

Dublin Airport Opex Efficiency Study: 2027–2031

Irish Aviation Authority

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PUBLISHABLE DRAFT REPORT

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CEPA is also separately retained by Aer Lingus to provide advice on aspects of the Dublin Airport price control that are outside the scope of this opex study, including advice on the weighted average cost of capital. That engagement does not include the assessment of Dublin Airport's operating expenditure. CEPA has put in place safeguards to mitigate any actual or perceived conflict of interest between the engagements. These include separate project teams, information barriers, access-controlled electronic folders, restrictions on the sharing of confidential information and separate senior oversight arrangements. The opinions expressed in this report are those of the CEPA project team advising the IAA on Dublin Airport's efficient opex.

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EXECUTIVE SUMMARY

Dublin Airport is subject to price-cap regulation by the Irish Aviation Authority (IAA). The current price control runs until 31 December 2026, and the IAA has commissioned CEPA to produce an independent forecast of Dublin Airport's efficient operating expenditure (opex) for the 2027–2031 regulatory period. This report presents our draft forecast of efficient opex by cost category and sets out the methodology and evidence base that underpin our findings. All figures are in March 2026 prices unless otherwise stated.

We forecast that Dublin Airport requires €2,260.3 million of efficient opex over the 2027–2031 regulatory period, including the operating impacts of the allowed Capital Investment Programme (CIP, or CIP27). This is below Dublin Airport's Regulatory Proposition but provides for real growth in opex over the period to reflect passenger growth, real wage pressures, justified step changes and assessed operational resilience requirements.

Our assessment framework and methodology

Our assessment of Dublin Airport's efficient opex applies a three-stage framework. We first assess whether Dublin Airport's 2025 outturn costs represent an efficient baseline, drawing on historical performance analysis, external benchmarking and, where appropriate, bottom-up operational modelling. We then project efficient expenditure by applying cost drivers and elasticities to that efficient baseline. Finally, we assess potential step changes, covering new activities, changes in service standards, the opex consequences of capital investment, and other cost pressures and efficiency opportunities.¹

Our assessment has been informed by:

- data on Dublin Airport's historic and current expenditure and operational performance;
- Dublin Airport's Regulatory Proposition and CIP, including proposed step-changes in spending;
- responses to supplementary questions and data requests issued to Dublin Airport;
- elasticity estimates derived from a review of external evidence and from our own statistical analysis;
- benchmarking of Dublin Airport's opex and operational performance to external comparators; and
- detailed modelling of Dublin Airport's security operation.

We have also applied top-down cross-checks to test the reasonableness of our bottom-up forecast at an aggregate level. These include comparisons of total opex per passenger and the implied elasticity of forecast opex to Dublin Airport and IAA's passenger growth projections.

Our draft opex forecast

We present two sets of opex forecasts in this report:

- a forecast based on Dublin Airport's passenger projections, to enable a like-for-like comparison against the airport's Regulatory Proposition; and
- a forecast based on the IAA's passenger forecasts, which are somewhat higher than those proposed by Dublin Airport. For the IAA's Draft Determination, this second set of opex forecasts will be used in the setting of the price cap.

The table below presents our forecast using **Dublin Airport's passenger projections**. The main body of this report presents content on the same basis, to enable a like-for-like comparison with Dublin Airport's forecast. **Appendix B** presents the comparable forecast using the IAA's passenger projections, which leads to a higher opex forecast relative to the one using Dublin Airport's passenger projections.

¹ Where necessary, we undertake a fourth step of considering whether a glide path is necessary if our efficient forecast requires Dublin Airport to implement efficiencies that are unachievable in the shorter term. For this draft forecast, we consider that a glide path is unnecessary, given we are forecasting a real terms increase in opex relative to Dublin Airport's 2025 outturn.

Table ES.1: CEPA draft opex forecast using Dublin Airport's passenger projections, 2027–2031 (€m, Mar 2026 prices)

	2027	2028	2029	2030	2031	Total
Dublin Airport (excl. CIP)	⌘ ⌘ ⌘ ⌘	⌘ ⌘ ⌘ ⌘	⌘ ⌘ ⌘ ⌘	⌘ ⌘ ⌘ ⌘	⌘ ⌘ ⌘ ⌘	⌘ ⌘ ⌘ ⌘
Dublin Airport (incl. CIP)	⌘ ⌘ ⌘ ⌘	⌘ ⌘ ⌘ ⌘	⌘ ⌘ ⌘ ⌘	⌘ ⌘ ⌘ ⌘	⌘ ⌘ ⌘ ⌘	⌘ ⌘ ⌘ ⌘
CEPA (excl. CIP)	435.6	443.4	451.0	457.3	463.7	2,250.9
CEPA (incl. CIP)	435.6	442.7	451.4	461.5	469.1	2,260.3

Source: CEPA analysis of Dublin Airport data and Dublin Airport Regulatory Proposition

Based on Dublin Airport's passenger forecasts, and including the impacts of the CIP, our forecast efficient opex totals €2,260.3 million over the 2027–2031 regulatory period. This is equivalent to an average of €452.1 million per annum. Annual expenditure increases from €435.6 million in 2027 rising to €469.1 million by 2031, which is ⌘ ⌘ ⌘ higher in real terms than Dublin Airport's outturn 2025 expenditure of ⌘ ⌘ ⌘ ⌘.

Excluding the impact of the CIP, our total forecast of efficient opex is €2,250.9 million over the 2027–2031 period.

Dublin Airport's 2025 expenditure represents a broadly efficient baseline

We conclude that Dublin Airport's 2025 baseline expenditure broadly reflects an efficient starting base for the 2027–2031 regulatory period. While the airport's opex has increased during the current determination period, this trend appears broadly consistent with passenger growth and the opex assumptions that underpin the current price control, when adjusted for outturn wage and wider economic cost pressures.

Since passenger volumes began recovering in 2022, Dublin Airport's reported costs have generally remained within the level of opex implicit in the IAA's current price cap. Its reported operating costs are also generally in line with benchmarks from other international airports against which we have compared Dublin Airport's 2025 expenditure.

For most cost categories, we have therefore used Dublin Airport's outturn expenditure as the baseline for forecasting efficient opex.

We forecast efficient opex will grow in real terms

Our forecast provides for real growth in opex over the 2027–2031 period. This reflects our assessment that Dublin Airport will face several upward cost pressures, including:

- passenger growth, which increases expenditure in several opex categories;
- real wage pressures, based on the latest Central Bank of Ireland (CBI) forecasts for the Irish economy;
- increased commercial service provision in areas such as retail and lounges; and
- operational cost pressures for areas such as Passengers with Reduced Mobility (PRM) services.

We have balanced these upward pressures by applying a 1% ongoing efficiency challenge. This applies to all categories of opex except for security, where we assess the efficiency potential on a bottom-up basis, and cost items that we consider should be limited to CPI increases over the regulatory period.

Security remains a key area of focus

Security is the single largest component of Dublin Airport's opex, accounting for approximately 16% of total operating costs in 2025. It has therefore been a major focus of our assessment.

Our security forecast is supported by detailed modelling of Dublin Airport's current and future security operation and associated staffing requirements. Our forecast reflects a baseline staffing requirement and a separate

resilience uplift of approximately 23 full time equivalent (FTE) staff to provide operational resilience.² Our modelled estimate of efficient staffing in 2025, with the resilience uplift, is broadly in line with Dublin Airport's outturn staffing levels in 2025, a year when Dublin Airport met all of its security queue targets every day.

We incorporate some, but not all, of the CIP-related opex impacts into our forecasts

Our review also assesses the impacts of Dublin Airport's CIP on future opex. Dublin Airport has produced high-level estimates of these impacts, which we reviewed for the purposes of our draft forecast.

We use some of the CIP-related opex impacts proposed by Dublin Airport and make corresponding adjustments to our forecasts. We do not make adjustments in areas where the proposed uplift is not sufficiently evidenced, is already reflected in the baseline forecast, or would materially double count costs captured through our elasticity-based trend adjustments. This includes some Maintenance uplifts for replacement or refurbishment projects, where Dublin Airport has not demonstrated that the costs represent incremental maintenance requirements rather than renewal of the existing asset base. It also includes some IT lifecycle refresh projects, where the proposed opex impact appears to relate to expenditure already reflected in the baseline forecast.

We also observe that Dublin Airport has focused on areas where capital projects can be expected to lead to incremental increases in opex, with less of a focus on where projects may reduce opex in the short-to-medium term, even where that forms part of the rationale for the project. In our assessment, we have sought to rectify this imbalance through our assessment of step-changes proposed by Dublin Airport and through our application of a top-down ongoing efficiency adjustment.

Overall, our forecast includes €9.4 million of additional CIP-related opex across the 2027–2031 period. This reflects the projects and cost impacts that we consider sufficiently evidenced at this stage.

Our forecast remains lower than Dublin Airport's proposal

Our opex forecast remains below Dublin Airport's Regulatory Proposition, with the gap widening over the regulatory period, reflecting differences in both forecasting assumptions and methodology.

A central theme in Dublin Airport's Regulatory Proposition is that the operational impact of capacity constraints will increase processing times, congestion, staffing requirements and the need for additional operational oversight. It also argues that major capital projects across the campus will reduce operational flexibility, temporarily remove stands and terminal areas from service, and require revised passenger flows and additional operational management.

We recognise that some of these factors will create operational pressures during the next regulatory period. Our forecast accounts for a number of the cost pressures identified by Dublin Airport where they are supported by the evidence. However, our assessment suggests that Dublin Airport has overstated the impact that these factors are likely to have on efficient opex.

In particular, our review of the underlying evidence, operational requirements, benchmarking information and forecasting assumptions indicates that some of the proposed expenditure increases are not fully supported. In other areas, the proposed uplifts are larger than we consider reasonable given the scale of the underlying cost pressure.

We therefore conclude that opex should increase in real terms, but that a lower allowance than proposed by Dublin Airport is consistent with the efficient delivery of airport operations.

Top-down cross checks and comparisons

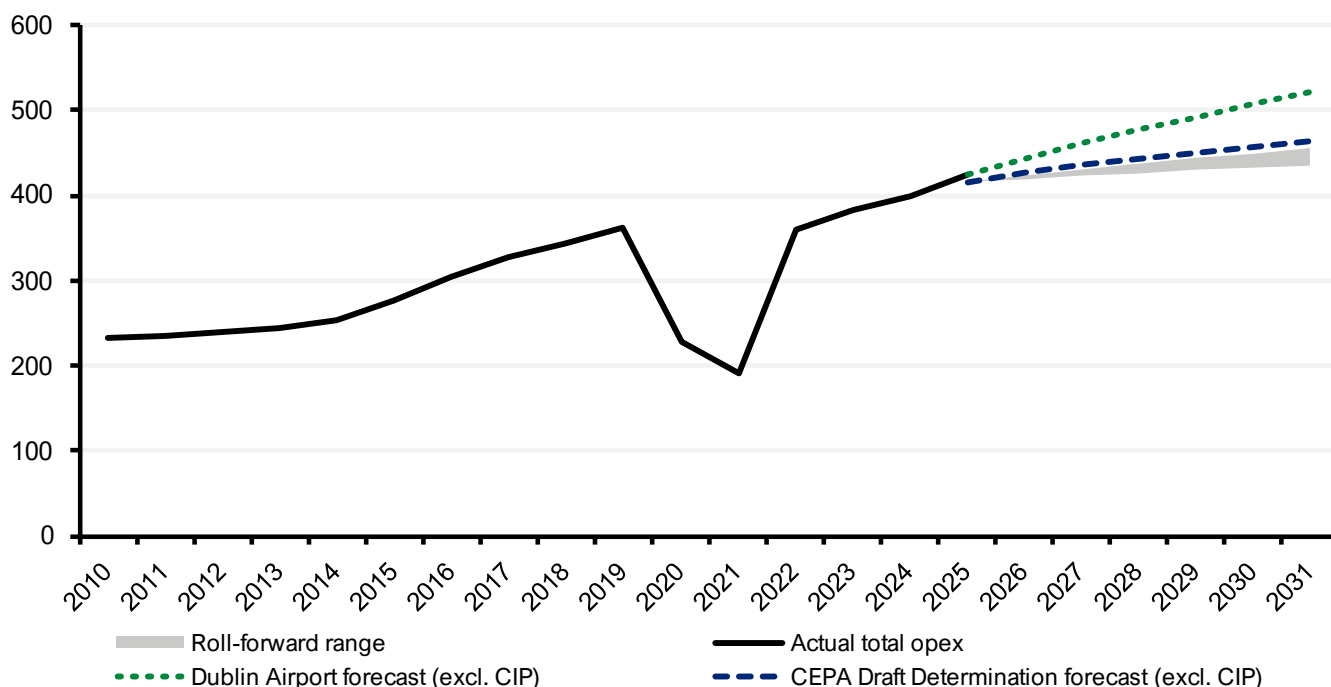
We apply top-down cross-checks to test whether our forecast is reasonable in aggregate. These checks are designed to complement, rather than replace, our category-by-category assessment:

² This contrasts with Dublin Airport's proposed N+1 resilience adjustment within its forecast and the related Team Supervisor requirement.

