PR5 and PR6 Cost Assessment: EirGrid Offshore Asset Owner

CRU

27 June 2025

FINAL REPORT

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EXECUTIVE SUMMARY

E.1. Context and scope

This report provides CEPA and GHD's review and analysis of the Price Review 5 (PR5) and Price Review 6 (PR6) operating (opex) and capital expenditure (capex) submissions made by EirGrid in its role as offshore system operator and asset owner for the years 2021-2030. For PR5, EirGrid's offshore opex and capex will be recovered through its existing Transmission System Operator (TSO) price control. In PR6, the CRU proposes to set a separate offshore price control for EirGrid's new offshore asset owner (OAO) functions and costs.

As well as separate price controls, we note that the Commission for Regulation of Utilities (CRU) has indicated in its offshore revenue model decision paper (CRU202499) that it is of the view that a high degree of separation of EirGrid's new offshore asset owner responsibilities and related offshore activities from its existing licenced functions is a key component of a robust and stable regulatory model that protects Irish energy consumers.

CEPA and GHD has not considered possible changes in EirGrid's functional structure and governance as part of our PR6 cost assessment and any impacts this may have on EirGrid's future expenditure requirements. We understand these issues are being considered outside of EirGrid's current price control process. We have reviewed the business plan submission and forecast offshore costs as submitted by EirGrid to the CRU.

Our cost 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 with EirGrid, and in response to Supplementary Questions (SQs) that were raised.

E.2. Summary of findings

A summary of the findings from our review is provided below in Table 1.

The proposed allowances in Table 1 are based on a scenario in PR6 where one Phase 1 offshore wind project is transferred to EirGrid – aligned with Scenario 3 in EirGrid's business plan. In practice, the timing of when Asset Transfer Value (ATV) payments will be made by EirGrid to Phase 1 developers is highly uncertain and there is a possibility that more Phase 1 transfers occur in PR6, or indeed that no transfers occur.

Our assumption is the CRU will set its baseline ex-ante allowed revenue for EirGrid's offshore price control in PR6 excluding any Phase 1 ATV payments and associated stamp duty. Phase 1 project ATV payments will then be added to the offshore Regulatory Asset Base (RAB) when the timing of Phase 1 project transfers (if any) are known, and ATV values are approved by the CRU. We have not assessed the current estimates of the ATV payments which we understand will be reviewed under a separate CRU regulatory process.

We recommend that CRU include an opex reopener mechanism as part of the new offshore price control regulatory framework that will allow EirGrid to request additional opex allowances should the number of Phase 1 projects that transfer to EirGrid increase in PR6 above the baseline assumption of 1 project transfer in our analysis, which are expected to increase costs in offshore pre-operations and operations and maintenance (O&M).

We understand other elements of EirGrid's submitted offshore opex in its BPQ also remain uncertain, and are subject to change as business requirements and specifications are finalised and EirGrid's procurement processes are progressed. We therefore recommend this opex reopener mechanism should also allow EirGrid to request additional allowances for other categories of offshore opex during PR6. We would propose that this reopener should form part of the annual reopener window that we understand the CRU is considering for the PR6 Agile Investment and Monitoring Framework (AIMF).[1]

[1] Consistent with the CRU/2024/99 decision, EirGrid might also be provided with an opportunity to take its major offshore opex programmes – e.g., the placing of operational insurances and establishment of O&M contracts and frameworks – through a similar gateway process as we understand the CRU proposes to apply to EirGrid's capital programme.

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.

As a result of the above, the proposed allowances in Table 1 should be considered baseline allowances with EirGrid able to access additional funding through these reopener mechanisms during PR6.

Table 1: Executive Summary

Offshore (€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	%
IT Software Licenses	-	-	-	90.6	86.0	-	-	-4.6	-5.0%
Offshore Asset Readiness Programme (OARP)	-	-	-	184.2	175.0	-	-	-9.2	-5.0%
Buildings & Facilities	-	-	-	2.7	2.7	-	-	-	-
Pre-operations	-	-	-	40.6	38.6	-	-	-2.0	-4.9%
Offshore Central Functions	-	-	-	61.9	58.8	-	-	-3.1	-5.0%
Enduring Operations & Maintenance	-	-	-	28.6	27.0	-	-	-1.6	-5.2%
Total Opex	**-**	**56.2**	**56.2**	**408.5**	**388.1**	**331.9**	**590%**	**-20.4**	**-5.0%**
IT Non-network capex: Technology	-	-	-	1.9	1.8	-	-	-0.1	-5%
IT Non-network capex: People and professional fees	-	-	-	18.3	17.4	-	-	-0.9	-5%
Buildings & Facilities	-	-	-	12.1	11.5	-	-	-0.6	-5%
Capital Spares	-	-	-	38.0	38.0	-	-	-	-
Phase 1 Asset Transfers	-	-	-	335.0	335.0	-	-	-	-
Phase 1 Asset Transfers – Stamp duty at 7.5%	-	-	-	25.1	25.1	-	-	-	-
Phase 2 Tonn Nua	-	-	-	347.9	347.9	-	-	-	-
Total Capex (including ATVs)	-	**64.6**	**64.6**	**778.4**	**776.7**	**712.11**	**1,102%**	**-1.7**	**-0.2%**
Total Capex (excluding ATVs)	-	**64.6**	**64.6**	**418.3**	**416.6**	**352.0**	**544%**	**-1.7**	**-0.4%**
Total expenditure (including ATVs	-	**120.8**	**120.8**	**1,186.9**	**1,164.9**	**1,044.0**	**864%**	**-22.1**	**-1.8%**
Total Expenditure (excluding ATVs)	-	**120.8**	**120.8**	**826.8**	**804.7**	**683.9**	**666.1%**	**-22.1**	**-2.6%**

Source: CEPA-GHD analysis

1. INTRODUCTION

EirGrid has been designated as the offshore system operator and offshore asset owner (OAO) in Ireland. This report – prepared jointly by CEPA and GHD – assesses EirGrid's offshore operational expenditure (opex) and capital expenditure (capex) over the PR5 (2021–2025) and PR6 (2026–2030) periods.

The capex assessment has been undertaken by GHD while the opex assessment has been led by CEPA drawing on the technical expertise of GHD and its offshore transmission engineers.

1.1. SCOPE OF ANALYSIS

While the offshore costs EirGrid incurred during PR5 were technically recovered under its TSO price control, rather than the separate offshore price control that is proposed for PR6, we include them in this report to provide a comprehensive narrative on offshore operations and capex expenditure.

Our review first considers the costs, systems processes, and initiatives implemented by EirGrid to establish its offshore functions during PR5. We then assess EirGrid's proposals for expenditure to be recovered through the separate offshore price control in PR6 and make recommendations on the level of expenditure, outputs and, where applicable, regulatory framework the Commission for Regulation of Utilities (CRU) might introduce.

As well as separate price controls, we note that the Commission for Regulation of Utilities (CRU) has indicated in its offshore revenue model decision paper (CRU202499) that it is of the view that a high degree of separation of EirGrid's new offshore asset owner responsibilities and related offshore activities from its existing licenced functions is a key component of a robust and stable regulatory model that protects Irish energy consumers.

CEPA and GHD has not considered possible changes in EirGrid's functional structure and governance as part of our PR6 cost assessment and any impacts this may have on EirGrid's future expenditure requirements. We understand these issues are being considered outside of EirGrid's current price control process. We have reviewed the business plan submission and forecast offshore costs as submitted by EirGrid to the CRU.

1.2. DATA SOURCES AND ASSUMPTIONS

Our 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 stated 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 Inflation trends and Ongoing Efficiency 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.

Lastly, for simplicity, we refer to EirGrid's offshore functions and activities as the 'OAO'. As discussed above, EirGrid's regulated offshore functions are part of EirGrid's licensed TSO role. The OAO role in this report refers to the activities and costs that EirGrid has reported in its separate offshore BPQ for PR6 rather than a specific functional definition of the OAO role as distinct from EirGrid's onshore TSO activities.

1.3. OUR APPROACH

Our review of EirGrid's expenditure is structured into two parts:

- A 'bottom-up' ex post assessment (or 'lookback' assessment) of EirGrid's offshore 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 the OAO’s forecast costs, planned delivery, and efficiency for PR6.

For the PR5 lookback assessment, our assessment is based on the offshore-related costs incurred by EirGrid which it has recovered through its TSO price control. We have compared and assessed EirGrid’s reported outturn costs against the submissions and variations to the TSO allowed revenue that the CRU has made during PR5.

For the PR6 look forward assessment, for opex 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.

The offshore capex assessment undertaken by GHD is based on a technical assessment of the forecast costs but applies similar assessment criteria – focused on need, options considered and cost detail / confidence – as are used in the base-step-trend methodology for opex.

In the subsections below we provide a brief description of the base-trend-step methodology.

Base-Trend-Step Methodology – introduction

We consider that a top-down benchmarking approach would be difficult to implement at present for EirGrid’s offshore functions and would give misleading results. As a result, we have set out an approach that builds upon the bottom-up cost assessment that was taken in PR5.[2] 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.

Each of these steps is discussed further in the following sections. A key strength of the base-trend-step approach is that it makes it very clear what customers will be funding in terms of new outputs and deliverables above business-as-usual costs.

Step 1: Approach to setting the OAO 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.

For EirGrid’s offshore asset owner functions and activities there are typically no recurring costs associated with normal operations rolling forward from PR5. As a result, for all the cost areas outlined in Sections 3 and 5, there is no direct comparison to PR5. In other words, there are no business-as-usual (BAU) costs. This means that all proposed costs are assessed as additions to a zero starting base cost in our assessment.

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 each category. We treat trend adjustments in our cost assessment as the growth in unit costs and volume of an underlying cost driver, independent of any step-change, programme, or structural change, as well as the unit cost increases captured by RPEs or OE improvements.[3]

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[2] For the TSO and TAO.

[3] Which as discussed above, are addressed in a separate report.

The nature of EirGrid's offshore functions mean that the growth in the business is currently inherently tied to structural change and new programmes and initiatives. As a result, we have not considered trend adjustments for EirGrid's offshore activities and instead have assessed its forecast costs as step adjustments.

Step 3: Identifying step changes

The final step in our cost assessment methodology is to identify whether there are any changes in the outputs EirGrid is expected to deliver in relation to offshore. In general, step-changes will account for new initiatives and requirements faced by the licensee during PR6. EirGrid's OAO role is a clear example of this, as the OAO in itself is both a new initiative and requirement of EirGrid during PR6.

We have evaluated the forecast offshore costs in EirGrid's BPQ 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 OAO? 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 business plan questionnaire (BPQ) submission** – has the OAO clearly mapped a step-change within 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 OAO has 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 OAO has not demonstrated additionality.
- **Cost confidence / customer value / efficiency:** has it been clearly demonstrated 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 OAO provided evidence that costs have been market-tested or benchmarked? 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 EirGrid before and/or comparators are not available. A cost challenge of up to 25 percent is applied in these cases where we conclude that EirGrid has not demonstrated cost efficiency / confidence 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 EirGrid 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.

Deciding the level of the cost challenge that should be applied for additionality and/or efficiency is inherently a judgement call. That judgement is necessarily informed by the information provided (or not provided) by EirGrid. In addition to the specific types of evidence listed above, we have based that judgement on general considerations such as:

- The completeness, clarity and consistency of the supporting information provided for the proposed step-change in costs.
- The level of detail provided to support the cost forecast for the step-change (relative to the monetary level of the step-change).
- Whether EirGrid has demonstrated that the costs of the proposed step-change are proportionate to the customer benefit.

