premises, and IT costs. Premises costs have been provided externally by CBRE, IT costs are based on internal estimates, and Staff related costs draw on external rates for security personnel.</p> <p>The level of cost confidence for this programme we consider it to be higher than for others, as it primarily involves the expansion and reallocation of existing resources rather than the initiation of a wholly new type of project. That said, some degree of uncertainty remains, as costs are based on external data and are being incurred under this programme for the first time.</p> <p>We therefore apply a challenge at this stage.</p>	<p>10%</p>	<p>5%</p>

Source: CEPA analysis



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