- We compare our forecast against the implied opex that would result from rolling forward the adjusted 2025 opex baseline using an aggregate passenger-volume elasticity in the range of 0.3–0.6. While this range may not capture all of the cost pressures identified by Dublin Airport for the 2027–2031 regulatory period, we consider the upper end of the range should reasonably accommodate some of these factors. It therefore provides a useful high-level cross-check on the overall outcome of our forecasting approach.
- We compare forecast opex per passenger against Dublin Airport's historical trends. This helps test whether the trajectory of our forecast opex per passenger is consistent with historic performance and whether the overall level of expenditure appears proportionate, credible and achievable.

Figure ES.1 compares our forecast total opex using Dublin Airport's passenger forecast, on a €m basis, against Dublin Airport's Regulatory Proposition and the results of the two cross-checks. CIP-related expenditure has been excluded for the purposes of this comparison.

Figure ES.1: Total opex comparison, 2010–2031 (€m, Mar 2026 prices)



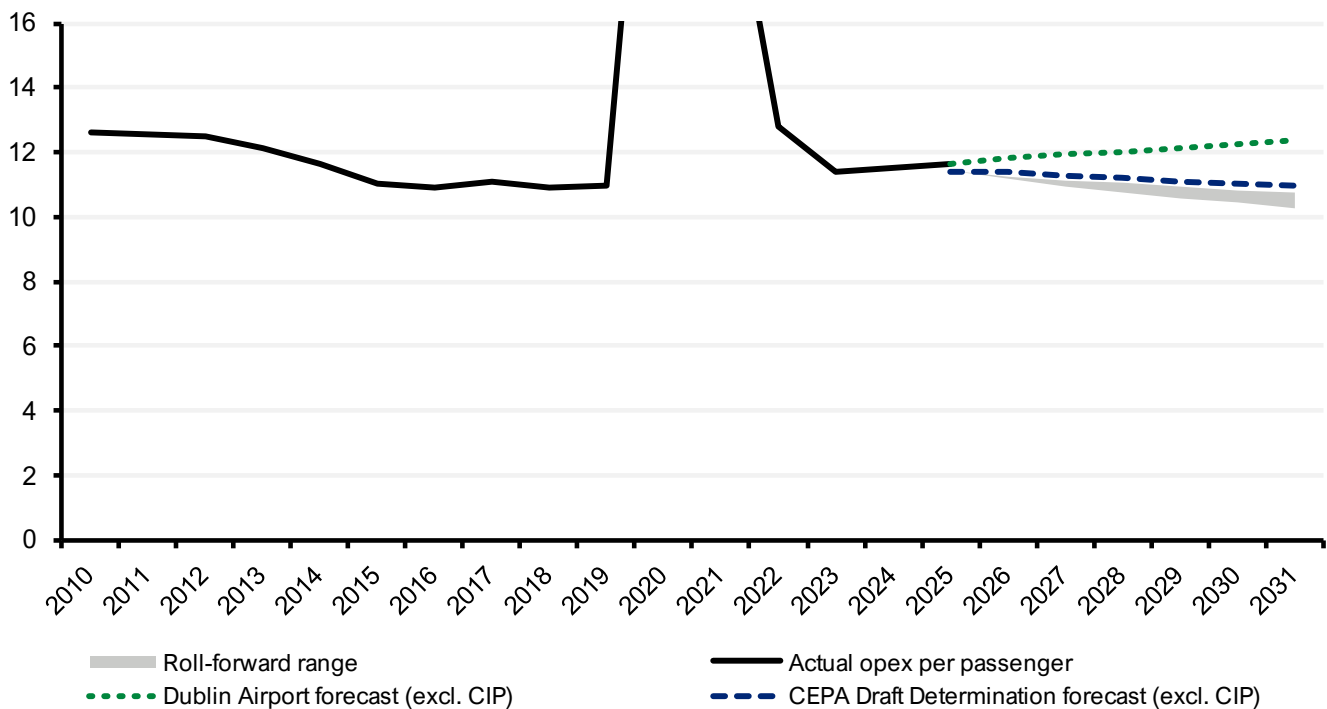
Source: CEPA analysis, Dublin Airport data and Dublin Airport Regulatory Proposition

Note: Opex forecasts are presented using Dublin Airport's passenger forecast.

The above cross-check supports the reasonableness of our draft opex forecast. Our forecast provides for an increase in total opex over the 2027–2031 period, reflecting passenger growth, justified step changes and uncontrollable cost pressures. It implies an aggregate passenger-volume elasticity of 0.62 to 0.68, with the range dependent on whether CIP impacts are excluded or included, respectively. This range is marginally above the upper end of our benchmark range but remains plausible in the context of the bottom-up evidence in various categories.

Figure ES.2 presents the same analysis on an opex per passenger (€ per pax) basis. As before, CIP-related expenditure has been excluded for the purposes of this comparison.

Figure ES.2: Opex per passenger comparison, 2010–2031 (€ per passenger, Mar 2026 prices)



Source: CEPA analysis, Dublin Airport data and Dublin Airport Regulatory Proposition

Note: Opex forecasts are presented using Dublin Airport's passenger forecast. The y-axis has been truncated to enable greater visibility of data excluding exceptional Covid-19 related years (2020 and 2021).

On a per-passenger basis, our forecast remains broadly consistent with Dublin Airport's historic outturn performance. Opex per passenger declines modestly over the period, reflecting the scope to spread fixed operating costs across a larger passenger base. This means our forecast allows higher overall expenditure as activity increases, while continuing to challenge Dublin Airport to deliver services at a cost per passenger broadly in line with recent performance.

Overall conclusion

We consider our draft forecast to represent a balanced assessment of Dublin Airport's efficient opex requirements for the 2027–2031 regulatory period. It recognises the cost pressures and operational challenges faced by Dublin Airport where these are supported by evidence and justified by the airport's operating environment. It also incorporates what we consider to be achievable and sustainable efficiency improvements, through our forecasting methodology, benchmarking analysis and review of operational requirements.

Our forecast remains below Dublin Airport's Regulatory Proposition because, while we accept several of the underlying cost pressures, the evidence currently supports a lower quantum in a number of categories. Our considerations are discussed in detail in this report.

There are several areas where additional evidence or clarification from stakeholders would assist our assessment ahead of the Final Determination. These areas are identified in the relevant cost-category sections. If further supporting information is provided, we would consider whether specific elements of our forecast should be revised.

1. INTRODUCTION

This report presents our forecast of Dublin Airport's efficient operating expenditure (opex) for the 2027–2031 regulatory period. It documents the methodology and evidence base underlying our findings and sets out our view of the efficient level of operating expenditure across each cost category.

1.1. PURPOSE AND SCOPE OF THIS STUDY

The Irish Aviation Authority (IAA) has commissioned CEPA to assess the efficiency of Dublin Airport's opex, and develop an opex forecast out to 2031, to inform the 2026 Determination on airport charges.

Our assessment delivers two outputs. First, we establish an efficient opex baseline for each cost category for 2025, drawing on historical performance analysis, external benchmarking and, where appropriate, bottom-up operational assessment. Second, we forecast efficient operating expenditure for the 2027–2031 regulatory period, applying appropriate cost drivers and elasticities to project the efficient base forward, and assessing both capital and non-capital related step changes.

1.2. CONTEXT TO THIS STUDY AND ANALYTICAL ANCHORS

Opex is one of the building blocks that determine the level of aeronautical charges faced by airlines and passengers.

The IAA published an Issues Paper in July 2025 setting out the key questions for the 2026 Determination, identifying opex as a material area of scrutiny. In March 2026, Dublin Airport submitted its Regulatory Proposition, including an Operating Expenditure Appendix setting out its proposed opex framework and forecast for 2027–2031. While our assessment of efficient opex is independent of the Regulatory Proposition, we draw on that submission, together with data and evidence provided by Dublin Airport in response to CEPA's information requests, to develop our findings.

Dublin Airport's Regulatory Proposition

Dublin Airport's Regulatory Proposition (including CIP) forecasts opex increasing from €533.4 million in 2025 to €533.4 million by 2031 (in March 2026 prices), representing a compound annual growth rate of 0%. Based on Dublin Airport's passenger forecasts, opex per passenger would rise from €1.10 to €1.10 over the same period.

Figure 1.1 overleaf provides a summary of Dublin Airport's proposed opex for 2027–2031 split by payroll costs, non-payroll costs and impacts of the 2027 Capital Investment Programme (CIP, or CIP27).

Dublin Airport states that the proposed opex profile is intended to:

- accommodate forecast passenger growth;
- maintain current service quality standards;
- ensure operational resilience and consistency of passenger experience; and
- support operations in a capacity-constrained environment.

A central theme underpinning the forecast is the operational impact of capacity constraints. Dublin Airport argues that these constraints are structural, rather than temporary, and therefore cannot be resolved through incremental efficiency improvements alone. According to the airport, the constraints will:

- increase processing times and congestion;
- require higher staffing and operational oversight; and
- increase resource requirements simply to maintain existing service standards.

These challenges are expected to intensify during the forthcoming regulatory period due to several major capital projects being delivered concurrently across the airport campus.

Figure 1.1: Dublin Airport's opex forecast, 2026–2031 (€m, Mar 2026 prices)



Source: CEPA analysis of Dublin Airport Regulatory Proposition

Note: Dublin Airport figures were submitted in 2026 prices and converted to Mar 2026 prices for consistency with the report.

Our analytical approach

To assess the efficiency of Dublin Airport's 2025 cost base, we draw on three sources of evidence.

We track the trend in outturn costs against the CEPA 2022 forecast as adopted in the IAA's 2022 Review Decision,³ and against an adjusted version of that forecast rebased for outturn passenger volumes, wage growth and consumer price inflation. We benchmark unit costs against other airports and, where appropriate, against broader industry comparators. Where the nature of the cost warrants it, we supplement this with bottom-up operational modelling. We also draw on 2019 pre-pandemic data where it provides a cleaner baseline than the post-Covid recovery years. Further details on our assessment framework and methodology are provided in Section 2.

Over the 2027–2031 period, Dublin Airport is forecast to serve materially more passengers than at the 2025 base year. Our efficient opex forecast reflects that demand trajectory and the cost pressures it generates, and explicitly addresses the interactions between opex, the capital investment programme in Dublin Airport's Regulatory Proposition, commercial revenues and service quality standards.

1.3. STRUCTURE OF THIS REPORT

This report is structured as follows:

- **Section 2** sets out the assessment framework applied throughout the study, covering the approach to establishing base year efficiency, projecting efficient expenditure and evaluating step changes.
- **Section 3** presents the unit payroll cost methodology, which is cross-cutting and underpins the staffing cost forecasts across all subsequent cost category chapters.

³ This 2022 forecast is based on the IAA's passenger forecasts that formed part of the current regulatory period determination.

- **Sections 4 to 11** address the major cost categories. Security (Section 4) is assessed using a bottom-up operational model, while the remaining sections in this group cover Maintenance, Other Non-Staff Non-Pay, Central Functions, IT, Facilities, Cleaning, and Retail in that order.
- **Sections 12 to 22** address the remaining cost categories: Rent and Rates, Passengers with Reduced Mobility (PRM), Campus Services, Car Parks, Utilities, Airside Operations, Other Staff Non-Pay, Consultancy, Capital Projects, Marketing, and Insurance.
- **Section 23** draws the results together in a summary of CEPA's efficient opex forecast for 2027–2031.

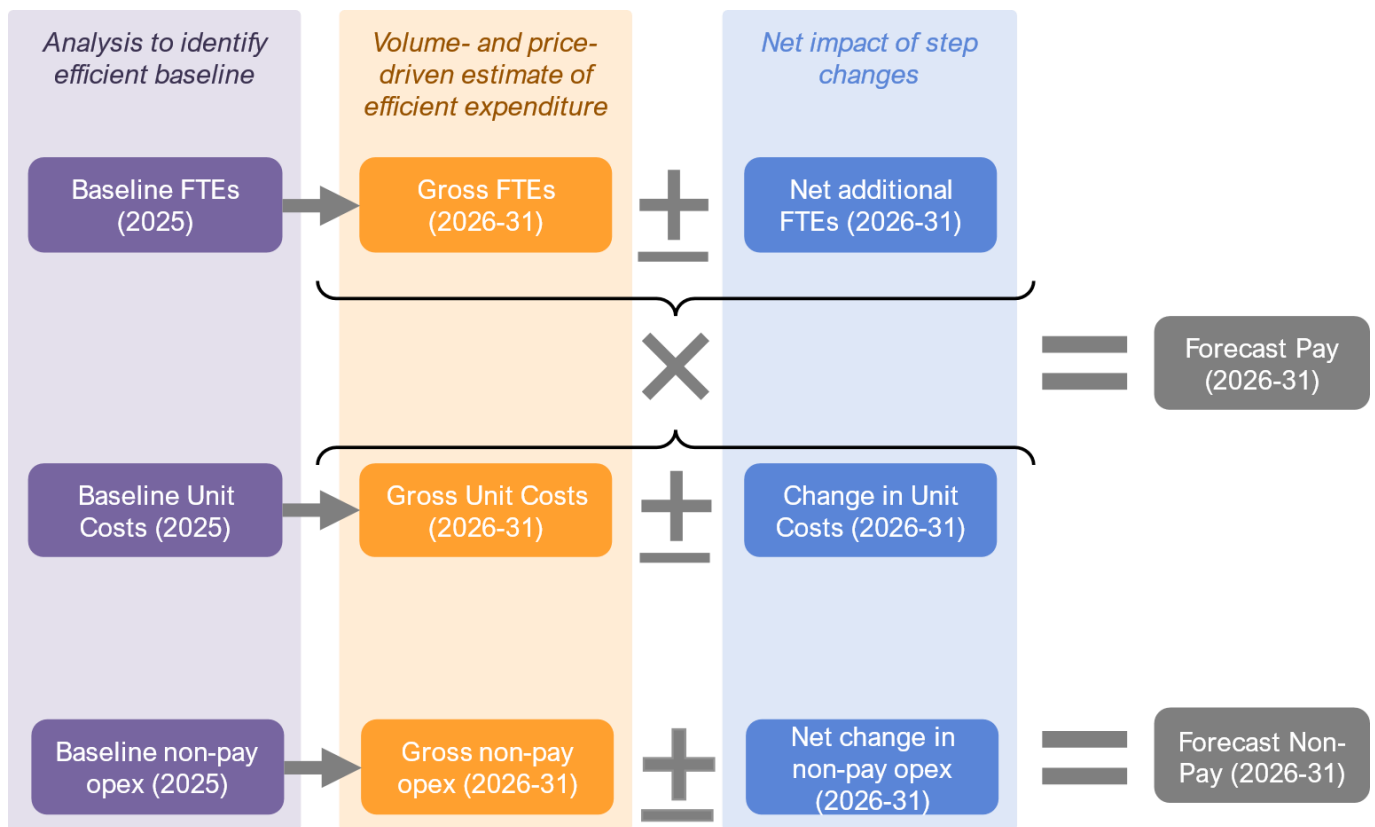
2. ASSESSMENT FRAMEWORK AND METHODOLOGY

This section sets out the analytical framework we apply across each of the cost categories in order to produce an overall efficient opex forecast for Dublin Airport.