It is important to recognise that in the context of a price review, the obligation is on EirGrid 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 EirGrid during the PR6 consultation process that further information and evidence is needed to establish the additional level of funded expenditure above the base. This means that where sufficient evidence and information can be provided by EirGrid as part of its response to the PR6 consultation (draft determination), we may revisit the adjustments and conclusions we have currently reached in these two final gateways.

In summary, all the costs submitted by EirGrid will fall within the step-change category for our PR6 assessment. We therefore exclude from our analysis any assessment of base and trend.

1.4. REPORT STRUCTURE

The rest of this report is structured as follows:

- Section 2, reviews EirGrid's PR5 offshore related opex. While these costs have been recovered through EIrGrid's TSO price control during PR5, we include them in this document to provide context on the activities carried out in the previous period;
- In Section 3, we provide our look forward review of the EirGrid's requested PR6 offshore opex. We provide our recommendations in terms of challenges or adjustments to the EirGrid's PR6 request, and the supporting rationale for this;
- In Section 4, we review PR5 capex related to offshore. As with our opex assessment, these costs are attributed to the TSO price control, but we include them in this document to provide context on the activities carried out in the previous period; and
- Finally, in Section 5, we provide our review of EirGrid's PR6 requested offshore capex.

2. REVIEW OF PR5 OPERATING EXPENDITURE

This section reviews EirGrid's reported Offshore PR5 (2021–2025) opex which it has recovered through the TSO price control during PR5.

Table 2 provides an overview of EirGrid's actual and forecast offshore outturn costs for PR5, alongside the PR5 allowance. In total, €56.3 million was spent on offshore activities during PR5, compared to an allowance of €61.7 million, resulting in an underspend of 9.5%. These allowances were approved as part of the in-period allowed revenue adjustments for 2023, 2024, and 2025.[4] We do not break down these allowances by cost category, as they do not directly align with the categories used for the outturn values.

Table 2: Summary of PR5 opex Outturn costs and Allowances

OAO 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	Internal Payroll and Pension	0.1	0.4	1.6	3.3	6.6	-	12.0	-	-
	External Contract and Agency	0.1	2.6	3.4	6.5	8.4	-	21.0	-	-
Professional Services	Legislative and Advisory Consultants	0.1	0.9	2.8	6.7	4.9	-	15.4	-	-
	Audit costs	-	-	-	0.02	-	-	0.02	-	-
IT Opex	IT Opex	-	-	0.1	1.2	6.6	-	7.9	-	-
Total Offshore Opex		**0.3**	**3.9**	**7.8**	**17.7**	**26.5**	**61.8**	**56.2**	**-5.6**	**-9.1%**

Source: CEPA analysis, EirGrid.

For the majority of PR5, EirGrid's expenditure on offshore activities was opex.[5] The Irish Government's policy statement on the framework for Ireland's Offshore Electricity Transmission System, published in May 2021, established that EirGrid would assume the role of offshore system operator and asset owner in Ireland.[6] This expansion of EirGrid's responsibilities beyond its existing onshore TSO role, introduced a new set of costs associated with starting to establish these new functions and activities. In 2021, EirGrid began to establish an Offshore Delivery Team (ODT) to address the new responsibilities, and began to work with the CRU to develop an Offshore Regulatory Framework. These costs increased in 2022 as more detailed analyses of grid integration were conducted to assess the availability of capacity on the transmission system. Moreover, EirGrid began to develop requirements of technical and operational specifications related to required capabilities to effectively manage offshore assets.[7]

[4] These values were obtained from the Electricity Transmission Network Allowed Revenues for 2023, 2024, and 2025.

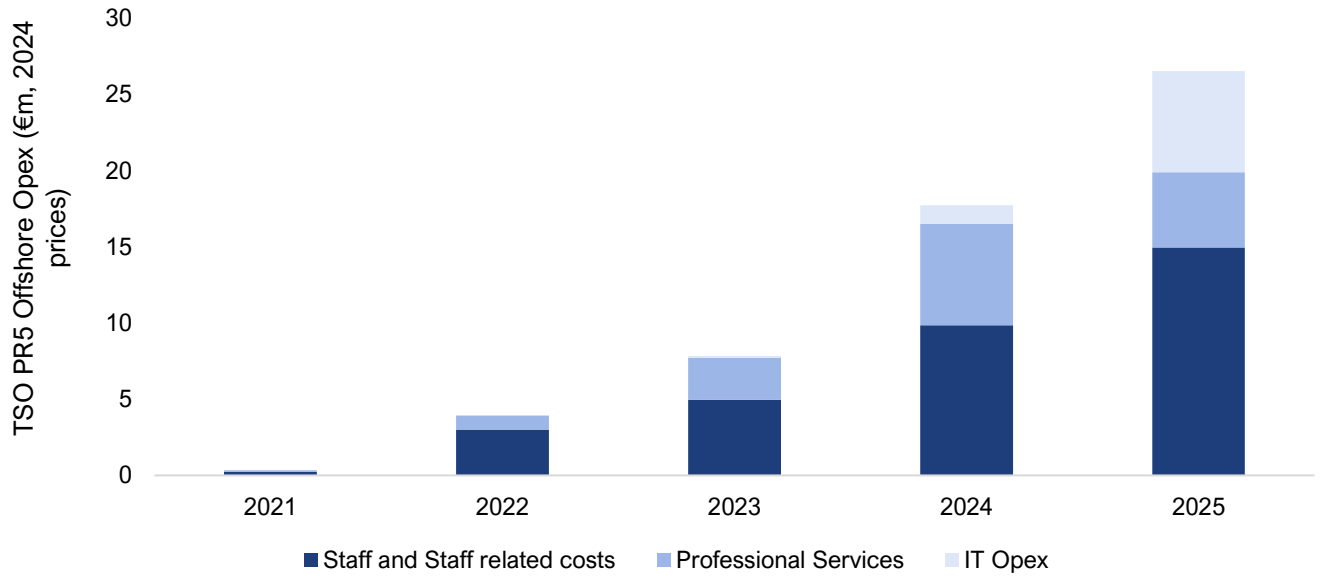
[5] For reference on capital expenditure during PR5 on offshore activities refer to Section 4.

[6] Gov.ie (2021), Policy Statement on the Framework for Ireland's Offshore Electricity Transmission System. Available at: here.

[7] The details on historical Offshore expenditure have been taken from EirGrid's Business Plan Submission, Annex 1.19 'TSO Lookback'.

In 2023, expenditure was allocated to advancing the Official Journal of the European Union (OJEU) Offshore frameworks ENQEIR823 and ENQEIR816, as well as an Interim Document Management System used with Phase 1 developers.[8] However, opex for 2023 was 39% lower than budgeted due to delays in Phase 1 developer timelines. As a result, fewer engineering and operational staff were hired that year, and costs were reprofiled into 2024 and 2025.[9] The expected increase in expenditure for 2024 and 2025 is illustrated in **Error! Reference source not found.**.

Figure 1: TSO PR5 Offshore opex over time



Source: CEPA analysis, EirGrid.

The underspend of allowances carried over into 2024, driven by delays in recruitment targets and the Offshore Technical Services Framework (ENQEIR816). Additionally, further delays in Phase 1 developer timelines resulted in further cost reprofiling into 2025 and PR6. In 2024, the procurement process for the Offshore Information Management System was completed. However, IT expenditure was lower in PR5 than was expected due to its reprofiling from 2024 and 2025 into PR6.

Overall, PR5 established a foundation for the Offshore Delivery Team, IT solutions, and the regulatory framework for the offshore grid. However, a key pattern that emerged during this period was the consistent delays in Phase 1 developer timelines. Given this trend, there is a risk that some of the forecasted costs for PR6, some of which are dependent on external developer timelines and actions, could also be subject to further delays.

[8] Phase 1 refers to the construction of offshore asset by third-party developers. At the time of EirGrid's BPQ submission six Phase 1 projects were under development in PR6. EirGrid's business plan submission sets out three scenarios of the Phase 1 projects that will transfer to EirGrid during PR6, ranging from 1 to 6.

These scenarios, which are dependent on Phase 1 project developer timelines, is discussed further in Section 3.1.2.

[9] The potential for delays in developer timelines later informs our decision to choice the most conservative scenario around Phase 1 asset transfers. For more information refer to Section 3.1.2.

3. REVIEW OF PR6 OPERATING EXPENDITURE

The objective of the CRU in setting allowed opex is to ensure that EirGrid as the OAO can deliver the outputs that are required by Irish customers, while challenging the licensee to perform at an efficient level. This should result in setting EirGrid challenging but realistic cost targets for the duration of the price control period.

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

3.1. OVERVIEW OF EIRGRID'S PR6 REQUEST

Following the Maritime Area Planning (MAP) Act in 2021 and the release of the Policy Statement on the Framework for Ireland's Offshore Electricity Transmission that same year, EirGrid's role is set to expand in coming years to develop its new offshore functions. The OAO will take on responsibility for developing offshore renewable infrastructure and is expected to begin owning offshore assets during PR6. This legislative and policy shift will significantly increase the number of assets under EirGrid's management, leading to a corresponding rise in managerial and operational activities. The transition to offshore asset ownership will begin during PR6.

EirGrid's approach to managing its transition to being Ireland's offshore network asset owner has been to structure the planned offshore investment programme into four categories:[10]

- **Category 1** (Connect Offshore Projects): consists of connecting onshore connections to offshore renewable generation.
- **Category 2** (Develop Offshore Assets): costs associated with EirGrid's development and construction of offshore assets (currently the Tonn Nua project).
- **Category 3** (Transfer Offshore Assets): costs associated with the transfer of Phase 1 developer Transmission Assets to EirGrid.
- **Category 4** (Offshore Asset Readiness Programme, Pre-operations, Enduring Operations): these are costs needed to allow EirGrid to carry out its offshore operations, such as engineering and asset management, health and safety, IT cloud infrastructure, finance, procurement, supply chain.

While these four categories of costs primarily relate to capex (and are discussed in sections 4 and 5) they also have interactions with EirGrid's forecast offshore opex in PR6. In particular, aspects of EirGrid's offshore opex requirements depend on the timing and the quantum of Category 3 costs (Phase 1 ATV payments).

EirGrid submitted three scenarios for the number of Phase 1 project ATV transfers that may occur during PR6 under Category 3 investment as part of its business plan submission:

- **Scenario 1**: 6 asset transfers in PR6.
- **Scenario 2**: 4 asset transfers in PR6.
- **Scenario 3**: 1 asset transfer in PR6.

Table 3 below presents EirGrid's forecast costs across cost areas and categories under each of these three scenarios.[11] Scenarios 1 and 2 have identical values, whereas Scenario 3 shows lower costs in the Pre-operations and Enduring Operations & Maintenance (O&M) categories. This difference in the scenarios is driven by two key factors. First, Pre-operations activities will build on capabilities developed through the Offshore Asset Readiness Programme (OARP) ahead of each asset transfer. As a result, fewer asset transfers mean fewer required activities for the Pre-operations delivery team.

[10] TSO PR6 Look forward Report from the Business Plan Submission.

[11] 'Cost area' refers to the broader category where costs are allocated and 'cost category' refers to each individual item line.

Second, Enduring O&M begins only once Phase 1 asset transfers have taken place. This category covers activities such as offshore asset maintenance and inspection, contingency planning, and contract support arrangements. Since these costs are tied to the number of assets in operation, a lower number of Phase 1 asset transfers naturally leads to low Enduring O&M costs in PR6.