2.1. OVERVIEW

Our assessment proceeds in three stages. First, we assess whether Dublin Airport's 2025 outturn costs represent an efficient level of expenditure. Second, we project efficient expenditure over the 2027 to 2031 price control period by applying appropriate elasticities and cost drivers to the efficient 2025 baseline. Third, we assess Dublin Airport's proposed step changes, covering new activities, changes in service standards, the opex consequences of capital investment, and other cost pressures and efficiency opportunities identified in its Regulatory Proposition. Figure 2.1 summarises the structure.

Figure 2.1: Framework for setting efficient opex allowances for 2027–2031



Source: CEPA analysis

Security departs from this structure in one respect: staffing requirements are modelled using a bottom-up operational model rather than through benchmarking and elasticity-based projection. Section 4 and Appendix D set out the Security methodology in full.

2.2. CORE ASSUMPTIONS

Inflation: The monetary figures in this report are presented in March 2026 prices unless otherwise stated. We have used the Consumer Price Index (CPI) for Ireland to inflate historic figures to March 2026 prices. For future rates of inflation, where needed, we have taken an average of available CPI forecasts to produce a consensus forecast based on:

- Economic and Social Research Institute, Quarterly Economic Commentary, Spring 2026.

- International Monetary Fund, World Economic Outlook, April 2026.

Passenger forecasts: Our draft forecasts as presented in Appendix B, use IAA's passenger projections (shown in the table below), to ensure the opex building block is consistent with the other regulatory building blocks. These are the forecasts that will be used for the setting of the price cap. The IAA's passenger forecast is higher than Dublin Airport's (also shown in the table below).

Table 2.1: Comparison of passenger forecasts, 2025–2031 (million passengers)

	2025	2026	2027	2028	2029	2030	2031
Historic	36.4	-	-	-	-	-	-
Dublin Airport forecast		37.5	38.6	39.6	40.6	41.5	42.3
IAA forecast		37.9	39.4	40.8	42.0	43.3	44.5

Source: CEPA analysis of Dublin Airport data, Dublin Airport Regulatory Proposition and IAA passenger forecasts

Wages and other payroll costs: As discussed in more detail in the subsequent section, we generally assume unit payroll costs will grow at the same rate as wage growth in the Irish economy. We use a forecast of wage growth from the CBI and deflate it to obtain a forecast of real wage growth. For 2029 onwards, we assume real wage growth will be 1.5% in line with the historic average growth in real wages in the Irish economy in recent decades, as per our previous studies.⁴ Our resultant wage forecast is summarised in the table below.

Table 2.2: Forecasts of wage growth, 2026–2031 (%)

	2026	2027	2028	2029	2030	2031
CBI nominal wage growth	4.0%	3.8%	3.5%			
CBI HICP inflation	2.9%	2.6%	1.9%			
CBI real wage growth	1.1%	1.2%	1.6%	-	-	-
CEPA long-run real wage growth	-	-	-	1.5%	1.5%	1.5%

Source: CEPA analysis of Dublin Airport data and CBI Quarterly Bulletin Q1 2026

2.3. ASSESSING BASE YEAR EFFICIENCY

We draw on three sources of evidence to assess whether Dublin Airport's 2025 cost base is efficient. The sources are complementary: each tests a different dimension of efficiency and triangulating between them provides a more robust overall assessment.

Outturn against the CEPA 2022 forecast and the adjusted forecast

The CEPA 2022 forecast is the efficient opex trajectory established at the time of the 2022 Review Decision. We compare 2022 to 2025 outturn costs against this forecast as a first-order test of whether costs have evolved broadly as anticipated.

The adjusted forecast rebases the CEPA 2022 forecast for outturn passenger volumes, economy-wide wage growth, and CPI inflation. It tests whether the observed growth in costs since 2022 is explained by changes in volume and input prices. A cost category that tracks the adjusted forecast has grown broadly in line with what volume and price changes would predict; a category that has grown materially faster warrants further scrutiny.

However, tracking the adjusted forecast does not confirm that the 2025 cost level is efficient in absolute terms, if there have been other drivers of costs in the intervening period that were not accounted for when setting the 2022

⁴ CEPA and Taylor Airey (2019), [Dublin Airport Operating Expenditure: Bottom-up Efficiency Assessment, Publishable Draft Report](#), 3 May 2019.

forecast. As such, a cost can track the adjusted forecast and still represent an inefficient level of spend, or conversely, a cost can be above the adjusted forecast and still represent an efficient level of spend. We therefore use benchmarking as an additional test.

Unit cost benchmarking

We benchmark Dublin Airport's unit costs against comparator airports and industry data to assess absolute efficiency. Comparators are selected on the basis of operational scale, geographic proximity, regulatory status, and data availability. Benchmarking is applied at the level of IAA cost categories and, where data are available, at sub-category level.

Where the 2022 to 2025 outturn period introduces distortions, for example because Dublin Airport's passenger volumes recovered at a different rate from comparators, we supplement the outturn data with 2019 pre-pandemic data as a cleaner baseline.

We have sought data from other airport and external benchmarks to match the 2025 Dublin Airport baseline wherever possible. Where 2025 data was not available, the relevant year is specified in comparisons. Some airports report data on a financial year rather than calendar year basis – in these cases the data has been matched to and labelled as its closest calendar year. For example, data for financial year 2024/25 would be labelled as 2024.

Bottom-up operational modelling

For security, we use bottom-up operational modelling to assess efficiency. Security is a large area of cost, where efficient staffing requirements are determined by lane configurations, throughput standards, queue time targets, technology, and rostering patterns. As such, a simple application of a cost driver and elasticity may materially over- or under-estimate the required level of opex. Section 4.1 describes the operational modelling we undertake in full.

For its Regulatory Proposition, in some cases Dublin Airport has developed estimates of its opex requirements using more bottom-up approaches, developing task models that are then aggregated up to an annual opex requirement. We have reviewed these task models and found that, while they provide some useful insight, they remain highly dependent on subjective judgements. And so, they do not necessarily provide a more robust or balanced view of efficient opex than the more high-level approach we use in terms of trend analysis and unit cost benchmarking.

2.4. FORECASTING EFFICIENT EXPENDITURE

Elasticities and cost drivers

We forecast efficient expenditure over the 2027–2031 regulatory period by applying a cost driver and elasticity to the efficient 2025 baseline for each cost line item. An elasticity measures how costs change in response to the selected driver: for example, a passenger elasticity of 0.4 means that a 10% increase in passenger volumes would increase the relevant cost line by 4%, before inflation, step changes and other adjustments. For most categories our chosen cost driver is total passenger volumes, though for some costs we use a different driver where costs are more directly linked to FTEs, terminal area, specific subsets of passengers, or specific revenue lines.

We apply elasticities below 1.0 for most passenger-driven cost categories. This reflects the fixed and semi-fixed components of airport opex: many activities require minimum levels of staffing, supervision, compliance coverage, asset availability, or operational management regardless of incremental passenger growth. We reserve 1.0 elasticities for costs that are directly transactional, contractually variable, statutory, or directly linked to headcount.

Table 2.3 presents the recommended cost driver and point elasticity for each category. Where passenger volumes are not the appropriate driver, the table records the alternative. We provide our rationale for the chosen cost driver and elasticity in subsequent sections, while the detailed evidence behind each recommendation is set out in Appendix C.

Table 2.3: Recommended cost drivers and elasticities by cost category

Cost category	Sub-category	Cost driver	Elasticity
Airside Operations	Airside operations	Passengers	0.40
Campus Services	Police, fire, Campus facilities	Passengers	0.15
Capital Projects	Capital projects	CIP	N/A
Car Parks	Car park operations	Passengers	0.4
Central Functions	HR	FTEs	0.77
	Platinum services	Passengers	0.40
	Commercial, Procurement, Graduates, SSC	Passengers	0.15
	Other	No elasticity	N/A
Facilities	Control centre	Passengers	0.50
Cleaning	Pay and non-pay	Terminal area and pax	N/A
IT	Pay and non-pay	Passengers	0.20
Maintenance	Pay and non-pay	Passengers	0.30 / 0.40
Security	Security	Bottom-up model	Bottom-up
Car parks	Pay and non-pay	Passengers	0.40
Consultancy	Consultancy	Passengers	0.10
Insurance	Insurance	Passengers	0.55
Marketing	Customer support, other marketing	Passengers	0.40
Other non-staff costs	Bank and Credit Card Charges	Passengers	1.00
	CBP Queue Management	US CBP passengers	1.00
	Lounges / VIP and retail	Passengers	0.50
	Other	Fixed	N/A
Other staff costs	Employee-related overheads	FTEs	0.95
PRM	PRM services	PRM passenger volumes	1.00
Rent and rates	Rent and rates	Airport valuation	N/A
Retail	Front-line retail	Passengers	0.40
Utilities	Utilities	Passengers	0.30

Source: CEPA analysis

Assessing step changes

The step change assessment comprises two components. First, we assess the step changes proposed by Dublin Airport. Second, we identify any additional efficiency opportunities that are not reflected in Dublin Airport's proposition.

Dublin Airport's regulatory proposition includes several proposed step changes. These are incremental cost allowances above the efficient baseline and forecast trajectory, covering new activities, changes in service standards and the opex consequences of capital investment. Before Dublin Airport submitted its Regulatory Proposition, we set out the Need-Additionality-Efficiency framework to provide a clear basis for presenting and assessing step change claims (the same framework as was also used in our 2022 study). This was intended to help

Dublin Airport explain each claim in a way that distinguished the underlying need, the incremental nature of the cost and the efficiency of the proposed quantum.

Dublin Airport's evidence was not always mapped explicitly to the Need-Additionality-Efficiency framework. We have therefore applied that framework to the information provided in the proposition, supporting materials and clarification responses. Where the evidence does not allow us to identify the need, additionality or efficient quantum of a claim, this affects the extent to which we can accept the proposed allowance.

We assess each claim against the three sequential questions that comprise the framework.

- **Need.** Is the proposed expenditure required to deliver the service? For step changes arising from IAA-mandated changes to service standards, the need test is satisfied by definition: the IAA determines the service quality standards to which the efficient opex forecast must be consistent, and expenditure required to meet those standards is necessary. For other claims, we assess whether the cost is necessary given Dublin Airport's regulated obligations and the applicable service standards. Expenditure that exceeds those standards, or that addresses requirements outside the regulated boundary, does not satisfy the need test.
- **Additionality.** Is the proposed expenditure genuinely incremental to the efficient baseline and forecast? This test checks that the claimed allowance is not already captured in the efficient cost trajectory. Where the evidence does not establish need or additionality, we do not include a separate step-change allowance in the draft forecast.
- **Efficiency.** Is the proposed quantum efficiently sized? A claim that satisfies the need and additionality tests is still subject to scrutiny of the proposed step-change. We assess whether the quantum is reasonably sized given the need, and whether it is benchmarked appropriately against comparable expenditure elsewhere.

A step change claim must satisfy all three limbs to be accepted in full.

Where a claim satisfies need and additionality, but we do not have sufficient evidence to justify the proposed level of spend, we accept the claim in part and apply an efficiency adjustment. Where a claim fails the need or additionality test, it is not incorporated, regardless of the proposed quantum.

The Need-Additionality-Efficiency framework is also applied to the opex consequences of capital investment in both directions. Where Dublin Airport proposes step change allowances to cover opex arising from new assets, we apply the three-limb test to assess whether those costs are necessary, incremental, and efficient. Where capital investment should enable opex savings through technology substitution, improved asset condition, or changed operational requirements, we assess whether Dublin Airport's proposition adequately reflects those savings.

The second component is CEPA's proactive identification of efficiency opportunities. We independently consider, drawing on benchmarking, operational analysis, and comparator evidence, whether further efficiencies exist beyond those acknowledged by Dublin Airport. Where we identify scope for improvement not reflected in the proposition, we set out the basis for that assessment and the adjustment applied.

Ongoing efficiency / ongoing productivity assumption

Ongoing efficiency is the productivity improvement an efficient airport should be expected to deliver over time, after any baseline or catch-up efficiency adjustment has been made. It reflects improvements in working practices, technology, asset management, procurement and management capability that allow the same level of output to be delivered with fewer inputs, or more output to be delivered with the same inputs.

For our draft forecast, we apply a targeted 1% annual ongoing efficiency challenge to wage-driven and wage-linked cost lines where productivity improvement is not otherwise captured in our forecast. We do not apply this as a broad top-down adjustment across all opex, because that would risk double counting efficiency improvements already reflected in category-specific analysis.

We recognise that CEPA did not apply a separate ongoing efficiency assumption in the 2019 and 2022 Dublin Airport opex studies. In those reviews, our assessment placed greater weight on bottom-up and category-specific

efficiency adjustments, and we considered that applying a further top-down ongoing efficiency challenge would have risked double counting. This was particularly relevant where the forecast already included material catch-up adjustments or where efficiency potential had been assessed directly within individual cost categories.

The balance of evidence is different for this review:

Our forecast allows for real wage growth and pay increments in several pay categories and selected wage-linked non-pay costs. If no ongoing efficiency challenge were applied, the forecast would allow real labour cost growth without recognising that this pressure should be partly or wholly offset through productivity improvements.

For several cost categories we have not undertaken a detailed bottom-up assessment of future opportunities for efficiency and/or productivity improvements.

Dublin Airport's proposed capital investment and technology programmes should create opportunities for more efficient operations over time, even where the precise category-level saving cannot be estimated with confidence at this stage. We note that several CIP projects are intended to automate activity, improve asset condition, reduce failures, improve passenger flows or consolidate systems, such that there are opex savings.

This treatment is also responsive to stakeholder submissions. In its response to the IAA's Issues Paper, Aer Lingus argued that the IAA should set an ongoing efficiency challenge to encourage new technology and management practices over time.⁵ Ryanair similarly argued that, beyond setting an efficient baseline, there is a case for a further stretch target for ongoing efficiency to reflect wider productivity improvements in the economy.⁶

There is also Dublin Airport-specific precedent for recognising ongoing efficiency. In Dublin Airport's 2019 Regulatory Proposition, Frontier Economics applied a 0.6% annual productivity adjustment for ongoing efficiency, based on Irish domestic-sector multi-factor productivity growth over 2000–2016.⁷ Dublin Airport stated that it understood and accepted the justification for this adjustment, while noting that it expected the challenge to be difficult to achieve. This supports the principle that some ongoing productivity improvement is relevant when forecasting Dublin Airport's efficient opex, even where the starting cost base is not assessed as inefficient.

Recent airport and regulated-sector precedent supports an assumption of up to 1% per year. In its H8 Initial Proposals for Heathrow, the CAA described ongoing efficiency as cost savings from productivity improvements through new technologies and new ways of working. It proposed a 1% annual ongoing efficiency challenge for all opex categories except for cost categories that it considered were outside of management control.⁸ The CAA noted that this was consistent with regulatory precedent and below Heathrow's own proposed 1.2% annual ongoing efficiency assumption.

Irish regulatory evidence also supports a positive ongoing efficiency assumption. In work for CRU's Price Review Six, CEPA defined ongoing efficiency as reductions in input volumes arising from new technology or working practices. CEPA proposed an ongoing efficiency range of 0.5% to 1.0% for ESB Networks and 0.4% to 0.6% for EirGrid TSO, and noted that recent Irish and UK regulatory precedent had assumed a 1% target for some infrastructure managers.⁹ This precedent is not directly transferable to airports, but it supports the view that a 1% challenge is within the range of mainstream regulatory practice where there is scope for technology, capital substitution and management improvement.

⁵ Aer Lingus (2025), Response to the Irish Aviation Authority's Issues Paper for the upcoming 2026 Determination on Airport Charges at Dublin Airport, pp. 5–7.

⁶ Ryanair (2025), Response to the IAA 2026 Determination on Airport Charges at Dublin Airport: Issues Paper Consultation, pp. 1–2.

⁷ Dublin Airport (2019), Regulatory Proposition for Determination 2020+, paras 5.82–5.85.

⁸ Civil Aviation Authority (2026), H8 Initial Proposals: Section 2, Building blocks and incentives, CAP 3232B, paras 4.47–4.51 and Table 4.8.

⁹ CEPA (2025), Real price effects and scope for ongoing efficiency in PR6, prepared for the Commission for Regulation of Utilities, pp. 8–9 and 39.

We consider that a 1% ongoing efficiency challenge is appropriate for Dublin Airport where the relevant costs are wage-driven or wage-linked and no separate productivity adjustment has been applied. The assumption is proportionate to the scale of real wage pressure included in the forecast, the scale of Dublin Airport's planned capital and technology investment, and the absence of bottom-up productivity modelling in some categories.

We apply the challenge selectively to avoid double counting. The ongoing efficiency challenge is applied only where both of the following conditions are met:

- the forecast includes real wage growth or wage-linked cost growth; and
- we have not already captured productivity improvement through a separate bottom-up or category-specific efficiency adjustment.

We do not apply the ongoing efficiency challenge to Security. Security efficiency is assessed through a bottom-up operational model, which considers efficient staffing, lane requirements and operational resilience directly. Applying a further top-down efficiency challenge to Security would risk double counting the efficiency assessment embedded in that modelling.

We also do not apply the ongoing efficiency challenge to pass-through, statutory or regulated cost items where Dublin Airport has limited control over the efficient cost level. Nor do we apply it to cost lines held flat in real terms or limited to CPI growth, because that treatment already assumes that non-wage input pressures are offset by productivity improvements over the period.

2.5. UNIT PAYROLL COST METHODOLOGY

Payroll costs account for a substantial share of Dublin Airport's total opex and are present across multiple IAA cost categories. We apply a consistent unit payroll cost methodology throughout the study, drawing on bottom-up workforce progression modelling for operational roles and a roll-forward approach for non-operational roles. Section 2.6 sets out the full methodology, including the treatment of workforce composition effects and the interaction with the efficient FTE projections.

2.6. AGGREGATE PLAUSIBILITY CROSS-CHECK

We cross-check our overall opex forecast against the top-down evidence of the aggregate elasticity of opex to passenger volumes. The available evidence indicates that aggregate airport opex is materially sub-proportional to passenger volumes. Across previous studies, the aggregate passenger elasticity of opex has typically been around 0.3 to 0.4.¹⁰ For this study, we have estimated the relationship using a panel dataset covering twelve European airports over the period 2000 to 2024. Our preferred specifications estimate an aggregate passenger elasticity range of around 0.3 to 0.6, with the statistically significant passenger specifications clustered towards the upper end of this range. This range is broadly consistent with the wider evidence base.¹¹

We have also considered the evidence prepared by Europe Economics and York Aviation for the CAA's H8 price control review of Heathrow.¹² That work estimated the elasticity of opex to passenger volumes using HAL's outturn expenditure for 2014 to 2024. The estimates were tightly clustered around 0.19 to 0.23 across various statistical specifications, providing a lower benchmark for comparison.

On this basis, we would generally expect the aggregate elasticity implied by our forecast to sit broadly within the range indicated by the top-down evidence, or for any difference to be explainable by short-term structural factors or other factors not related to passenger growth.

¹⁰ CEPA and Taylor Airey (2019), [Dublin Airport Operating Expenditure: Bottom-up Efficiency Assessment, Publishable Draft Report](#), 3 May 2019. See Appendix B.

¹¹ The detailed evidence, model specifications and limitations with this analysis are set out in Appendix C.

¹² Europe Economics and York Aviation (2026), [Opex and Commercial Revenues for H8 - Recommendations](#).

3. UNIT PAYROLL COSTS

This section explains how we forecast efficient unit payroll costs for individual staff categories. We find that over the current determination, unit payroll costs have been affected by both the underlying rate of pay and the mix of junior to senior staff in post, particularly for operational roles, where there has been a material increase in recruitment.

3.1. SUMMARY OF OUR APPROACH

We forecast efficient unit payroll costs using different approaches for operational and non-operational roles. For operational roles, we use a bottom-up model of the expected workforce mix. For non-operational roles, we use a standard roll-forward of observed payroll costs, supported by role-level benchmarking.

This approach reflects the evidence available for each role group. In the main operational categories, recent average payroll costs have been affected by recruitment, attrition, tenure and pay-band progression. The efficient unit cost needs to reflect the expected efficient workforce mix, rather than the observed 2025 average alone.

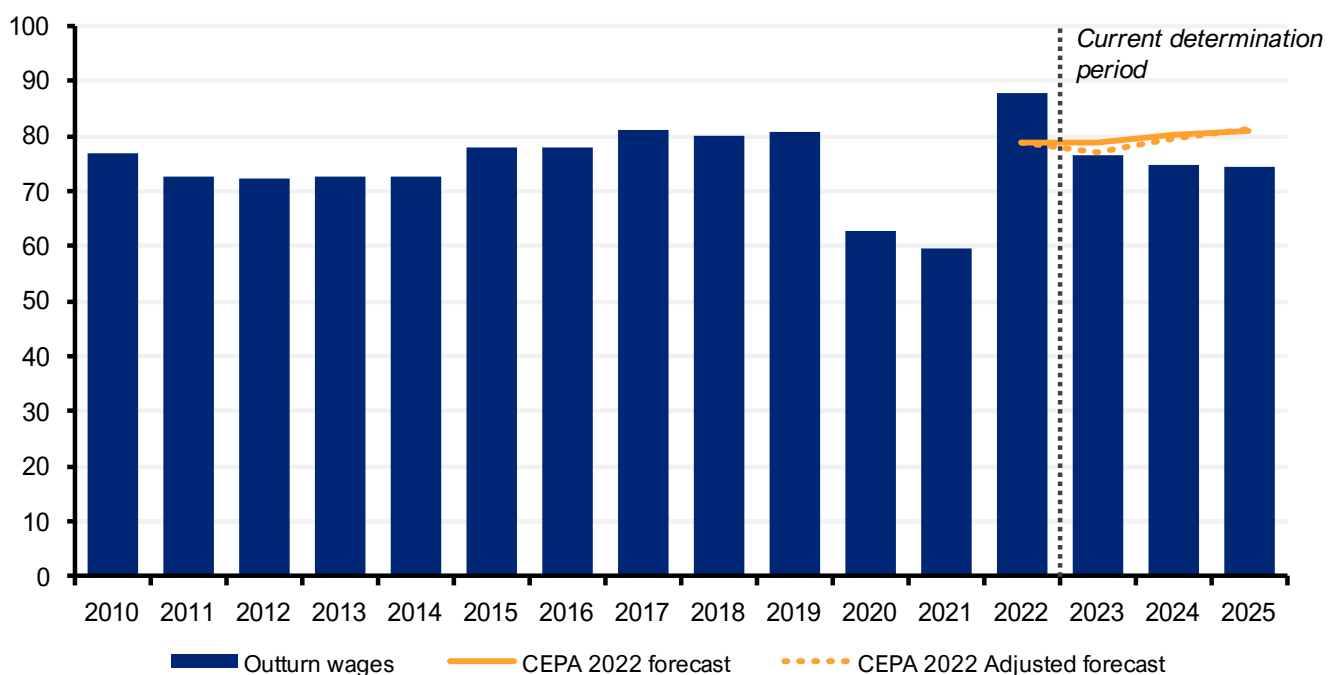
For non-operational roles, the evidence is better suited to a simpler roll-forward approach. Most of these roles do not have pay bands and structured tenure progression in the same way as frontline operational roles. The workforce data therefore does not support the same bottom-up progression model. We instead use 2025 outturn cost per FTE as the starting point, with role-level benchmarking used to test the plausibility of the resulting forecast.

The unit payroll forecast is combined with the efficient FTE projections for each staff category. Where an FTE efficiency challenge changes the number or mix of staff within a category, the payroll forecast should remain consistent with the associated efficiency assumptions.

3.2. HISTORICAL UNIT PAYROLL COSTS

Dublin Airport's payroll cost per FTE, across all roles, was lower in 2025 than in most pre-pandemic years. Figure 3.1 shows the historic trend in unit payroll costs, including operational and non-operational roles. The chart shows a marked decline between 2022 and 2024, with an increase in total payroll costs more than offset by higher FTE numbers over the same period.

Figure 3.1: Dublin Airport historic unit payroll costs, 2010–2025 (€000s, Mar 2026 prices)



Source: CEPA analysis of Dublin Airport data and IAA 2022 Decision

Dublin Airport's outturn payroll costs per FTE also remain below both CEPA's 2022 forecast and a version of that forecast rebased using realised economy-wide wage growth. The gap is likely to reflect a combination of workforce-composition effects, higher attrition and higher FTE growth.

The most likely explanation is that Dublin Airport's workforce mix has become more junior in the main operational categories. This is consistent with CEPA's 2022 assessment, which anticipated that post-pandemic recruitment and attrition effects could affect the average payroll cost per FTE as the workforce was rebuilt.¹³ Dublin Airport's 2026 Regulatory Proposition similarly notes that average employment cost per FTE has been moderated by higher staff turnover and a workforce profile with a higher proportion of entry-level rates.¹⁴ General wage growth may therefore be offset, in the short term, by a larger share of FTEs sitting in lower pay bands.