Table 3: Overview of EirGrid's offshore PR6 Request

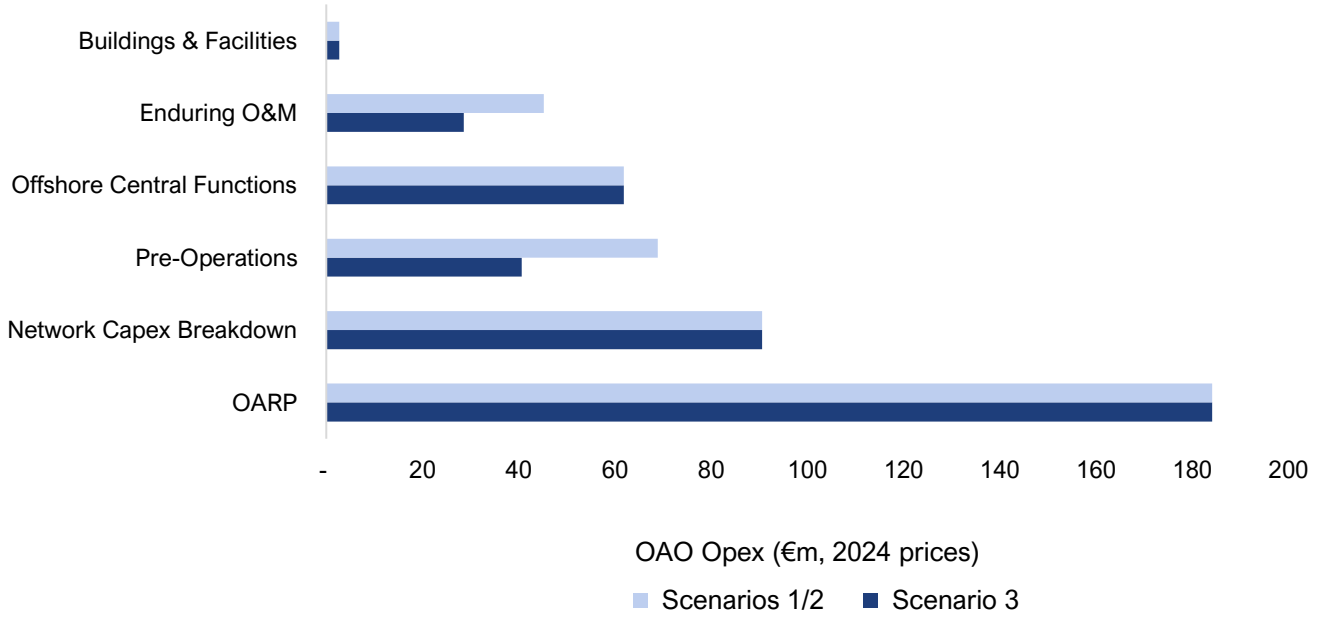
OAO Opex (€m, 2024 prices)		PR6 Request Scenarios 1 and 2	PR6 Request Scenario 3
IT Software Licenses[12]	IT Software Licenses	90.58	90.58
Offshore Asset Readiness Programme (OARP)	Internal FTE	20.4	20.4
	External FTE	55.3	55.3
	Professional Fees	108.5	108.5
	Total	184.2	184.2
Buildings & Facilities	Warehousing leasing	1.3	1.3
	Office space & disaster recovery site rental	1.4	1.4
	Total	2.7	2.7
Pre-operations	Internal FTE	12.5	7.6
	External FTE	39.9	23.4
	Professional Fees	16.5	9.7
	Total	68.9	40.6
Offshore Central Functions	Internal FTE	30.1	30.1
	External FTE	22.8	22.8
	Professional Fees	9.0	9.0
	Total	61.9	61.9
Enduring Operations and Maintenance	Internal FTE	4.7	4.0
	External FTE	14.6	12.2
	Insurance	4.6	1.5
	Operations & Maintenance activities	21.4	10.8
	Total	45.2	28.6
Total OAO Opex		**453.4**	**408.5**

Source: EirGrid, TSO Business Plan Questionnaire Offshore.

Figure 2 below illustrates the variation in EirGrid's forecast offshore opex in PR6 depending on the scenario that is assumed of the number of Phase 1 project transfers that occur in PR6.

[12] In the TSO BPQ Offshore Submission this cost area was named 'Network Capex Breakdown'. To avoid confusion, we have renamed the cost area IT Software Licenses.

Figure 2: OAO opex scenarios 1/2 and 3 for PR6



Source: CEPA analysis, TSO Business Plan Questionnaire Offshore.

3.1.1. Accounting treatment

As part of our cost assessment, we have considered whether the accounting treatment of EirGrid's requested opex is appropriate given significant parts of the programme relate to projects and programmes and business establishment activities that might qualify for capitalisation. Our findings are summarised in Appendix A. Overall we conclude that the majority of the OAO's proposed treatment of opex and capex appears appropriate. However, there are some areas of EirGrid's submission that require further substantiation. Given the issues identified are not definitive, we have taken the conservative approach of not making any changes at this stage, but consider that further information is required from EirGrid to address the queries we have raised.

3.1.2. Scenario choice for our assessment and reopener mechanism

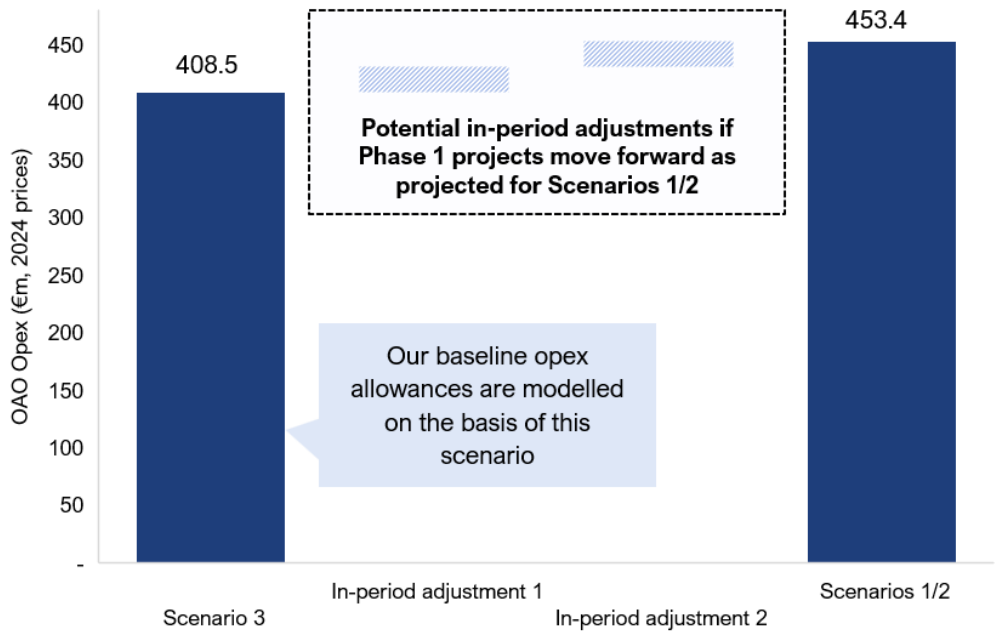
We have chosen to base our PR6 cost assessment exercise on EirGrid's Scenario 3, which assumes only one offshore asset transfer takes place during PR6. Figure 3: Impact of Phase 1 project transfer scenario on offshore opex below illustrates the implication of this decision for the forecast opex base we have assessed. Given the possibility of delays in Phase 1 developer timelines, as has occurred during PR5 (and which are outside of EirGrid's ability to manage), we consider that baseline allowances for PR6 should be based on a conservative scenario for Phase 1 asset transfers.

However, there is a possibility that a greater number of transfers may in practice occur in PR6. As a result, we propose that the CRU introduce a reopener mechanism as part of the offshore price control that will permit the OAO to recover additional opex allowances should more asset transfers occur during the period. We would expect this reopener to trigger additional allowances once the timing of project transfers are known and additional opex is approved for recovery in tariffs by the CRU.

This reopener mechanism will allow additional opex to be recovered consistent with Scenarios 1/2 in the OAO's business plan submission, as illustrated in Figure 3 below.

The core principle of the reopener mechanism would be that additional allowances can be unlocked as more asset transfers occur and EirGrid takes ownership of Phase 1 offshore assets. We have chosen Scenario 3 for setting an allowance as a starting point because it will enable EirGrid to develop operational capacities that can be scaled as and when further transfers take place. We consider setting allowed revenues that reflect costs associated with asset transfers that may not occur in PR6 would not be in the interests of Irish consumers.

Figure 3: Impact of Phase 1 project transfer scenario on offshore opex



Source: CEPA analysis.

We suggest that the detailed mechanics of the reopener mechanism be agreed in consultation with EirGrid. At a high-level we would expect the release of additional allowances to be recovered through tariffs would be based on:

- A technical milestone prior to EirGrid taking control and ownership of the offshore asset – e.g., an Interim Operational Notification (ION) or equivalent by the Phase 1 developer.
- A formal submission by EirGrid detailing the required adjustment to opex allowances (and/or other relevant adjustments) and supporting information to the request.
- An external assurance report confirming the forecast additional opex and confirmation / sign off of the submission from an Executive Director in EirGrid.

We would propose that this reopener should form part of the annual reopener window that we understand the CRU is considering for the PR6 Agile Investment and Monitoring Framework (AIMF).

As we discuss at the conclusion of this section, there are several other categories of EirGrid's offshore opex that remain highly uncertain and there may be additional opex items that are not currently captured in EirGrid's offshore BPQ for the PR6 period. As a result, we would propose that the reopener mechanism has the flexibility to allow EirGrid to request changes to its offshore opex allowances across other opex categories that are not directly related to the number of Phase 1 project transfers that occur. Consistent with the CRU's 2024/99 decision, EirGrid might also be provided with an opportunity to take its major offshore opex programmes – e.g., the placing of operational insurances and establishment of O&M contracts and frameworks – through a similar gateway process as we understand the CRU proposes to apply to the offshore capital programme.[13]

3.1.3. Opex as a share of capex

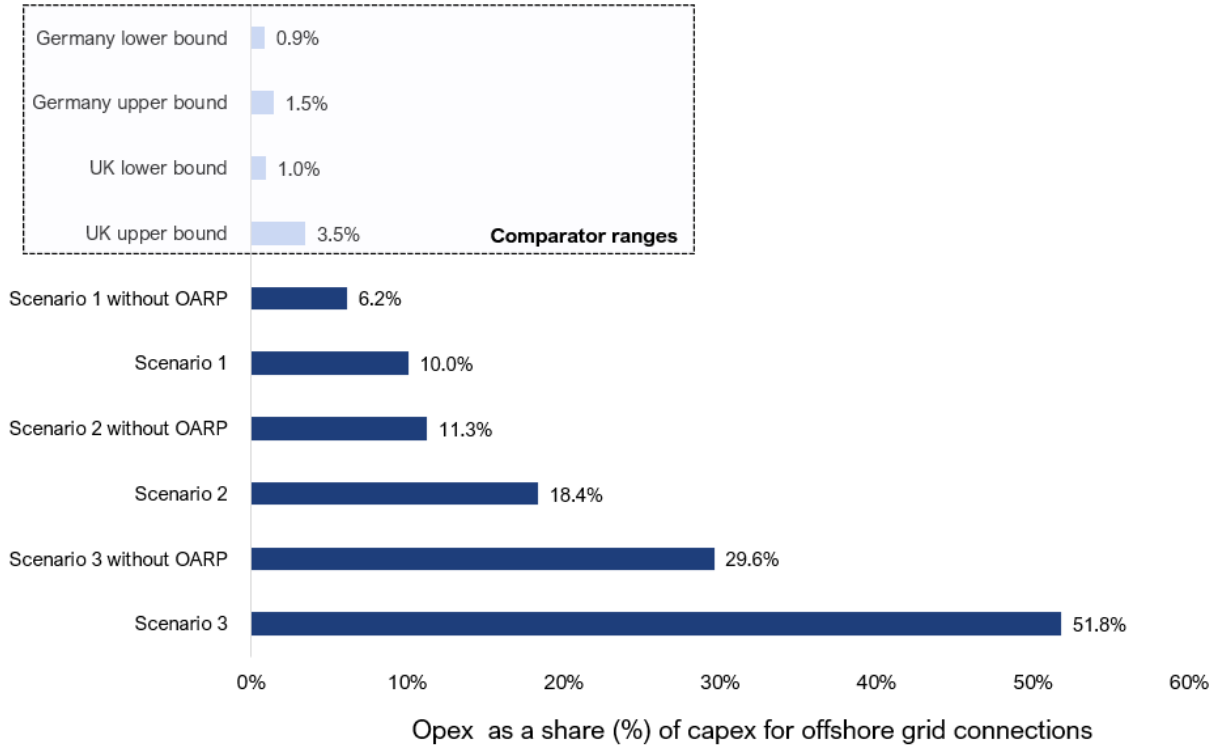
As an initial top-down cross check of EirGrid's forecast offshore opex, we have compared the ratio of capex and opex that is forecast in its BPQ with the ratio in other jurisdictions as reported in a study conducted by DNV GL for

[13] However, this would require relatively complex capital programme gateway process offshore to be adapted to be suitable to the main milestones of these programmes.