Recent outturn payroll costs provide useful evidence on the current workforce mix. In categories where the workforce mix has changed materially, the efficient unit payroll cost also needs to reflect the expected mix over the regulatory period. This is particularly relevant where the efficient FTE projection removes staff whose recruitment has reduced the observed average wage.

3.3. BENCHMARKING EVIDENCE

We benchmark Dublin Airport's wage growth against relevant comparators to test whether recent payroll growth appears above or below market trends. The analysis uses 2019 and 2022 as baseline years and compares cumulative growth in Dublin Airport's 2025 outturn payroll costs per FTE with cumulative growth in relevant comparator roles, using data from the Central Statistics Office.¹⁵

The benchmarking follows three steps:

- **Overall comparison.** We compare each broad workforce category with economy-wide wage growth to identify whether wage growth appears above or below market trends.
- **Sub-role comparison.** Where a category contains varied roles, we compare individual sub-roles with comparator roles based on Central Statistics Office (CSO) data.
- **Role-level cross-check.** Where relevant, we compare specific roles within a category with advertised wages from job postings.

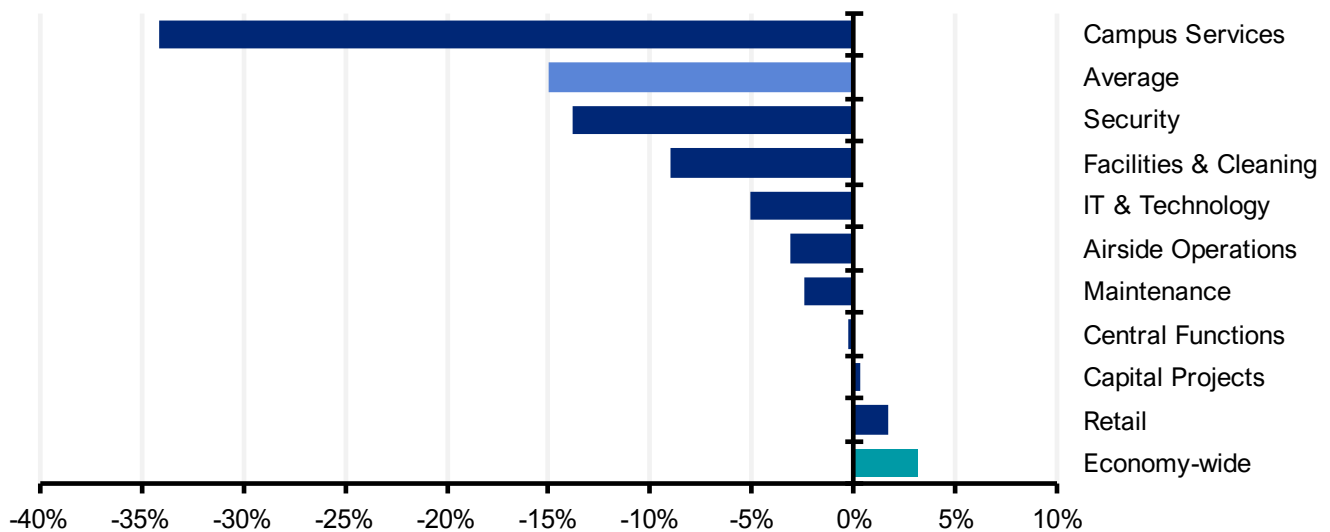
Figure 3.2 and Figure 3.3 compare cumulative wage growth at Dublin Airport with economy-wide wage growth using 2022 and 2019 as baseline years. The figures show that cumulative wage growth at Dublin Airport remains below the economy-wide benchmark across most staff categories.

¹³ CEPA and Taylor Airey (2022), Dublin Airport Operating Expenditure Assessment: Review of Consultation Responses, prepared for the Commission for Aviation Regulation, 19 December 2022.

¹⁴ Dublin Airport (2026), Regulatory Proposition - Appendix 2: Operating Expenditure. Available at [2026 Determination](#)

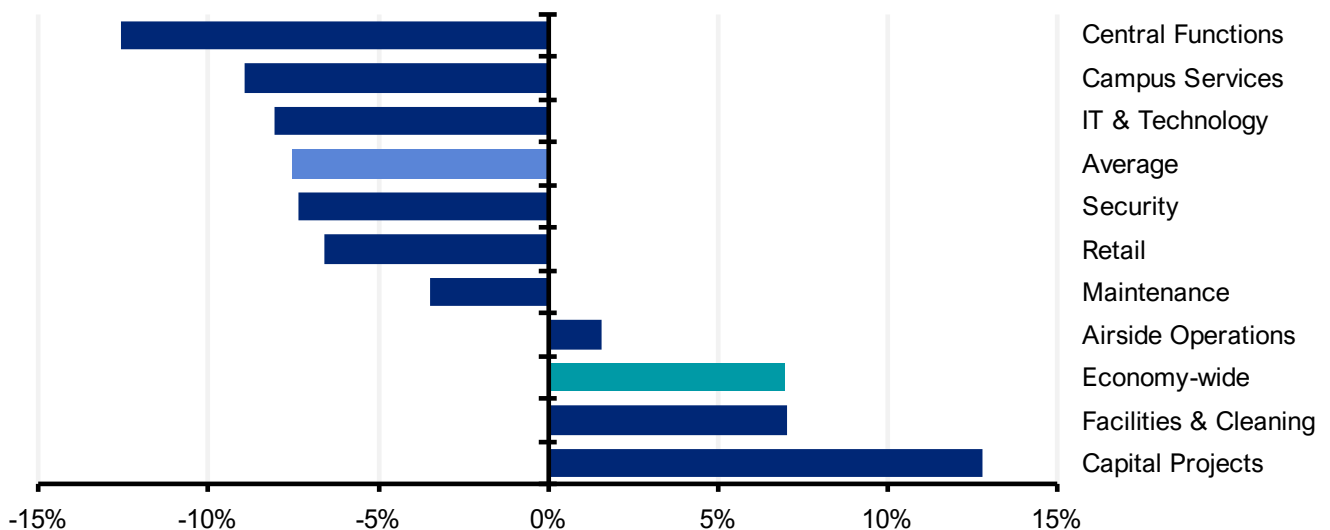
¹⁵ Central Statistics Office (2025), EHECS Earnings Hours and Employment Costs Survey - Quarterly. Available on <https://data.cso.ie/table/EHQ03>

Figure 3.2: Comparison of cumulative real wage growth from 2022 to 2025 (%)



Source: CEPA analysis of Dublin Airport data

Figure 3.3: Comparison of cumulative real wage growth from 2019 to 2025 (%)



Source: CEPA analysis of Dublin Airport data

The broad comparison is a useful starting point, but it is not a complete test of efficiency. Average payroll growth can be compressed by high FTE growth, higher attrition and recruitment into lower-tenure roles. This is particularly relevant for the main operational categories, where recent workforce growth has been concentrated in frontline roles.

The broad benchmarking therefore identifies where more detailed analysis is needed. Where a category is relatively homogeneous and there is no evidence of a material tenure-driven composition effect, the broad comparison provides a useful reasonableness check. Where a category includes varied roles, or where workforce mix is likely to affect average pay, we rely on more detailed evidence.

We undertake more detailed benchmarking of Central Functions and Capital Projects together. This is appropriate because the categories are not fully separable for pay benchmarking purposes. Our focus on Capital Projects reflects that this category of expenditure has seen a material increase in unit payroll costs since 2019, although the series is volatile because a proportion of payroll costs is capitalised each year. Central Functions also covers a wide range of roles, which may mask differences between sub-roles. Some of those roles are likely to be similar in nature

to roles within Capital Projects. As such, considering the two categories together, despite the relatively low cumulative wage growth observed in Central Functions since 2019, provides a more meaningful assessment of whether the 2025 unit payroll cost can be considered efficient.

We do not undertake further benchmarking of Facilities and Cleaning unit payroll costs. Payroll costs in these categories have increased materially, but we reviewed the underlying growth as part of the 2022 Decision. The increase since 2022 appears broadly consistent with that assessment and does not, in itself, indicate a need for an additional unit payroll efficiency adjustment.

3.3.1. Central Functions (incl. Capital Projects)

Central Functions includes a range of roles with different labour-market comparators, including some frontline positions such as Platinum Services. We therefore disaggregate Central Functions into sub-roles and compare each with relevant CSO comparator categories. Table 3.1 shows cumulative wage growth for each Dublin Airport sub-role, using both 2019 and 2022 as baseline years.

Table 3.1: Cumulative wage growth of Central Functions roles using 2019 and 2022 as the baseline

Sub-roles	Cumulative wage growth to 2025 (%)	
	From 2019	From 2022
Dublin Airport roles		
Platinum Services	-10%	-17%
Commercial	+2%	+3%
Finance	+4%	+14%
Finance (Shared Services)	-3%	+6%
HR	-3%	+9%
Management	-33%	-11%
Administration / Support (incl. Capital Projects)	+4%	-2%
CSO benchmark roles		
Retail trade	+8%	+1%
Financial and insurance service activities	+14%	+3%
Legal and accounting activities	+24%	+5%
Office administrative, office support and other business support activities	+30%	+9%
Activities of head offices; management consultancy activities	+0%	+6%

Source: CEPA analysis of Dublin Airport and CSO data

The sub-role benchmarking shows a mixed picture. Finance staff stand out as having above-benchmark wage growth since 2022, though less so when considering growth since 2019. Administration and support staff appear to be below benchmark across the period. Airport management also appears below the benchmark over both comparison periods, although this category may contain roles with different levels of seniority and responsibility.

This mixed evidence means that Central Functions should not be treated as a single homogeneous role group for benchmarking purposes. It supports role-level cross-checks where the sub-role evidence suggests potential pressure, particularly for Finance.

Commercial and Finance

We split Commercial into Platinum Services and other Commercial, while Finance comprises Group Finance and the Shared Services Centre. We benchmark 2025 payroll costs per FTE for each role against relevant job postings

from Indeed, IrishJobs and Jooble, adjusted to account for other labour costs beyond salaries. Where possible, we convert advertised pay ranges into a midpoint and compare with Dublin Airport's 2025 payroll cost per FTE.

Figure 3.4 compares Commercial and Finance unit costs per FTE with advertised job market evidence. It shows that most Commercial sub-roles sit below the relevant advertised wage benchmarks, with Finance sub-roles sitting above the benchmarks, particularly non-Shared Service Centre (SSC) sources finance.

Figure 3.4: Commercial sub-role pay per FTE relative to advertised market wages, 2025 (€000s, Mar 2026 prices)



Source: CEPA analysis of Dublin Airport data and advertised wage evidence from Indeed, Jooble and IrishJobs

This evidence should be interpreted as a cross-check rather than a direct adjustment. Job postings do not always map precisely to Dublin Airport roles, and advertised salaries may not capture full employment costs, seniority, shift patterns, benefits or airport-specific requirements. The evidence is therefore useful as a general guide for assessing the efficiency of the unit cost assumption, but it should not be used mechanically to set the forecast.

3.4. FORECASTING EFFICIENT UNIT PAYROLL COSTS

The benchmark evidence generally provides no clear basis for concluding that unit payroll costs are inefficient. One potential exception is Finance roles outside of the SSC, where unit payroll costs have increased significantly and outturn costs appear materially above benchmark levels. However, given that we find less evidence of concern when assessing Central Functions on an aggregated basis, we do not propose an efficiency adjustment in this area.

When projecting efficient unit payroll costs, we differentiate between operational roles that have seen substantial numbers of new staff joining in recent years (i.e. Security, Facilities and Cleaning, Retail), and other roles.

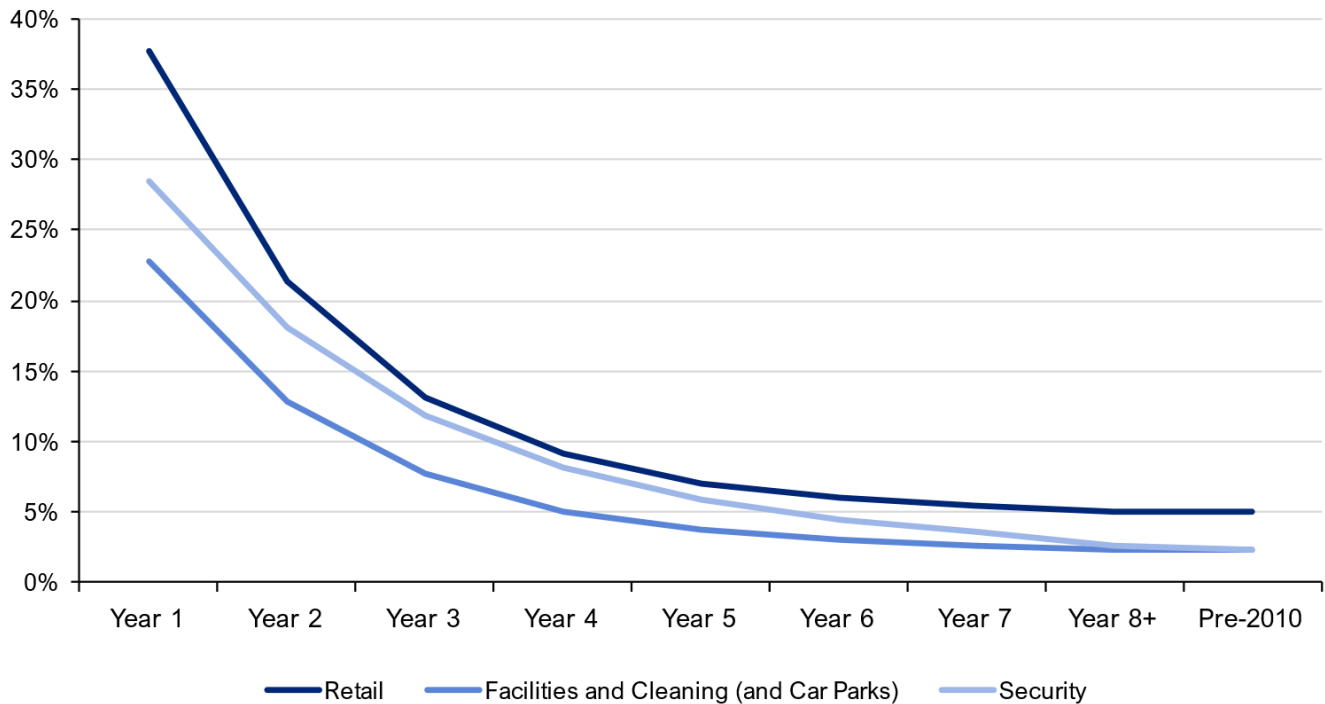
Security, Facilities and Cleaning, and Retail

For the above roles, we forecast unit payroll costs from the bottom up. These are the categories where the evidence most strongly indicates that workforce mix, tenure and progression materially affect average payroll costs. The resulting unit payroll forecast reflects both expected wage growth and the expected movement of staff through the relevant pay structure.

In our bottom-up model, we estimate the expected distribution of staff across pay bands and tenure points over the regulatory period, taking account of recruitment, attrition and progression.

For each role, we construct an attrition curve by tenure point using data provided to us by Dublin Airport on outturn attrition in 2025, shown in the figure below. Each attrition curve estimates the likelihood of a staff member leaving based on how long they have been in the role. We also assume each member of staff progresses to the next pay band each year. Combining these two assumptions with our FTE forecast allows us to estimate the distribution of staff across pay bands for each forecast year, by assuming that any FTE growth after attrition in the previous year is met by hiring new staff at the bottom of the pay band.

Figure 3.5: Assumed attrition rates by tenure and role (assumed annual attrition rate)



Source: CEPA analysis

We then use actual pay bands for 2025 and uprate each pay band by our standard wage growth assumption, as shown in Table 2.2. We then calculate a weighted average unit payroll cost by multiplying the unit payroll cost at each pay band with the proportion of staff at each pay band. We prefer this approach for operational roles as recent recruitment into lower-tenure roles can reduce the average payroll cost per FTE in the short term.¹⁶

However, we also recognise that any progression from a lower pay band to a higher pay band (and wage growth more broadly) ought to be accompanied by productivity improvements. We capture such productivity improvements in the ongoing efficiency assumption documented in Section 2.4.

Other roles

For other roles, we use the 2025 outturn payroll cost per FTE as the starting point and roll it forward using the real wage-growth assumption shown in Table 2.2. This approach reflects the evidence from our benchmarking, where the data does not indicate the same tenure-driven composition effect seen in the above categories.

There is also a practical difference in the pay data available for these roles. Most of these roles do not have pay bands and tenure progression in the same way as the roles assessed on a bottom-up basis. A bottom-up model would therefore require stronger assumptions about progression and grade mix than the evidence supports. A roll-forward approach, supported by role-level benchmarking, is more proportionate.

3.5. EFFICIENT UNIT PAYROLL FORECAST

The table below presents the efficient unit payroll forecast by role group, rounded to the nearest €000, as well as the real terms percentage change relative to the 2025 base year.

¹⁶ If we apply an FTE efficiency challenge, this will remove a proportion of the recently recruited staff. This in turn means the average payroll cost of the remaining workforce would be higher than the observed average and so, would not be a fair basis for rolling forward payroll costs for setting the opex allowance in the next regulatory period.

Table 3.2: Efficient unit payroll forecast by role group, 2025–2031 (€, Mar 2026 prices)

	2025	2026	2027	2028	2029	2030	2031
Top-down roll-forward							
Admin	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m
Airfield Operations	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m
Campus Services	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m
Central Finance	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m
Commercial	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m
HR	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m
IT	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m
Maintenance	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m
Platinum Services	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m
SSC	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m
% growth from 2025*	0%	0%	0%	0%	0%	0%	0%
Bottom-up forecast							
Facilities and Cleaning	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m
% growth from 2025*	0%	0%	0%	0%	0%	0%	0%
Retail	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m
% growth from 2025*	0%	0%	0%	0%	0%	0%	0%
Security	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m	€ 3.3m
% growth from 2025*	0%	0%	0%	0%	0%	0%	0%

Source: CEPA analysis, CBI Quarterly Bulletin Q1 2026 and Dublin Airport data

Note: Percentage growth based on unrounded values.

4. SECURITY

Security is the largest single component of Dublin Airport's opex, covering directly employed staff carrying out security-related activities. The Security function comprises the following broad activities:

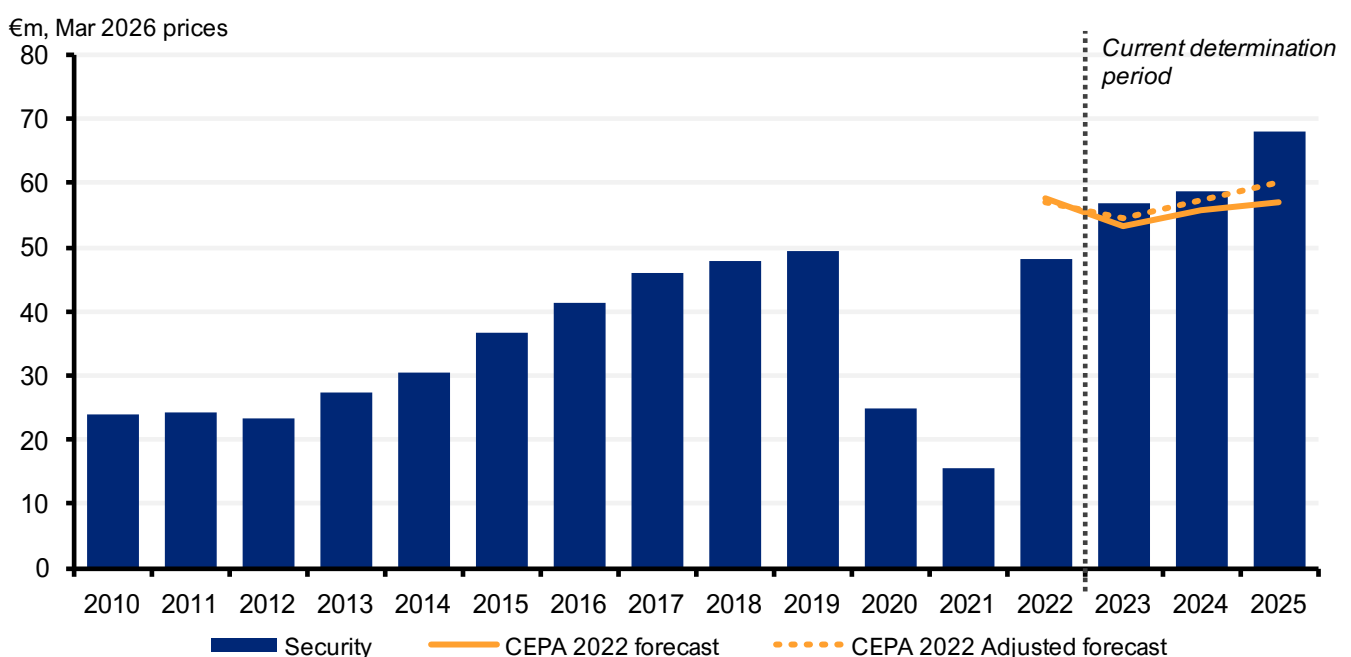
- **Central search**, which covers passenger and cabin-bag screening in the terminal buildings. This includes staff operating screening lanes and staff managing passenger flows around the security area.
- **Static posts**, which cover fixed positions around the airport, including screening and access-control activity for staff entering restricted areas, and for connecting passengers where additional checks are required.
- **Vehicle Control Posts (VCP)**, which are the perimeter access points where staff, vehicles and supplies enter the airfield and other security-restricted areas.
- **Management and other security posts**, which include supervisors, duty managers, resource planning, training, equipment testing, and behavioural detection.

We estimate efficient security staffing levels using a bottom-up operational model of security officers working in central search, and a separate bottom-up assessment of the staffing requirement for other activities. Our modelling, and associated benchmarking, indicates that Dublin Airport's 2025 Security operation was efficient. It also suggests that (using Dublin Airport's passenger forecast) efficient security staffing should remain broadly stable over 2027–2031, with the increased workload from higher passenger volumes being largely offset by expected productivity improvements. Our forecast of efficient staffing increases from 1,204 FTEs in 2026 to 1,225 FTEs in 2031, with Security payroll costs increasing from €68.1 million in 2025 to €84.2 million in 2031. Using the IAA's passenger forecasts, our 2031 forecast is 1,258 FTEs and €86.3 million in expenditure.

4.1. TRENDS IN HISTORIC EXPENDITURE

Security expenditure was broadly in line with the CEPA 2022 forecast in 2023 and 2024, but the 2025 outturn was above both the CEPA 2022 forecast and the adjusted forecast, as shown in Figure 4.1. As shown in Figure 4.2, the increase in 2025 was driven mostly by higher FTEs.

Figure 4.1: Historic Security expenditure, 2010–2025 (€m, Mar 2026 prices)

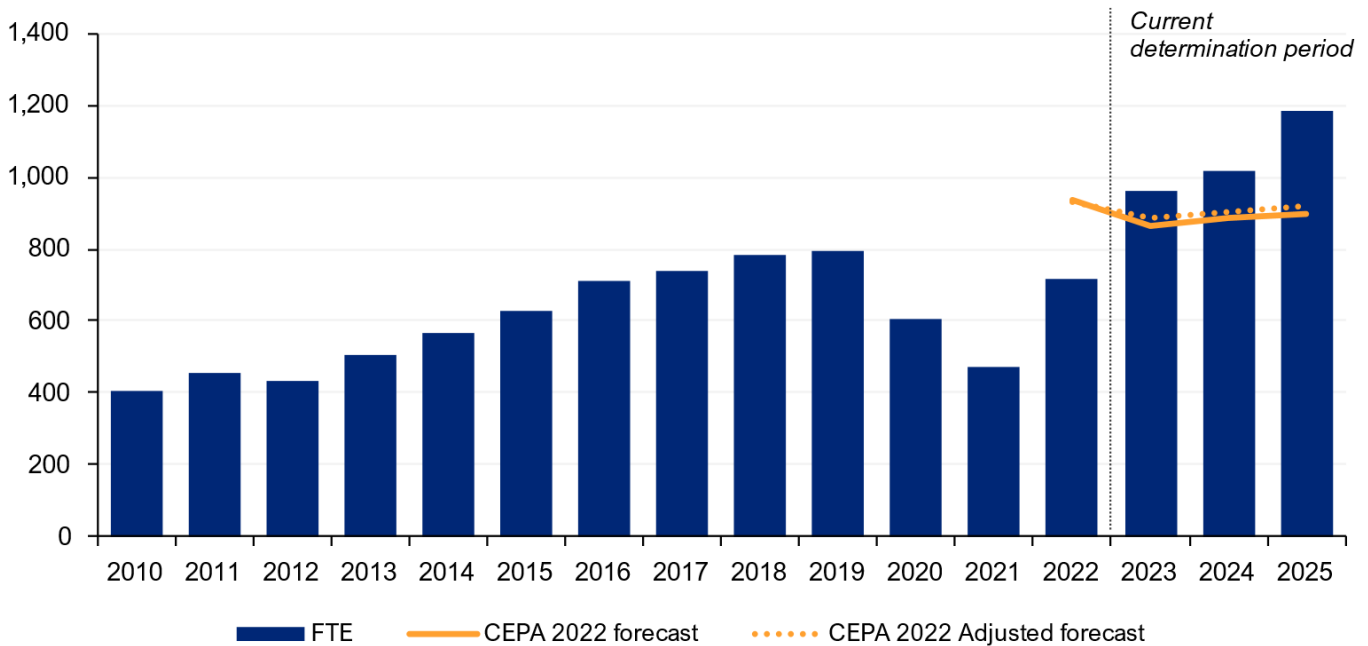


Source: CEPA analysis of Dublin Airport data and IAA 2022 Decision

Dublin Airport attributes the observed cost trend to structural changes in the security operating model during the current regulatory period. The key drivers include:

- **The rollout of new C3 (or CT) screening technology** which produce 3D cabin-bag images increased lane staffing requirements with C3 lanes requiring additional roles for image analysis, passenger flow management and compliance with enhanced screening procedures.
- **Changes in regulation** such as the requirement for passengers to divest hoodies and boots introduced an additional processing step and required a dedicated host role per lane pair.
- Dublin Airport also **increased security trainer capacity by eight FTEs** to support the larger workforce, C3 training requirements and recurring certification needs.