ACM, the Dutch Authority for Consumers and Markets.[14] While this may not yet represent a fair "like for like" comparison, given that EirGrid is still establishing its offshore operations, we believe this ratio is still relevant to consider as the offshore function evolves over the coming years.

As we can see from Figure 4, DNV GL compiled a range of ratios of opex as a % share of capex for offshore grid connections in Germany and the UK. These range between 0.9% as the lower bound for Germany, and 3.5% as the upper bound for the UK.[15] The study claims that two key factors influence this ratio. First, the more capacity that is installed, the lower the proportion of opex to capex. And second, the longer the distance to the shore of the offshore grid, the higher the proportion of opex to capex.

Figure 4: Opex as a share of capex for the OAO and offshore grid connections in the UK and Germany



Source: CEPA analysis, ACM.

Alongside the international comparators, we also illustrate six scenarios drawn from EirGrid's offshore BPQ. These represent combinations of the three core scenarios, 1, 2, and 3, each shown with and without the inclusion of costs related to the Offshore Asset Readiness Programme (OARP). We include a version excluding OARP costs to reflect that these are setup costs associated with establishing initial operations and functions. Across all scenarios, our opex to capex ratios remain higher than those of the comparators. However, we observe that as installed capacity (MW) increases, progressing from Scenario 3 to Scenario 1, the ratio decreases.

We do not consider that the above analysis suggests that EirGrid's offshore opex forecast is necessarily too high given that much of the forecast opex in PR6 is associated with the ongoing establishment of the new offshore business. Lower ratios in other markets may be because fixed costs are spread over a larger volume of connections and/or because the scope of activities (e.g., OFTOs vs. EirGrid) are not a like for like comparison. The study for the ACM was also conducted 4 years ago. Nevertheless, we consider that the CRU should continue to monitor this ratio as EirGrid's offshore business expands and number of assets under its ownership and operation increases over time.

[14] DNV GL (2021): 'Study on an estimation method for the additional efficient operating expenditure of the Dutch TSO's offshore grid'

[15] Denmark was also included in the sample. For reference, the chosen comparators for the UK are OFTOs.

3.2. IT SOFTWARE LICENSES

EirGrid has requested €90.6m in IT software license costs for PR6, and our recommended baseline allowance is €86.0m. This represents a difference of €4.6m, or a 5% decrease.

Table 4: PR6 step-change for IT software licenses

OAO Opex (€m, 2024 prices)		2026	2027	2028	2029	2030	PR6 Total
IT Software Licenses	CEPA forecast	7.5	11.3	18.8	24.2	24.2	86.0
	OAO Submission	7.9	11.9	19.8	25.5	25.5	90.6
	Difference	-0.4	-0.6	-1.0	-1.3	-1.3	-4.6

Source: CEPA analysis, TSO Business Plan Questionnaire Offshore.

We have applied our need, additionality, and cost efficiency gateway methodology to this requested cost category to form our recommendation.

First, the need criterion is met. EirGrid has provided a detailed justification for the development of business functional applications to support key capabilities, such as computerised management systems and enterprise resource planning. Additionally, IT solutions will enable reporting and data-driven analysis while also ensuring the technological operations necessary to maintain the IT ecosystem.

Second, the additionality gateway is met, with the challenge set at 0%. Since there are no base costs and all activities will be new and additional, the additionality gateway is fully satisfied. This will apply to all cost areas and categories in EirGrid's offshore submission.

Third, we apply a 5% adjustment at the cost confidence / value for money / efficiency gateway. EirGrid has explained that the costs were estimated using list prices from licenses, along with assumptions on resource utilisation. This information helps to build confidence in the cost estimation process, as the costs have been modelled with up-to-date information and market prices.[16] We apply a 5% adjustment, as this is the first time EirGrid will incur these IT costs for its offshore functions, and we consider further assurance is required to demonstrate that a range of options and specifications for the forecast costs were considered and the proposed solution is best.

3.3. OFFSHORE ASSET READINESS PROGRAMME (OARP)

The OARP cost category represents the largest cost of EirGrid's offshore cost submission, in total €184.18m for the PR6 period (see Table 5). Our allowance recommendation for this cost area is €175.0m. Our proposed value is €9.21m (5%) lower than EirGrid's request.

During PR6, EirGrid will need to develop new capabilities to manage and oversee its expanding offshore network asset based. The OARP cost area addresses this need, encompassing a set of capabilities required to ensure operational readiness for owning, operating, and maintaining offshore assets.[17] Since resources must be developed to manage assets before they are acquired, we consider the need gateway to be passed. As with all other cost areas, the additionality gateway is passed with a 0% challenge. Since no base or fixed recurring costs from PR5 can be identified, all proposed costs for PR6 are considered entirely additional.

EirGrid provided a detailed response on how OARP costs were estimated, structuring the analysis by programme. Each programme was assessed based on its complexity, novelty for EirGrid, dependencies with other business areas, and management requirements. Other key factors considered included project duration and the specific discipline the programme covered, such as commercial, regulatory, technical, or project management.

[16] Additional information on how the IT Software Licenses costs were calculated by EirGrid are available in SQ 58.

[17] The OARP is comprised of 31 capabilities (programmes) that outline the specific operational needs of the OAO.

Given EirGrid is developing some of the capabilities for the first time, there is a possibility that the cost forecast may in practice be greater than is needed (see experience of outturn in PR5) and there may be scope for efficiencies / savings during the further development and specification of the programme and its implementation. Further, there may be scope for optioneering during the implementation of the project.

For these reasons we apply a 5% adjustment which we apply equally across the cost categories for OARP (i.e., internal FTE, external FTE, professional fees). We would expect to revisit our conclusion if EirGrid can provide further information prior to Final Determinations to strengthen confidence in the cost estimate that it has provided for the OARP which forms a material component of the forecast opex.

Table 5: PR6 step-change for OARP costs

OAO Opex (€m, 2024 prices)		2026	2027	2028	2029	2030	PR6 Total
Internal FTE	CEPA forecast	4.4	5.0	4.5	3.7	1.8	19.4
	OAO Submission	4.59	5.31	4.70	3.93	1.87	20.4
	Difference	-0.2	-0.3	-0.2	-0.2	-0.1	-1.0
External FTE	CEPA forecast	14.5	16.7	12.9	7.6	0.8	52.5
	OAO Submission	15.28	17.62	13.58	7.99	0.85	55.32
	Difference	-0.8	-0.9	-0.7	-0.4	-0.1	-2.8
Professional Fees	CEPA forecast	18.5	24.4	20.3	19.4	20.5	103.1
	OAO Submission	19.49	25.63	21.37	20.38	21.59	108.46
	Difference	-1.0	-1.2	-1.1	-1.0	-1.1	-5.4
Total	CEPA forecast	37.4	46.1	37.7	30.7	23.1	**175.0**
	OAO Submission	**39.36**	**48.57**	**39.64**	**32.30**	**24.31**	**184.18**
	Difference	-1.96	-2.47	-1.94	-1.60	-1.21	**-9.21**

Source: CEPA analysis, TSO Business Plan Questionnaire Offshore.

3.4. BUILDINGS AND FACILITIES

Table 6 presents the submitted costs for buildings and facilities and our recommended allowance. We recommend a total allowance for buildings and facilities of €2.7m, which is equal to EirGrid's request.

EirGrid will require warehousing and additional office space throughout PR6. This includes storage for materials such as submarine cables, marine deployment components, and spare parts. Additionally, extra office space will be needed for the offshore management centre.

EirGrid has provided a clear rationale for the necessity of these requirements, so the need gateway is passed. At the additionality gateway, we apply a 0% challenge, as these spaces will be required for the effective operation and management of offshore assets.

We also apply a 0% challenge at the cost efficiency gateway. Warehousing costs have been benchmarked against a European comparator, while office-related costs are based on EirGrid's existing office expenses.

As we discussed in the introduction, we have not considered as part of our cost assessment potential structures or options for any future separation of offshore and existing TSO functions within the EirGrid group. Our assessment of buildings and facilities is based on EirGrid's submitted business plan and costs and we have not considered the impact any possible structural or functional changes may have on EirGrid's future buildings and facilities (or other components) opex requirements.

Table 6: PR6 step-change for buildings and facilities costs

OAO Opex (€m, 2024 prices)		2026	2027	2028	2029	2030	PR6 Total
Warehouse leasing	CEPA forecast	0.18	0.20	0.28	0.33	0.33	1.30
	OAO Submission	0.18	0.20	0.28	0.33	0.33	1.30
	Difference	-	-	-	-	-	-
Office space and disaster recovery site rental	CEPA forecast	0.28	0.28	0.28	0.28	0.28	1.40
	OAO Submission	0.28	0.28	0.28	0.28	0.28	1.40
	Difference	-	-	-	-	-	-
Total	**CEPA forecast**	**0.45**	**0.48**	**0.55**	**0.60**	**0.60**	**2.70**
	OAO Submission	**0.45**	**0.48**	**0.55**	**0.60**	**0.60**	**2.70**
	Difference	**-**	**-**	**-**	**-**	**-**	**-**

Source: CEPA analysis, TSO Business Plan Questionnaire Offshore.

3.5. PRE-OPERATIONS

Our recommended allowance for PR6 is €38.6, €2.04m less than the request of €40.64m (see Table 7). We note that the values presented below correspond to Scenario 3 of in EirGrid's business plan submission.

Table 7: PR6 step-change for pre-operations costs

OAO Opex (€m, 2024 prices)		2026	2027	2028	2029	2030	PR6 Total
Internal FTE	CEPA forecast	0.5	0.9	2.5	2.1	1.3	7.3
	OAO Submission	0.52	0.94	2.59	2.17	1.35	7.56
	Difference	-0.02	-0.04	-0.09	-0.07	-0.05	-0.26
External FTE	CEPA forecast	1.3	2.6	7.8	6.5	3.9	22.1
	OAO Submission	1.38	2.75	8.25	6.88	4.13	23.38
	Difference	-0.08	-0.15	-0.45	-0.38	-0.23	-1.28
Professional Fees	CEPA forecast	0.6	1.1	3.2	2.7	1.6	9.2
	OAO Submission	0.59	1.15	3.41	2.85	1.72	9.71
	Difference	0.02	-0.05	-0.21	-0.15	-0.12	-0.51
Total	**CEPA forecast**	**2.4**	**4.6**	**13.5**	**11.3**	**6.8**	**38.6**
	OAO Submission	**2.48**	**4.84**	**14.25**	**11.89**	**7.19**	**40.64**
	Difference	**-0.08**	**-0.24**	**-0.70**	**-0.59**	**-0.39**	**-2.0**

Source: CEPA analysis, TSO Business Plan Questionnaire Offshore.

The pre-operations cost area builds on the OARP costs, focusing on applying the capabilities developed as Phase 1 projects approach commissioning. This includes transferring knowledge from the development phase to the OAO and training EirGrid's OAO teams on procedures, processes, and materials.[18] Given these requirements, we consider the need gateway to be passed. The Pre-operations team is expected to grow as the OARP is implemented.[19] Since no similar outputs have been delivered from a comparable cost area in the past, we do not have a set of costs that can be considered business-as-usual. As a result, we believe these costs meet the additionality requirement and we also apply a 0% adjustment at this gateway.

For the final cost confidence / cost efficiency gateway, we apply a 5% adjustment to all Pre-operations cost categories. EirGrid has provided a rationale for its cost estimations in this area. The plan to migrate OARP resources into Pre-operations is expected to retain knowledge and improve efficiency. Additionally, the split between internal and external resources has been benchmarked against European comparators. However, we apply a 5% adjustment because a greater reliance on external FTEs may reduce the efficiency benefits of transitioning resources from OARP to Pre-operations (and eventually to Enduring O&M). Moreover, since this is the first time that EirGrid will be delivering the proposed outputs and management of offshore connection assets, we anticipate there may be scope of efficiencies in implementation during PR6.

3.6. OFFSHORE CENTRAL FUNCTIONS

Our recommended allowance for offshore central functions in PR6 is of €58.8m, €3.06m (5%) less than the requested €61.86m (see Table 8).

Table 8: PR6 step-change for offshore central functions costs

OAO Opex (€m, 2024 prices)		2026	2027	2028	2029	2030	PR6 Total
Internal FTE	CEPA forecast	4.2	5.0	5.7	6.4	7.3	28.6
	OAO Submission	4.40	5.23	5.96	6.79	7.67	30.05
	Difference	-0.20	-0.23	-0.26	-0.39	-0.37	-1.45
External FTE	CEPA forecast	2.5	3.3	3.7	5.3	6.9	21.7
	OAO Submission	2.62	3.47	3.89	5.58	7.25	22.81
	Difference	-0.12	-0.17	-0.19	-0.28	-0.35	-1.11
Professional Fees	CEPA forecast	2.4	1.9	1.4	1.	1.4	8.5
	OAO Submission	2.50	2.00	1.50	1.50	1.50	9.0
	Difference	-0.10	-0.10	-0.10	-0.10	-0.10	-0.50
Total	CEPA forecast	9.1	10.2	10.8	13.1	15.6	**58.8**
	OAO Submission	**9.52**	**10.70**	**11.35**	**13.87**	**16.42**	**61.86**
	Difference	-0.42	-0.50	-0.55	-0.77	-0.82	**-3.06**

Source: CEPA analysis, TSO Business Plan Questionnaire Offshore.

Unlike OARP, Pre-operations, and Enduring Operations & Maintenance, the Offshore Central Functions team is not directly focused on offshore assets. Instead, it is responsible for areas such as finance, regulation, offshore future planning, and offshore transmission system operations. Given these responsibilities, we consider these costs to pass the need gateway. Additionally, since there were no prior costs associated with delivering these roles, we

[18] Information retrieved from Supplementary Question 31.

[19] As discussed in Section 3.7, Pre-operations teams are expected to migrate to Enduring Operations and Maintenance.

apply a 0% adjustment at the additionality gateway, although we note that there is a risk of overlap in activities and resources with regulatory and finance activities in the existing TSO function and role.

We apply a 5% adjustment at the final gateway.

While the OAO has provided a detailed analysis of what these costs represent and how they were estimated, there is limited benchmarking detail and exploration of alternative approaches. Further, as we have noted above, we consider there is some risk of overlap with existing resources in the EirGrid business in these functions and as a result, we consider the proposed reduction in the round reasonable.

3.7. Enduring Operations and Maintenance

Our recommended allowance for ensuring O&M for the PR6 period is of €27.0m, €1.58m (5%) less than the requested €28.58m (see Table 9).

Table 9: PR6 step-change for enduring operations and maintenance costs

OAO Opex (€m, 2024 prices)		2026	2027	2028	2029	2030	PR6 Total
Internal FTE	CEPA forecast	-	-	0.8	1.3	1.7	3.8
	OAO Submission	-	-	0.83	1.38	1.79	3.99
	Difference	-	-	-0.02	-0.08	-0.09	-0.19
External FTE	CEPA forecast	-	-	2.2	4.0	5.4	11.6
	OAO Submission	-	-	2.37	4.24	5.64	12.24
	Difference	-	-	-0.17	-0.24	-0.24	-0.64
Insurance	CEPA forecast	-	-	-	0.7	0.7	1.4
	OAO Submission	-	-	-	0.77	0.77	1.54
	Difference	-	-	-	-0.07	-0.07	-0.14
Operations and Maintenance Activities	CEPA forecast	-	-	-	5.1	5.1	10.2
	OAO Submission	-	-	-	5.41	5.41	10.81
	Difference	-	-	-	-0.31	-0.31	-0.61
Total	**CEPA forecast**	**-**	**-**	**3.0**	**11.1**	**12.9**	**27.0**
	OAO Submission	**-**	**-**	**3.19**	**11.79**	**13.60**	**28.58**
	Difference	**-**	**-**	**-0.19**	**-0.69**	**-0.70**	**-1.58**

Source: CEPA analysis, TSO Business Plan Questionnaire Offshore.

Enduring O&M will cover activities such as asset management centre support, maintenance and inspection of the offshore assets, and contingency requirements. Given the necessity of the offshore assets being maintained and managed, this cost passes the need gateway. Furthermore, since there were no costs allocated to these activities in PR5, as there were no assets to maintain, we apply a 0% adjustment at the additionality gateway.

As Pre-operations resources are expected to transition into Enduring O&M with the transfer of Phase 1 assets to EirGrid's ownership, the training and knowledge developed through OARP and the Pre-operations team are expected to enhance efficiency. This is particularly relevant for costs associated with Internal and External FTEs, as these resources will move across cost areas in line with asset transfers. These cost categories have been benchmarked against comparators, though there is a greater reliance on external resources due to uncertainties around asset transfer timelines, which is a factor that may reduce efficiency. Given EirGrid will be incurring these costs for the first time, we apply a 5% cost confidence / efficiency adjustment to Internal and External FTE costs subject to EirGrid providing further supporting analysis to underpin its cost estimate.

Similarly, we apply a 5% cost confidence / efficiency adjustment to Operations and Maintenance Activities costs, which cover services such as helicopter response, cable monitoring, crew transfer vessels, cable repair response, mechanical maintenance, and cleaning maintenance. These costs have been benchmarked against other European offshore asset owners and UK OFTO asset maintenance costs. Nevertheless, with the significant expansion of its activities, we consider there may be scope for EirGrid to seek efficiencies.

Lastly, for Insurance costs, we apply a 10% cost adjustment. Given the difficulty in forecasting insurance costs without specific technical details of the assets, EirGrid acknowledges a high degree of uncertainty in the requested costs. As a result, we would expect that this cost item may need to be revisited through the proposed reopener mechanism we have recommended above.

3.8. SUMMARY OF RECOMMENDATIONS

Table 10 below presents our recommended offshore opex allowance for PR6 before the application of RPEs and OE. EirGrid requested €408.5m in offshore opex over PR6, compared with our recommended allowance of €388.2m. This implies a difference of €20.3m, or 5% less.

Table 10: Summary of proposed offshore (OAO) opex allowance for PR6

OAO Opex (€m, 2024 prices)		2026	2027	2028	2029	2030	PR6 Total			
							Allowance	Request	Variance	
									€m	%
IT Software Licenses	IT Software Licenses	7.5	11.3	18.8	24.2	24.2	86.0	90.6	-4.6	-5%
OARP	Internal FTE	4.4	5.0	4.5	3.7	1.8	19.4	20.4	-1.0	-4.9%
	External FTE	14.5	16.7	12.9	7.6	0.8	52.5	55.3	-2.8	-4.9%
	Professional Fees	18.5	24.4	20.3	19.4	20.5	103.1	108.5	-5.6	-5.1%
	Total	37.4	46.1	37.7	30.7	23.1	175.0	184.2	-9.2	-5.0%
Buildings & Facilities	Warehouse leasing	0.18	0.20	0.28	0.33	0.33	1.3	1.3	-	-
	Office space and disaster recovery site rental	0.28	0.28	0.28	0.28	0.28	1.4	1.4	-	-
	Total	0.45	0.48	0.55	0.60	0.60	2.7	2.7	-	-
Pre-operations	Internal FTE	0.5	0.9	2.5	2.1	1.3	7.3	7.6	-0.3	-5.3%
	External FTE	1.3	2.6	7.8	6.5	3.9	22.1	23.4	-1.3	-5.1%
	Professional Fees	0.6	1.1	3.2	2.7	1.6	9.2	9.7	-0.5	-5.2%
	Total	2.4	4.6	13.5	11.3	6.8	38.6	40.6	-2.0	-4.9%
Offshore Central Functions	Internal FTE	4.2	5.0	5.7	6.4	7.3	28.6	30.1	-1.5	-5.0%
	External FTE	2.5	3.3	3.7	5.3	6.9	21.7	22.8	-1.1	-4.8%
	Professional Fees	2.4	1.9	1.4	1.4	1.4	8.5	9.0	-0.5	-4.4%
	Total	9.1	10.2	10.8	13.1	15.6	58.8	61.9	-3.1	-5.0%
Enduring Operations & Maintenance	Internal FTE	-	-	0.8	1.3	1.7	3.8	4.0	-0.2	-5.0%
	External FTE	-	-	2.2	4.0	5.4	11.6	12.2	-0.4	-4.9%
	Insurance	-	-	-	0.7	0.7	1.4	1.5	-0.1	-6.7%

OAO Opex (€m, 2024 prices)		2026	2027	2028	2029	2030	PR6 Total			
							Allowance	Request	Variance	
									€m	%
	Operations & Maintenance activities	-	-	-	5.1	5.1	10.2	10.8	-0.6	-4.6%
	Total	-	-	3.0	11.1	12.9	27.0	28.6	-1.6	-5.2%
Total OAO Opex		**56.85**	**72.68**	**84.35**	**91.0**	**83.20**	**388.1**	**408.5**	**-20.4**	**-5.0%**

Source: CEPA analysis, TSO Business Plan Questionnaire Offshore.

As discussed above, we recommend that CRU include an opex reopener mechanism as part of the offshore price control regulatory framework that will allow EirGrid to request additional opex allowances should the number of Phase 1 projects that transfer to EirGrid increase in PR6 above the baseline assumption of 1 project transfer in our analysis, which will increase costs in offshore pre-operations and enduring O&M.

We understand other elements of EirGrid's submitted opex in its BPQ are also uncertain and are subject to change as business requirements and specifications are finalised and its procurement processes are progressed. We therefore recommend this opex reopener mechanism should also allow EirGrid to request additional allowances for other categories of offshore opex during PR6. We would propose that this reopener should form part of the annual reopener window that we understand the CRU is considering for the PR6 AIMF.[20]

As a result, the proposed allowances in the table above should be considered base allowances with EirGrid able to access additional funding through the reopener mechanisms during PR6.

Finally, we note that the opex allowance reflects forecast costs that the OAO has stated it requires in the event of 1 Phase 1 asset transfer during PR6. There is a possibility that no asset transfers take place during PR6 and as a result, a component of the proposed allowance may not in practice be required. We consider it is appropriate and prudent to include provision for at least one project transfer in the allowed opex during PR6 despite the uncertainty of the timings of the Phase 1 transfers. We would expect that if there are no transfers in PR6, this would be reviewed as part of the ex-post review of EirGrid's offshore opex allowances for PR6.