Figure 4.2: Historic Security staffing levels, 2010–2025 (FTEs)



Source: CEPA analysis of Dublin Airport data and IAA 2022 Decision

The 2025 FTE position provides important context for the forecast. Dublin Airport's 2025 staffing was materially above the level assumed in the CEPA 2022 forecast, but it also reflects a period of operational transition as C3 technology was embedded. We therefore place more weight on the current operating model and forward-looking staffing requirements than on a mechanical comparison with the CEPA 2022 FTE forecast.

4.2. BASELINE PERFORMANCE OF DUBLIN AIRPORT'S SECURITY OPERATION

We use operational benchmarking to cross-check Dublin Airport's 2025 security performance. The benchmarking covers productivity and queue performance in central search. It is intended to inform our assessment of the efficient baseline and the reasonableness of the forward-looking staffing assumptions.¹⁷

¹⁷ This benchmarking forms part of a wider study looking at the efficiency of Dublin Airport's security operation, undertaken jointly by Think Research and CEPA. The results of that study have been published alongside this report.

Productivity evidence

We use passengers processed per security officer staff hour as an operational productivity indicator. This is calculated by dividing the number of passengers processed through central search by the number of officer staff hours worked over the same period.

The available benchmarking sample covers six airport terminals,¹⁸ including Dublin Airport's two terminals, for July 2025. Five comparator terminals operated on a C3-only basis. Dublin Airport Terminal 1 operated with a mixed C3 and X-ray operation during that period, which means the comparison should be treated as indicative.

We consider two productivity measures:

- **mean planned productivity**, which compares forecast passengers with planned staff hours, as shown in Figure 4.3; and
- **achieved productivity**, which compares actual passengers processed with actual staff hours worked at both the mean and 95th percentile, as shown Figure 4.4.¹⁹

Figure 4.3: Benchmark security staff productivity, planned (forecast passengers per planned lane staff hour)

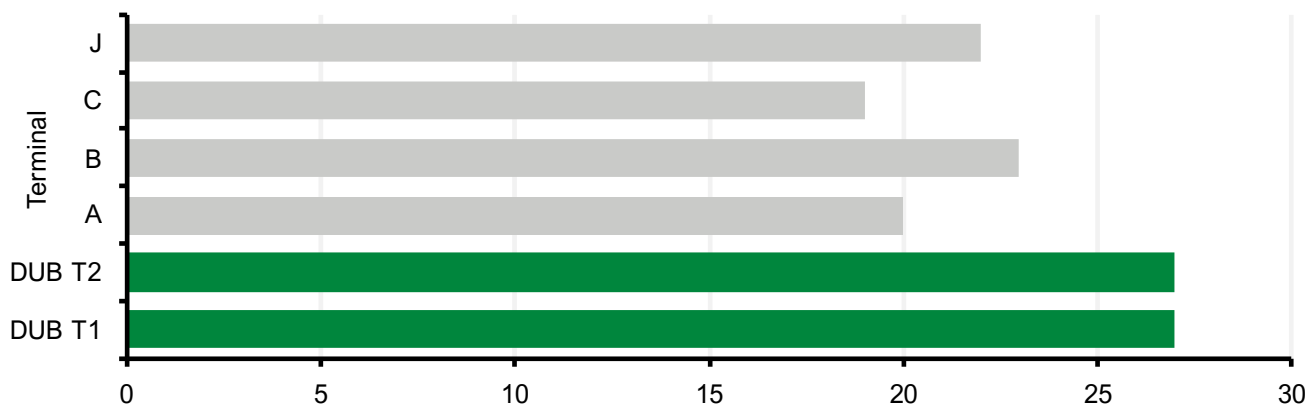
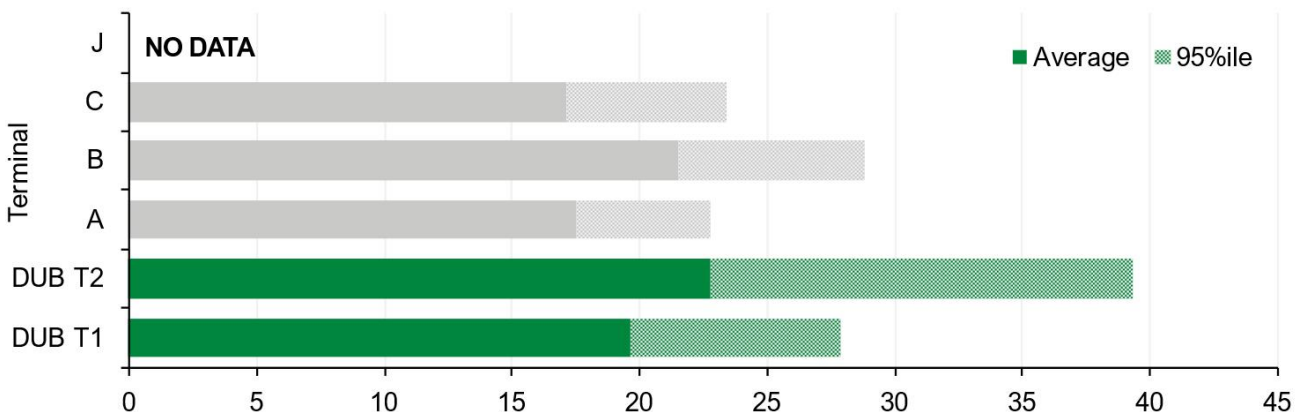


Figure 4.4: Benchmark security staff productivity, achieved (actual passengers per actual lane staff hour)



Source: CEPA analysis of Dublin Airport operational data and comparator airport data

The available evidence suggests that Dublin Airport's central search productivity is comparatively strong.²⁰ Planned productivity at both Dublin terminals is above the planned productivity of the comparator terminals for which data is

¹⁸ This sample is a sub-set of a larger benchmarking sample comprising 12 terminals. For confidentiality reasons, the terminals other than at Dublin are not identified but are labelled as A through to J.

¹⁹ Equivalent operational data for the sixth terminal was not available.

²⁰ The rules around the treatment of liquids and gels (LAGs) are marginally more restrictive at our benchmark airports than they are in Ireland, which may in turn affect the productivity of the security operation.

available. Achieved productivity is lower than planned productivity, which is also observed across the comparator sample. However, Dublin Airport Terminal 2 has the highest achieved productivity in the sample, and Terminal 1 sits around the middle of the comparator range.

This supports the view that Dublin Airport's 2025 central search operation does not show clear evidence of baseline inefficiency. It also supports using current operational assumptions as the starting point for our bottom-up forecast, subject to separate assessment of throughput, lane staffing and resilience.

Queue-time evidence

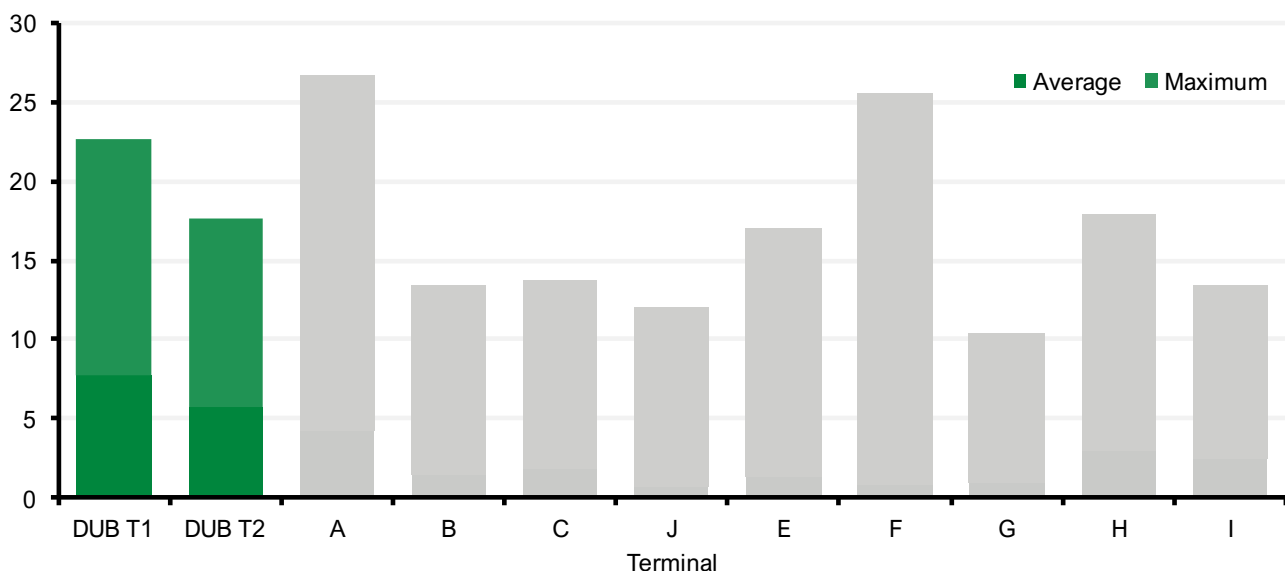
We have also reviewed available security queue-time evidence. Queue time is relevant because an efficient staffing forecast must be consistent with the IAA's service-quality targets. However, queue-time benchmarking is less reliable than productivity benchmarking because airports measure and report queues differently.

There are two main limitations:

- **Airports define the start and end points of the queue differently.** Dublin Airport's reported measure captures a wider part of the passenger journey than some comparator measures, which may, further, exclude unimpeded walk time.
- **Airports report queue performance using different sampling intervals and summary statistics.** Some data are reported in one-minute intervals, while other data are reported in five-, 15- or 60-minute intervals. The underlying passenger-level queue distributions are not available.

For these reasons, we do not use queue-time benchmarking to rank Dublin Airport against comparator airports. The evidence is more useful as a cross-check on whether there is a service-quality concern and whether the operation is likely to require additional resource. On that basis, the available evidence, as shown in Figure 4.5 below, does not indicate that Dublin Airport's queue performance is inconsistent with the regulatory targets. It does, however, show that queue outcomes can vary within the day and across terminals. This variation is relevant to the resilience analysis set out below.

Figure 4.5: Peak summer month security queue lengths (waiting times, minutes)



Source: CEPA analysis of Dublin Airport operational data and comparator airport data

4.3. ESTIMATING EFFICIENT SECURITY STAFFING LEVELS

We estimate efficient Security staffing using a bottom-up operational model for central search, supported by separate assessments of static posts, VCPs and ancillary security roles. Central search is modelled separately

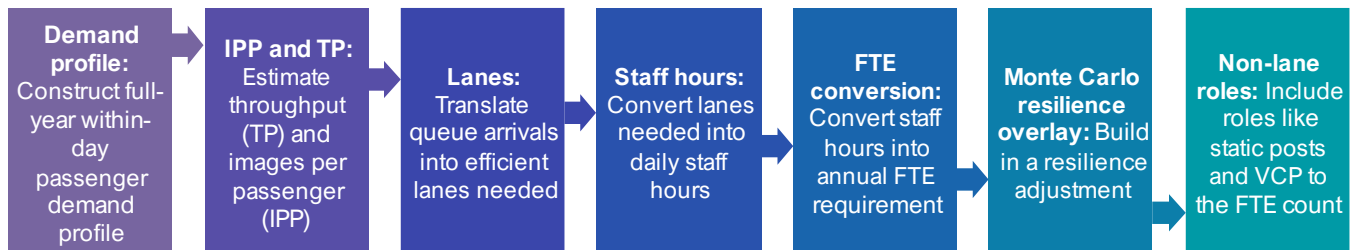
because staffing requirements depend on the timing of passenger demand, lane throughput, images per passenger and the staffing complement required for each open lane.

The model constructs terminal-specific passenger presentation profiles using Dublin Airport's 2025 operational data and scales these profiles to the forecast years. It then converts passenger demand into tray demand using images-per-passenger assumptions, estimates the number of lanes required at each point in the day, and maps the resulting lane profile into staff hours using efficient staffing-per-lane assumptions. The model converts staff hours into FTEs using assumptions for annual working time, non-availability and roster coverage.

We use a deterministic model as the starting point for the efficient central search requirement. This provides a centreline estimate based on expected passenger presentation, expected images per passenger and expected throughput. We then apply a separate resilience test using Monte Carlo analysis to assess whether the deterministic staffing profile remains sufficient when plausible operational variation is introduced.

The diagram below summarises the approach we take to estimate efficient Security staffing.

Figure 4.6: CEPA approach for constructing the bottom-up Security forecast



Source: CEPA analysis

Appendix D sets out the detailed modelling methodology, including demand profile construction, throughput assumptions, lane smoothing rules, FTE conversion and Monte Carlo resilience testing.

4.4. CENTRAL SEARCH ASSUMPTIONS

The central search model requires assumptions on lane throughput, images per passenger and staffing per lane. We have reviewed these assumptions using Dublin Airport's 2025 operational data, available comparator evidence and discussions with Dublin Airport.

4.4.1. Throughput assumptions

Dublin Airport's central search forecast assumes that C3 throughput improves over the regulatory period. For Terminal 1, Dublin Airport assumes throughput rises from 360 images per C3 machine per hour to 420 by the end of the period. For Terminal 2, Dublin Airport assumes throughput rises from 350 images per C3 machine per hour to 380 by the end of the period.

These assumptions are higher than the levels achieved in 2025, and generally higher than achieved by most airports in our benchmark sample. Meeting them will require Terminal 1 to operate consistently at around its current 95th percentile throughput for C3 scanners. Terminal 2 would also need to improve C3 throughput and body scanner throughput relative to observed 2025 levels.