[20] Consistent with the CRU/24/99 decision, EirGrid might also be provided with an opportunity to take its major offshore opex programmes – e.g., the placing of operational insurances and establishment of O&M contracts and frameworks – through a similar gateway process as we understand the CRU proposes to apply to EirGrid's capital programme.

4. REVIEW OF PR5 CAPITAL EXPENDITURE

The PR5 outturn capex for offshore is shown in Table 11, for both network and non-network capex items.

We note that in relation to PR5 offshore capex, as EirGrid states in its PR5 Lookback narrative document, "*the role of EirGrid in offshore was unknown prior to CRU making its Price Review 5 (PR5) decision, no ex ante allowances for Offshore Delivery Operational Expenditure (OpEx) or Capital Expenditure (CapEx) were provided within the PR5 provision*". Hence, all of the incurred costs shown in Table 11 are outside of final PR5 determination allowances, but have been reported by EirGrid in its Offshore Revenue Submission to the CRU made in 2022, 2023 and 2024.

The total forecast values for PR5 are also detailed in Section 6.3 of the Annex 19 – PR5 TSO Lookback narrative document as well as Appendix A6 of the same document.

Table 11 Summary of PR5 Capex Outturn costs[21]

	2021	2022	2023	2024	2025	Total
Non-Network CapEx additions	-	-	-	0.44	-	0.44
Offshore Network CapEx additions	-	0.20	4.98	10.63	48.79	64.60

Source: GHD analysis, TSO Business Plan Questionnaire Offshore.

In relation to network capex, reviewing the material provided by EirGrid it is evident that the majority of the network capex proposed for years 2024 and 2025 is associated with the re-profiling of the Phase 2 programme works for Tonn Nua and will include in years 2025 ~€35m for marine surveys and other planning works, including inputs for FEED designs, EPC packages, landowner engagements and site investigations. The values incurred in 2024 include an element of the marine survey work, circa €2m, plus other works associated with DECC, DMAP and MARA engagement, tendering for marine surveys and other ongoing consenting works. Based on the information provided by EirGrid we consider that the incurred network capex is broadly reasonable, albeit that a full detailed list of incurred or forecast (for year 2025) capital expenditure at an individual line item basis has not been provided

In addition to the network capex there was also a small value of non-network capex incurred in 2024 for which again there was no equivalent PR5 allowance. EirGrid has, however, provided details in the PR5 Lookback narrative document that details how based on a revised IT solution delivery around €10m of opex has been deferred into PR6 but that this has been accommodated by the €0.44m capex addition, which follows non-normal EirGrid capitalisation approaches for non-network assets. No specific details of exactly what non-network assets were delivered for the outlined capex spend, but given the deminimis nature of it relevant to the both the onshore non-network capex spend and offshore network capex additions, we consider that it is nonetheless reasonable, particularly given the reprofiling of the associated non-network operational expenditure.

[21] EirGrid '1.13 Annex 13 - TSO BPQ Offshore' does not include any PR5 outturn related to offshore. The numbers in the above table are taken from the Appendix 6 of the '1.19 Annex 19 - PR5 TSO Lookback' document. The '1.15 Annex 15 - TSO BPQ' appears include €0.44m for outturn PR5 non-network capex under 'Other – offshore'.

5. REVIEW OF PR6 CAPITAL EXPENDITURE

This section presents our assessment of EirGrid's forecast offshore capex in PR6.

As discussed in Section 3.1, the OAO has structured the offshore investment programme in 4 categories:

- **Category 1** (Connect Offshore Projects): consists of connecting onshore connections to offshore renewable generation (Phase 1 & Phase 2).
- **Category 2** (Develop Offshore Assets): costs associated with the development and construction of the EirGrid offshore assets on the South Coast for Tonn Nua.
- **Category 3** (Transfer Offshore Assets): costs associated with the transfer of Phase 1 Transmission Assets to the OAO via ATV payments.
- **Category 4** (Offshore Asset Readiness Programme, Pre-operations, Enduring Operations): these are costs needed to allow the OAO to carry out its offshore operations, such as engineering and asset management, health and safety, IT cloud infrastructure, finance, procurement, supply chain.

The scope of our capex analysis focuses on EirGrid's forecast offshore capex in Category 2 and Category 4. We have excluded Category 1 costs entirely from our assessment as these are included in the TSO's onshore PR6 capex submission and are addressed in GHD's transmission capex report.

In relation to the Category 3 costs, EirGrid submitted three scenarios with differing asset transfer numbers:

- **Scenario 1**: 6 asset transfers take place during PR6.
- **Scenario 2**: 4 asset transfers take place during PR6.
- **Scenario 3**: 1 asset transfer takes place during PR6.

Table 12 below presents the proposed values across cost areas. IT non-network capex, Buildings & Facilities and Capital Spares collectively form Category 4 costs, with Phase 1 Asset Transfers being Category 3 costs, and Tonn Nua costs being Category 2.

Table 12: Overview of the OAO's PR6 Capex Request

OAO Capex (€m, 2024 prices)	PR6 Request Scenario 1	PR6 Request Scenario 2	PR6 Request Scenario 3
IT Non-network capex: Technology	1.92	1.92	1.92
IT Non-network capex: People and professional fees	18.32	18.32	18.32
Buildings & Facilities	12.07	12.07	12.07
Capital Spares	38.00	38.00	38.00
Phase 1 Asset Transfers	3,800.00	1,900.00	335.00
Phase 1 Asset Transfers – Stamp duty at 7.5%	285.00	142.50	25.13
Phase 2 Tonn Nua	347.93	347.93	347.93
Total OAO Capex	**4,503.24**	**2,460.74**	**778.37**

Source: EirGrid, TSO Business Plan Questionnaire Offshore.

As Table 12 shows, the forecast PR6 OAO transmission capex costs range from €778m to €4,503m – with the difference largely being driven by the number of Phase 1 Asset Transfers. Category 2 (Tonn Nua Ph 2) and Category 4 (OARP) costs are the same regardless of the number of Phase 1 asset transfers that occur in PR6.

The proposed transmission capex for PR6 for the OAO is all considered as a step increase, as there is no comparable baseline or trend applicable with reference to the PR5 outturn. Our assessment of each of the categories of investment is set out in the subsections below.

Please note that while we have included a subsection on EirGrid's Category 3 capex in practice we have not assessed these costs as we understand they are solely based on current Phase 1 project information that has been submitted by project developers and is expected to change. We have not assessed the current estimates of the ATV payments which we understand will be reviewed under a separate CRU regulatory process as outlined in the CRU's Phase 1 asset treatment decision, CRU/2023/09.

5.1. IT Non-network Capex: Technology

As can be seen from the Table 13, EirGrid has submitted a capex request of €1.92m for IT systems non-network capex for PR6. The corresponding PR6 opex request for this OARP business function has been reviewed and discussed in Section **Error! Reference source not found.**, where the need for the expenditure has been accepted a nd the additionality requirements is also met, e.g. this expenditure is a step-increase over BAU (effectively there is no BAU from PR5).

A 5% efficiency challenge was applied to the proposed PR6 opex, and as this line item relates to the associated capex for IT non-network systems, we have again accepted the need and agree that a similar 5% efficiency adjustment on proposed capex costs for this offshore business requirement in PR6 is applied.

Table 13: PR6 step-change for IT Non-network Capex: Technology

OAO Capex (€m, 2024 prices)		2026	2027	2028	2029	2030	PR6
IT Non-network capex: Technology	GHD forecast	0.17	0.17	0.34	0.57	0.57	1.82
	OAO Submission	0.18	0.18	0.36	0.60	0.60	1.92
	Difference	-0.01	-0.01	-0.02	-0.03	-0.03	-0.10

Source: GHD analysis, TSO Business Plan Questionnaire Offshore

5.2. IT Non-network Capex: People and Professional Fees

Table 14 presents the accompanying people and professional services capital costs associated with the OARP programme. EirGrid has provided details that confirms that the bulk of the requested PR6 capex (€13.75m) is associated with changes and revisions to various business management systems, including energy metering and maintenance management systems, with the remainder (€4.57m) being associated with communication systems.

This total capex request (€18.32m) is associated with the larger opex request (€184.18) detailed in Section **Error! R eference source not found.** where the need for the expenditure, as a step change was confirmed, and where a 5% cost confidence / efficiency adjustment was applied to the proposed costs. On a similar basis (and being consistent with the opex recommendation) we have also provided a 5% cost confidence / efficiency reduction to the proposed capex values given that whilst some visibility of the capex cost build to support this business function has been provided, further detail would ideally have been provided to fully support proposed capex costs.

Table 14: PR6 step-change for IT Non-network Capex: People and Professional Fees

OAO Capex (€m, 2024 prices)		2026	2027	2028	2029	2030	PR6
IT Non-network capex: People and professional fees	GHD forecast	0.69	1.62	7.80	6.24	1.05	17.40
	OAO Submission	0.73	1.71	8.21	6.57	1.10	18.32
	Difference	-0.04	-0.09	-0.41	-0.33	-0.05	-0.92

Source: GHD analysis, TSO Business Plan Questionnaire Offshore

5.3. Buildings and Facilities

EirGrid's PR6 submission includes €12.07m for offshore buildings and facilities. This is split into €0.671m for office fit out costs in 2027, with the remainder (€11.40 m) for warehousing costs. EirGrid has provided supplementary information as part of the SQ process. This includes how the provisional office costs have been determined based on similar space requirements as per the Oval Block 3 in Dublin, with fit-out costs being based on Cushman Wakefield references and Turner Townsend Ireland outturn project costs. No specific costs references have been provided in relation to the warehousing costs, however, EirGrid has confirmed that the warehousing will cover a number of areas including insurance spares, capital spares and O&M spares.

GHD notes that capex cost profile for the expenditure shows a high (relative to the ask) value in 2027, which is likely to be in advance of the time period over which projects with ATVs are likely to be transferred. EirGrid has provided further information to support the time period (and capex profile) assumed for both capital and insurance spares. On this basis we are satisfied of the need for the warehousing activities and expenditure which is clearly a step change from PR5 on the basis that there was no comparable expenditure.

However, as with the other capex items, we have proposed a 5% cost confidence / efficiency reduction to the proposed capex values given that whilst some visibility of the capex cost build to support this business function has been provided for office costs and fit out, no detailed cost build has been demonstrated for the proposed warehousing functions in PR6.

Table 15: PR6 step-change for Buildings and Facilities Capex

OAO Capex (€m, 2024 prices)		2026	2027	2028	2029	2030	PR6
Buildings & Facilities	GHD forecast	2.85	5.29	2.00	1.33	-	11.47
	OAO Submission	3.00	5.57	2.10	1.40	-	12.07
	Difference	-0.15	-0.28	-0.11	-0.07	-	-0.60

Source: GHD analysis, TSO Business Plan Questionnaire Offshore

As noted in the introduction, it is important to note that we have assessed EirGrid's buildings and facilities capex as submitted in its BPQ. GHD has not considered possible changes in EirGrid's functional structure and governance as part of our PR6 cost assessment and any impacts this may have on EirGrid's expenditure requirements.

5.4. Capital Spares

EirGrid has confirmed that this capex line item relates to capital spares for the Phase 1 asset transfer projects and is intended to cover high value items such as transformers, shunt reactors and STATCOMs. As there was no comparable expenditure in PR5 this is clearly a step change capex request with a clear need.

The values included in the PR6 submission (€38m) has been determined on the basis of 1% of the full (six) Scenario 1 Phase 1 asset transfer value (total ATV capex €3.8 bn). As this capex spend is transparent and clearly linked to the number and value of Phase 1 project ATVs, it is recommended to allow this requested capex in full and which should be adjusted at the end of PR6 based on the exact number of Phase 1 asset transfers that take place and specific costs of the capital spares items actually ordered by EirGrid.

Table 16: PR6 step-change for Capital Spares Capex

OAO Capex (€m, 2024 prices)		2026	2027	2028	2029	2030	PR6
Capital Spares	GHD forecast	-	8.80	8.80	10.20	10.20	38.00
	OAO Submission	-	8.80	8.80	10.20	10.20	38.00
	Difference	-	-	-	-	-	-

Source: GHD analysis, TSO Business Plan Questionnaire Offshore

5.5. Phase 1 (Scenario 3: One Asset Transfer)

As part of the PR6 capex submission EirGrid has presented three scenarios with differing numbers of potential Phase 1 asset transfers, namely: Scenario 1 – six asset transfers (ATV capex €3.8 bn); Scenario 2 – four asset transfers (ATV capex €1.9 bn); and Scenario 3 – one asset transfer (ATV capex €335 m).

Note that all of these capex value excluded stamp duty on the asset transfer sale (currently at 7.5%). As the time for the prospective project asset transfers is currently unclear, from a PR6 capex allowance and financial modelling perspective the lower value Scenario 3 has been assumed for the purposes of setting out a plausible / most likely scenario of what the total offshore capex requirement may be in PR6.

In practice, our assumption is the CRU will set its baseline ex-ante allowed revenue for the offshore price control in PR6 excluding any Phase 1 ATV payments and associated stamp duty. Phase 1 project ATV payments will then be added to the offshore Regulatory Asset Base (RAB) when the timing of Phase 1 project transfers (if any) are known, and ATV values are approved by the CRU under the processes set out in its decision papers.

The total capex for Scenario 3 is shown in Table 17, including the associated stamp duty value.

Table 17: PR6 step-change for Phase 1 Capex

OAO Capex (€m, 2024 prices)		2026	2027	2028	2029	2030	PR6
Phase 1 Asset Transfers	GHD forecast	-	-	-	335.00	-	335.00
	OAO Submission	-	-	-	335.00	-	335.00
	Difference	-	-	-	-	-	-
Phase 1 Asset Transfers – Stamp duty at 7.5%	GHD forecast	-	-	-	25.12	-	25.12
	OAO Submission	-	-	-	25.12	-	25.12
	Difference	-	-	-	-	-	-
Total	GHD forecast	-	-	-	360.12	-	360.12
	OAO Submission	-	-	-	360.12	-	360.12
	Difference	-	-	-	-	-	-

Source: GHD analysis, TSO Business Plan Questionnaire Offshore

5.6. Phase 2 (Tonn Nua)

The Phase 2 offshore costs are associated with the Tonn Nua offshore wind project and EirGrid has requested a PR6 capex of €347.93m for development of this project, see below in Table 18.

Table 18: PR6 step-change for Phase 2 Capex

OAO Capex (€m, 2024 prices)		2026	2027	2028	2029	2030	PR6
Phase 2 Tonn Nua	GHD forecast	34.43	44.00	18.70	128.70	122.10	347.93
	OAO Submission	34.43	44.00	18.70	128.70	122.10	347.93
	Difference	-	-	-	-	-	-

Source: GHD analysis, TSO Business Plan Questionnaire Offshore

The requested costs have been split into the following sub-categories:

- Project management – resources up to Final Investment Decision (FID): €79.5m
- Planning consultant – lead planning consultancy fees for onshore surveys, site investigations, environmental surveys, etc: €8.5m
- Marine survey work package 1 - €13.3m

- Marine survey work package 2 – €22.0m
- EPC advanced downpayment (10%) – €100.0m
- EPC notice to proceed payment[22] – €93.0m
- Contingency (10% on total) – €31.63m

Following a request for additional information to support the above PR6 capex values, EirGrid provided a more detailed cost breakdown for the project management costs split into sixteen sub-items along with associated PR6 staff FTE values for each sub-item. Additional detail was also provided for the marine survey costs. The values presented for package 1 have been taken from tender returns received by EirGrid in Q3 2024, with a reduced campaign expected for package 2 at broadly 50% of the package 1 total cost, over PR5 and PR6 this is €42.8 m. The remaining amounts with the overall Phase 2 Tonn Nua costs comprise advanced payments (€100m and €93m respectively) and a 10% overall contingency at €36.63 m.

Overall, having reviewed the current status of the Tonn Nua project (see below in Section 5.6.1), GHD are satisfied that at this stage of the project a development capex budget request of €348m is reasonable, particularly when ~65% of the total (€224.6m) is associated with advanced payments and contingency budget and hence it is fairly transparent how the bulk of the costs, which it is accepted are clearly provisional at this point in time, have been determined. On this basis we recommend that the full requested PR6 capex for Tonn Nua Phase 2 works should be provided. We understand that the Phase 2 Tonn Nua development capex will be governed by the CRU's proposed capital programme gateway process which is being consulted on as part of the PR6 process and will allow the CRU to assess the efficiency of EirGrid's expenditure during project development.

5.6.1. Tonn Nua Project Capex Envelope

EirGrid has detailed in their Annex 9 – TSO Offshore submission document that their current working range capital cost estimate for Tonn Nua is €1,580m- €2,212m, the upper value having a 40% contingency and uncertainty provision included. As part of the review process, it is clear from discussion with EirGrid that the Tonn Nua project design concept is less evolved at this stage than would be ideal, and EirGrid were asked to provide further information to support the capex range estimates provided in this PR6 submission. Subsequently, EirGrid provided additional information to support their initial capex range estimation demonstrating that for a 275 kV[23] transmission connection option the prospective capex cost could be circa €1.58bn, including various contingency and uncertainty cost provisions, supporting the lower end capex range provided as part of the PR6 submission.

Following the discussions undertaken between GHD and EirGrid, and understanding the current status of the Tonn Nua project design concept, at this stage GHD considers that the outlined capital cost estimate (€1,580m) is broadly reasonable for the Tonn Nua transmission connection as a project capex envelope, this being based on 2024 prices and allowing for required uncertainty cost provisions. This also supports the PR6 development capex value requested for PR6 (~€348m) discussed in Section **Error! Reference source not found.**, which appears r easonable in the context of an overall project capex value of circa €1,580m (in current prices).

The additional uncertainty provision of 40% in 2024 monies resulting in a top-end estimate of €2,212m is however considered less supportable, based on the information that EirGrid has been able to provide. Our indicative view is that there may be an element of double counting and overlap across the various contingency cost provisions. However, there is not sufficient detail provided by EirGrid at this time to thoroughly interrogate the cost basis and conclusively state that this upper value is unreasonable, although it remains GHD's current view that a total project cost at this range (in 2024 monies) is considered unlikely.

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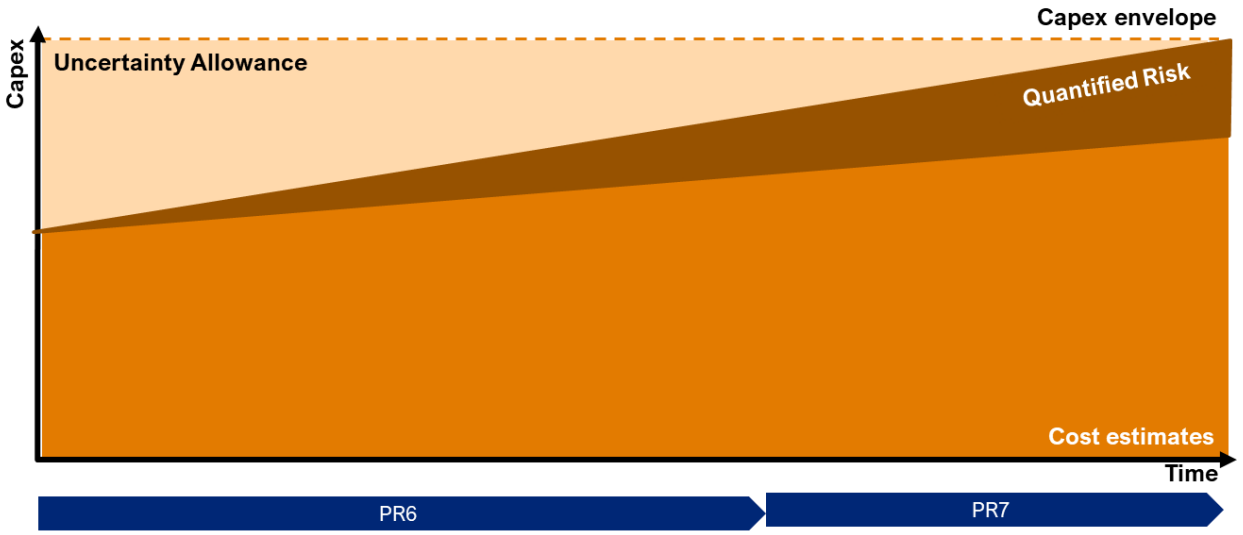
[22] 10% of remaining capex estimated from EPC packages.

[23] At the present time EirGrid has not decided on the whether the Tonn Nua transmission connection will be 220 kV or 275 kV, with the ultimate choice being impacted by available offshore export cable sizes and prospective thermal ratings, which may require the 275 kV option to deliver the full wind farm power export whilst limiting the transmission export cables to two parallel circuits.

While the technical assessment would indicate that a project cost of €2,212m (in current prices) appears high based on current information on the Tonn Nua project, EirGrid's higher end estimate of €2,212m may still in principle be consistent with an uncertainty provision being added to the current estimated costs[24], which is aligned with the design objective of the capex envelope in the offshore price control.

As discussed in the CRU's Investment Gateway Monitoring Procedures manual, the capex envelope is expected to be an early-stage estimate given the levels of uncertainty. For these reasons the envelope will include an appropriate provision for uncertainty. Over time, as the project and level of technical definition and cost estimating matures, the uncertainty provision will reduce, as it is reassigned into known project costs or via a quantified risk assessment. This process is illustrated in the simple diagram below.

Figure 5 – Illustration of uncertainty allowances in the project life cycle



Source: CEPA-GHD

We understand from engagement with EirGrid that it has sized its uncertainty provision to derive its higher end capex estimate to align with international guidance[25] on an appropriate uncertainty provision given the current stage of development and maturity of the Tonn Nua project. Despite this and, in particular, given the cost estimate is stated in a current price base[26], GHD's assessment still considers the estimate to be high.

Given the importance of the project capex envelope to the regulatory governance of the Tonn Nua capital programme under CRU's investment gateway process that will form part of EirGrid's offshore price control, we propose that the CRU consult on a possible range for the Tonn Nua capex envelope of €1,580m- €2,212m with a final decision on a point estimate made at the PR6 Final Determination.

On this basis the envelope (in 2024 prices) the OAO has proposed was accepted this would be as follows:

- Development cost - €348m
- Delivery cost - €1,232m
- Uncertainty provision - €632m

[24] Even where this includes an industry standard provision for contingency.

[25] Association for the Advancement of Cost Engineering – Cost Estimation Guidance

[26] We understand current prices to mean a real, 2024 price base.

5.7. SUMMARY OF RECOMMENDATIONS

Table 19 presents capex forecasts for PR6. EirGrid requested €778.4m in capex over PR6, compared with our recommended allowance of €776.8m.[27] The reduction of €1.62m, or 0.22% of the capex request, is due to the proposed cost confidence / efficiency adjustments provided for selected elements of the non-network capex, which aligns with the approach adopted for the equivalent opex line items.

Table 19: Summary of GHD's OAO allowance estimations for PR6

OAO Capex (€m, 2024 prices)	2026	2027	2028	2029	2030	PR6 Total			
						Allowance	Request	Variance	
								€m	%
IT Non-network capex: Technology	0.17	0.17	0.34	0.57	0.57	1.82	1.92	-0.10	-5%
IT Non-network capex: People and professional fees	0.69	1.62	7.80	6.24	1.05	17.40	18.32	-0.92	-5%
Buildings & Facilities	2.85	5.29	2.00	1.33	-	11.47	12.07	-0.60	-5%
Capital Spares	-	8.80	8.80	10.20	10.20	38.00	38.00	-	-
Phase 1 Asset Transfers	-	-	-	335.0	-	335.0	335.0	-	-
Phase 1 Asset Transfers – Stamp duty at 7.5%	-	-	-	25.12	-	25.12	25.12	-	-
Phase 2 Tonn Nua	34.43	44.00	18.70	128.70	122.10	347.93	347.93	-	-
Total OAO Capex (incl. ATV)	**38.14**	**59.89**	**37.64**	**507.57**	**133.9**	**776.74**	**778.4**	**-1.7**	**-0.2%**
Total OAO Capex (excl. ATV)	**38.14**	**59.89**	**37.64**	**147.45**	**133.9**	**416.62**	**418.28**	**-1.7**	**-0.4%**

Source: CEPA-GHD analysis,

For the network capex, which makes up the vast majority of the PR6 capex request, no reductions have been proposed, but we note that both the number of Phase 1 asset transfer projects plus the associated ATVs and the Tonn Nua development capex are both provisional, and hence potentially likely to change through the PR6 period.

It is recommended that ongoing monitoring and reporting through the PR6 period is enacted as part of the offshore regulatory framework in order to ensure that the appropriate scrutiny and efficiency challenge is provided to EirGrid's capex costs in these areas as further information and clarity on project development timescales is obtained. This will be facilitated by the proposed investment gateway process for the Tonn Nua project, whilst the Phase 1 ATVs will be assessed under a separate process as set out in CRU/2023/09.

[27] This includes 1 Phase 1 ATV payment which as discussed above, in practice we assume the CRU will not include in its baseline allowed revenues.

Appendix A ACCOUNTING TREATMENT

This appendix reviews the accounting treatment and categorisation of the OAO Opex costs in the EirGrid Offshore PR6 Investment Plan to assess if these costs should be treated as opex, or if they should be capitalised and recovered over the life of the asset by depreciation/amortization.

This review uses the cost information contained in the TSO BPQ Offshore spreadsheet and the description of these OAO costs in the EirGrid responses to the CRU Supplementary Questions (SQ's 31, 51 & 58) along with descriptions of the OAO costs contained in EirGrid Offshore presentations to the CRU included in the SQ responses. As the OAO opex costs are part of the Category 4 costs in EirGrid Offshore PR6 Investment Plan, which includes Capex as well as Opex costs, this review has included all Category 4 Capex costs to help inform how EirGrid has categorised all OAO costs.

A summary of the findings along with a more detailed review of the accounting treatment and categorisation of the OAO costs is discussed below.

A.1. SUMMARY

The total OAO Category 4 costs in the EirGrid Offshore PR6 Investment Plan of €525m is made up of €454m of Opex and €71m of Capex. The Capex categorisation appears appropriate from the information provided although no asset lives or depreciation was evident for this review.

In reviewing the €454m of Opex costs further information is required regarding at least €112m of OAO Opex costs to assess if the accounting treatment and categorisation of these costs as Opex is appropriate of if they should be capitalised or depreciated. A summary is shown below:

- **IT Software Licences: €91m** - IT software licences are normally capitalised as intangible assets and amortised over the life of the licences.
- **Operations (Enduring Operations and Maintenance):** €20m – if the operations costs for crew transfer vessels and cable services include installation or commissioning of operations assets then these costs could be capitalised and depreciated over the lives of the assets.
- **Warehouse Leasing (Buildings & Facilities):** €1m - if the warehouse lease is a finance lease this should be capitalised and depreciated over the life of the lease.
- OARP Staff costs: if the OARP total staff costs of €76m supporting the Knowledge & Information Management, Warehousing and Engineering Programmes are used to install assets then these staff costs could be capitalised and depreciated over the lives of the assets.

While further information is needed to assess the accounting treatment and categorisation of the above OAO Opex costs, from the information provided there would appear to be three options:

- **Option 1** – as the majority of OAO Opex costs appear to be correctly categorised, they should remain as Opex for prudence until further information is available.
- **Option 2** – if the IT software licences of €91m cover a number of years they could be capitalised and amortised over the lives of these licences.
- **Option 3** – in addition to Option 2 above, if staff and other costs are used to install OARP and operations assets, and the warehouse lease is a finance lease, then these costs could be capitalised and depreciated over the life of the assets and leases respectively.

A more detailed review of the above costs and the remaining OAO Category 4 costs in the EirGrid Offshore PR6 Investment Plan is provided below.

A.2. Review of OAO Opex & Capex Category 4 costs

The following OAO Category 4 costs in the EirGrid Offshore PR6 Investment Plan and their Opex and Capex split are shown below using values from the TSO Offshore Investment Plan (Annex 9 Figure 25 and Annex 13 spreadsheet). Potential issues with their categorisation are shown in red:

- IT Systems = €93m: Opex = €91m, Capex = €2m
- Pre-operations = €69m: Opex= €69m
- Offshore Central Functions = €62m: Opex= €62m
- Buildings & Facilities = €15m: Opex = €3m (€1.3m), Capex = €12m
- Implementation of Spares Strategy and Repair Readiness Tools = €38m: Capex= €38m
- Offshore Asset Readiness Programme = €203m: Opex = A proportion of €184m, Capex = €18m
- Enduring Operations and Maintenance: = €45m: Opex= €45m (€19.5m)

TOTAL Category 4 costs = €525m: Opex = €454m, Capex = €71m

TOTAL Category 4 potential OAO Opex cost issues = €111.8m + any capitalised OARP staff costs

The above OAO costs and categorisation issues are reviewed below with issues again highlighted in red.

A.2.1. IT Systems

Opex = €91m made up of IT software licences

Capex = €1.9m made up of IT Technology

IT Systems Opex costs provide licences for components of the technology solution for the Offshore Wind requirements including Enterprise Applications and supporting tools and technologies.

IT Systems Capex costs appear to be related to the acquisition of the technology platforms and infrastructure to host the IT systems applications although not identified SQ 058.

IT software opex licence costs should be reviewed as these are normally accounted for as an intangible asset amortised over the useful life of the asset. More detail is needed on the licences, the rights to use of these licences and the number of years the licence costs cover.

IT Systems capex costs should be reviewed to understand why only €1.9m have been capitalised.

A.2.2. Pre-Operations

Opex = €69m is made up of:

- Internal and external staff costs = €52m
- Professional fees = €17m

Pre-Operations staff costs and professional fees are incurred to enable the transition into the enduring operations teams by deploying the OARP capabilities.

All Pre-Operations costs should remain as opex as they are staff costs and professional fees incurred for the purpose of deploying the OARP capabilities into the enduring operations teams.

There are no Pre-Operations costs associated with increasing capital asset values or the future economic value of the Offshore PR6 investment plan so these costs should not be capitalised.

A.2.3. Offshore Central Functions

Opex = €62m made up:

- Internal and external staff costs = €59m
- Professional fees= €9m

Staff costs include:

- Finance and regulation – investor relations, Insurance, tax, reporting and regulatory support
- Information technology - providing support of OARP
- Offshore future planning – network planning for net zero and renewable energy
- Offshore transmission system operation – inspection and maintenance of offshore assets

Offshore Central Functions staff costs and professional fees are incurred to grow the core functions within the Offshore PR6 Investment Plan and are in addition to the costs forecast to deliver the OARP and pre-operations projects and the enduring operations and maintenance teams costs.

Offshore Central Functions costs should remain as opex as they are staff costs and professional fees incurred for the purpose of growing the core functions within the business on a day-to-day basis.

There are no Offshore Central Functions costs associated with increasing capital asset values or the future economic value of the Offshore PR6 investment plan so these costs should not be capitalised.

A.2.4. Building and Facilities

Opex = €3m made up of:

- Warehouse leasing = €1.3m – what type of lease to be confirmed – if finance should be capex
- Office space and disaster recovery site rental = €1.4m

Capex = €12.1m made up of:

- Office fit out = €0.7m
- Warehousing fit outs= €11.4m

Building and Facilities opex costs provide additional leased warehousing to store cables and spares and rent of additional office space for the Offshore Monitoring Centre and disaster recovery site.

Building and Facilities capex costs provide warehouse inventory (e.g. submarine cables) to support offshore operations and office fit out for the Offshore Monitoring Centre.

Building and Facilities Warehouse leasing opex costs should be reviewed to understand the type of lease used for the additional warehousing required. If a finance lease, then it should be capitalised and depreciated over the life of the lease, if an operating lease, then it should remain as opex.

Building and Facilities capex costs should remain as capex as they are the capital costs of fit outs.

A.2.5. Implementation of Spares Strategy and Repair Readiness Tools

Capex = €38m for spares in the event that assets require replacing.

Implementation of Spares Strategy and Repair Readiness Tools cost are to ensure asset spares (e.g. transformers and switch gear) are available to ensure any transmission assets can be replaced.

Implementation of Spares Strategy and Repair Readiness Tools costs should remain as capitalised costs for the replacement of any capital assets as required.

A.2.6. Offshore Asset Readiness Programme (OARP):

Opex = €184m made up of:

- Internal and external staff costs = €76m

- Professional fees= €108m

Capex = €18m made up of IT delivery staff costs and professional fees.

OARP costs are incurred to develop the 31 operational capabilities to operate and manage the offshore assets. While the staff and professional fees would normally be considered opex, if staff costs are related to the installation of assets these could be capitalised.

In reviewing the 31 operational capabilities the following 3 capabilities should be reviewed in more detail to see if any of the staff costs are involved in installing the assets for operational use.

- Knowledge & Information Management Programme 13 - while the IT Systems application costs are included in the IT Systems costs above, if there are staff costs related to the installation of the assets in this programme then these could be capitalised as part of the asset cost.
- Warehousing Programme 31 - while the majority of these costs are included in the Building and Facilities costs above, if there are staff costs related to the warehousing and office fit outs then these could be capitalised as part of the cost of these assets.
- Engineering Programme 4 – while these costs are not material (<€1m) they relate to the engineering works carried out to ensure the asset is ready for EirGrid ownership. Staff costs incurred to ensure the engineering asset is ready for transfer could be capitalised.

The remining 28 OARP programs should remain as opex costs as they relate to central (HR, finance, legal etc.) costs and other costs such as logistics and project management incurred as part of the day to day operation and maintenance of the offshore programme.

A.2.7. Enduring Operations and Maintenance

Opex = €45m made up of

- Internal and external staff costs = €19m.
- Insurance = €5m
- Operations and Maintenance = €21m made up of:
    - Crew transfer vessels = €1.6m
    - Helicopter response service(s) = €0.9m
    - Cable monitoring service(s) = €9.2m
    - Cable repair response service(s) = €7.8m
    - Mechanical and structural maintenance = €1.6m
    - Jacket surveys and cleaning maintenance= €0.2m

Enduring Operations and Maintenance staff costs are incurred to enable EirGrid to fulfil its future offshore asset owning and maintain duties and are a continuation of Pre-Operations resources which are expected to transition into the enduring operations once EirGrid has received the offshore assets.

Enduring Operations and Maintenance staff and insurance costs should remain as opex as they are incurred for the purpose of offshore day to day operations.

Enduring Operations costs should be reviewed (e.g. Crew transfer vessels and cable services) to see if it includes installation of enduring operations assets which could be capitalised.

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