We consider these assumptions challenging but achievable. C3 technology was still bedding in during 2025, particularly in Terminal 1. It is reasonable to expect some improvement as staff experience increases, lane processes mature and operational management improves. Available comparator evidence from the UK also suggests that material throughput improvements can be achieved during the initial bedding-in period, although the evidence is not uniform across airports.

We also recognise that Dublin Airport's assumed C3 throughputs may be closer to peak-period operating rates than whole-year average throughput across all operating conditions. Treating those rates as average throughputs would, in isolation, risk understating lane and staffing requirements. However, Dublin Airport's staffing-per-lane

assumptions (discussed in the subsequent section) are relatively conservative and appear closer to the complement required to sustain peak-period throughput, rather than average actual staffing levels per lane. These two assumptions therefore partly offset each other, and in our view collectively generate a reasonable forecast.

Finally, we note that further throughput upside may arise over the regulatory period from automated prohibited item detection systems (APIDS). APIDS uses automated image analysis to support the identification of prohibited items in C3 or X-ray images and has started to move from trial to operational deployment in Europe. Given uncertainty around the timing of deployment and the potential scale of benefits, we treat APIDS as a potential upside to the forecast rather than as an efficiency saving that can be incorporated into our forecast.

Body scanner throughput

Our modelling focuses on C3 scanner throughput, assuming it is the main constraint within each lane. We note from our benchmarking of Dublin Airport's 2025 operation that currently, body scanner throughput is an operational constraint, particularly at Terminal 1. However, on a forward-looking basis, we expect body scanner throughput at Terminal 1 to improve and more closely match achieved throughput at other terminals within our benchmark sample.

In principle, there may be scope to improve throughput at the margin by adding a body scanner or additional screener without opening a full additional lane. For our draft forecasts, we have not modelled this adjustment because the data provided does not allow us to estimate robustly the relationship between tray throughput, passenger throughput and staffing at that level of granularity. We therefore use Dublin Airport's throughput assumptions as a pragmatic choice. However, we expect to review this approach further ahead of the Final Determination.

4.4.2. Converting staff hours into FTEs

The lane model estimates the number of productive staff hours required to operate central search. We convert those productive hours into contracted FTEs using assumptions for non-availability and roster coverage. These assumptions are necessary because not every contracted hour can be deployed directly to live security operations:

We apply a **28% non-availability allowance** to account for paid time when staff are not available for operational deployment, including annual leave, public holidays, sickness absence, training and other paid leave. This is higher than the 25% shrinkage assumption we apply in our adjusted Facilities task-model cross-check. The difference is appropriate, given Security officers have more formal regulatory training, certification and recurrent competency requirements. The higher Security allowance therefore reflects the specific requirements of the role, rather than a general uplift to staffing.

We also apply a **12% roster coverage allowance** to roles where demand varies across the day or year. This includes central search lane staff and static posts, where staffing must be aligned to peaks and troughs in passenger presentation, lane opening, breaks and fixed coverage requirements. This allowance reflects the practical inefficiency of matching fixed rosters to variable operational demand. The 12% roster coverage allowance is lower than the 15% rule-of-thumb assumption we have typically used in previous assessments. We consider 12% appropriate for this draft forecast because Dublin Airport now has improved tools and operational data to support more efficient rostering. These tools should allow staffing to be matched more closely to expected demand than would have been possible under less developed rostering arrangements.

The roster coverage allowance also provides a degree of operational resilience. It is not a substitute for a targeted resilience assessment, but it does mean that the deterministic model is not converted into FTEs on a purely theoretical basis.

4.4.3. Resilience adjustment

We do not include Dublin Airport's proposed N+1 resilience adjustment. Dublin Airport's approach applies a standing uplift equivalent to staffing one additional lane above the modelled requirement. We do not consider this an appropriate centreline assumption because it does not demonstrate when the additional lane is required,

whether the requirement is specific to one terminal or season, or whether the same resilience need is already addressed through non-availability, roster coverage and lane smoothing.

However, we recognise that a deterministic model does not capture all operational variation. In practice, passengers may arrive earlier or later than expected, the number of images per passenger may vary, and lane throughput may differ from planned levels. These factors can create short periods where the deterministic staffing profile is insufficient, even if it is appropriate on average.

We have therefore undertaken a Monte Carlo resilience analysis. The analysis applies random variation to passenger presentation, images per passenger and throughput, calibrated using Dublin Airport's 2025 operational data. We then test whether the modelled staffing profile is sufficient to meet security queue targets under these plausible variations.

The analysis indicates that the main resilience risk is concentrated in Terminal 1 during the summer months. Where the Monte Carlo results identify material queue-target risk at specific pinch points, we include additional resource in the forecast. This produces a resilience allowance of approximately 23 FTEs per year.

We consider this a more proportionate approach than Dublin Airport's N+1 adjustment. It links the resilience allowance to observed operational variation and modelled queue risk, rather than applying a general standing uplift across the central search operation. It also recognises that the 12% roster coverage allowance already provides a degree of resilience in the conversion from productive staff hours to contracted FTEs.

The estimate remains subject to consultation. This is the first time we have applied this form of stochastic resilience testing in the Dublin Airport opex assessment, and the analysis depends on the granularity and consistency of the operational data provided. We will consider further evidence from Dublin Airport and airline stakeholders ahead of the Final Determination.

4.4.4. Static posts, VCP and ancillary security roles

Central search lane staffing is only one part of the Security requirement. Some Security roles are driven by fixed coverage, regulatory obligations or access-control requirements, rather than by the number of open passenger screening lanes. We assess these roles separately.

Static posts

Static posts are fixed positions across the terminals. They support passenger flow, queue management, fast-track access, transfer corridors, automated access controls and secure doors. These posts are not directly elastic to passenger volumes, because they reflect fixed operational and regulatory coverage requirements.

Dublin Airport's projection of static posts is based on the number of posts required for each function, the number of hours per day each post is needed, and the conversion of those hours into FTEs. Dublin Airport estimates a requirement of 102.5 FTEs for Terminal 1 and 82.5 FTEs for Terminal 2. This gives an overall static post requirement of 185 FTEs for each year from 2026 to 2031.

We consider this a transparent and reasonable basis for the draft forecast. We therefore include 185 FTEs for static posts in our Security staffing forecast.

Vehicle Control Posts

VCPs are the entry and exit points on the airfield perimeter where access for staff, vehicles and supplies is controlled. The work includes document checks, vehicle inspection, identity checks and screening of staff, possessions and supplies entering security-restricted areas.

We accept Dublin Airport's proposed 2026 VCP baseline of 131 FTEs. This reflects the transition to C3 technology and the associated staffing requirement at VCP screening lanes. It is also a limited increase from the 128 FTEs assumed in the previous determination. However, we do not accept Dublin Airport's proposed increase in VCP staffing over the regulatory period, which rises to 282 FTEs by 2031. Dublin Airport has not demonstrated that this represents the most efficient and effective way to meet future supplies-screening requirements.

Dublin Airport has identified future changes to supplies-screening requirements. We accept that these requirements may increase the workload associated with airport supplies. However, we understand that the rule change is intended, in part, to encourage suppliers into the secure supply chain. This supports the view that the efficient response should not rely primarily on screening all additional supplies at dispersed VCPs.

The efficient operating model should place as much screening as practicable upstream, through known or regulated supplier arrangements, supported by consolidation, delivery booking and time-slot management. This would reduce the residual workload at VCPs and avoid creating unnecessary space, queueing and operational constraints at perimeter posts.

Construction-related supplies reinforce this conclusion. Many construction materials, tools and related deliveries are bulky, high-volume, time-sensitive or delivered using vehicles and handling methods that are not suitable for routine VCP screening. Increasing VCP staffing is therefore unlikely to be the most efficient way to manage the construction-related element of the future screening requirement. The efficient response should instead rely on upstream supplier controls, consolidation, delivery booking, segregation of secure and non-secure flows, and the proposed consolidated security and screening centre.

VCPs may still have an important role in access control, identity verification, seal checks, vehicle inspection and exception handling. However, they should not be treated as the primary screening solution for all additional supplies. Dublin Airport's own capital programme includes CIP27.02.15, a consolidated security and screening centre, and Dublin Airport has also referred to delivery booking or virtual queuing with time-slot reservations to ease peak capacity requirements. These measures support a more centralised and managed approach to supplies screening, rather than a large permanent increase in VCP staffing.

On this basis, we hold VCP staffing constant at 131 FTEs across the 2027–2031 regulatory period. Dublin Airport could provide further evidence ahead of the Final Determination on the residual VCP workload that cannot be managed through upstream supplier controls, consolidation or the proposed consolidated screening centre. Relevant evidence would include the expected volume and timing of deliveries by type, the proportion of supplies suitable for secure supply-chain treatment, the proportion unsuitable for VCP screening, and the staffing requirement for residual access-control, verification and exception-handling activity at VCPs.

Ancillary roles

We include ancillary roles where they are required to support the central search and wider security operation. This includes team supervisors, duty managers, resource optimisation coordinators, equipment testers, training partners and behavioural detection units.

We apply the following treatment:

- For team supervisors, we maintain a ratio of one supervisor FTE to every 15 security officer FTEs (before any resilience adjustment or adjustment for non-productive time), with a 15% buffer for supervisors undertaking other duties.
- We hold the number of duty managers constant at 12 FTEs, reflecting one full-time post on a 24/7 basis in each terminal.
- We hold resource optimisation coordinators constant at 20 FTEs.
- For equipment testers, training partners, and the behavioural detection unit, we keep staffing levels constant, in line with Dublin Airport's forecast.

This treatment recognises that these roles are required to support the effective operation of the security function, while avoiding mechanical growth where the underlying need is not linked directly to passenger volumes.

4.5. EFFICIENT SECURITY COST BASELINE AND FORECAST

We forecast security staffing using annual passenger forecasts and a modelled within-day demand profiles for each forecast year. These demand profiles capture how passenger volumes are expected to present across the date and

time interval. The model processes this demand at 5-minute intervals, converting the forecast passenger profile into tray demand, lane requirements and staff demand.

The table below presents our resulting FTE forecasts and compares them with Dublin Airport's proposals. Our forecasts are approximately 14% lower than Dublin Airport's 2031 forecast, equivalent to around 192 FTEs.

Table 4.1: Forecast of Security staffing levels, 2025–2031 (FTEs)

Security staffing	2025	2026	2027	2028	2029	2030	2031
CEPA forecast							
Security Management	59	59	59	59	59	59	59
Central Security	1,121	1,145	1,143	1,148	1,152	1,154	1,167
Total Security	1,181	1,204	1,202	1,206	1,211	1,213	1,225
Dublin Airport forecast							
Security Management	51	59	59	59	59	59	59
Central Security	1,131	1,135	1,202	1,247	1,297	1,338	1,359
Total Security	1,182	1,194	1,260	1,306	1,355	1,397	1,418

Source: CEPA analysis, Dublin Airport Regulatory Proposition

Table 4.2 decomposes central security FTEs further and we observe that the gap is concentrated in ASU FTEs and the associated Team Supervisor requirement. Changes in ASU FTEs feed through to a higher supervisor requirement because Dublin Airport's model scales Team Supervisors with the ASU workforce.

Table 4.2: Forecast of Central Security staffing levels by role, 2025–2031 (FTEs)

Security staffing	2025	2026	2027	2028	2029	2030	2031
CEPA forecast							
ASU	1,000	1,019	1,017	1,021	1,025	1,027	1,039
Team Supervisors	59	59	59	59	59	59	60
Duty Managers	12	12	12	12	12	12	12
ROCs	20	20	20	20	20	20	20
Equipment testers	10	10	10	10	10	10	10
Training partners	12	12	12	12	12	12	12
Behavioural Detection Unit (BDU)	9	13	14	14	14	14	14
Total Central Security	1,121	1,145	1,143	1,148	1,152	1,154	1,167
Dublin Airport forecast							
ASU		979	1045	1,087	1,132	1,171	1,189
Team Supervisors		89	89	92	96	100	102
Duty Managers		12	12	12	12	12	12
ROCs		20	20	20	20	20	20
Equipment testers		10	10	10	10	10	10
Training partners		12	12	12	12	12	12
Behavioural Detection Unit (BDU)		13	14	14	14	14	14

Security staffing	2025	2026	2027	2028	2029	2030	2031
Total Central Security		1,135	1,202	1,247	1,297	1,338	1,359

Source: CEPA analysis, Dublin Airport Regulatory Proposition

The difference between our forecast and Dublin Airport's forecast is driven primarily by the treatment of resilience, and VCP staffing. Dublin Airport's ASU forecast includes both its proposed N+1 resilience adjustment and an increase in VCP staffing. These assumptions increase ASU FTEs directly and also feed through to a higher Team Supervisor requirement, as Dublin Airport's model scales supervisors with the ASU workforce.

Security payroll

Based on the operational FTE modelling set out above, the table below presents our forecast of security staffing costs for the regulatory period.

Table 4.3: Forecast of Security payroll costs, 2025–2031 (€m, Mar 2026 prices)

Security payroll	2025	2026	2027	2028	2029	2030	2031
CEPA forecast	69.0	72.8	74.9	77.6	79.8	81.9	84.2
Dublin Airport forecast	68.1	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘

Source: CEPA analysis, Dublin Airport Regulatory Proposition

5. MAINTENANCE

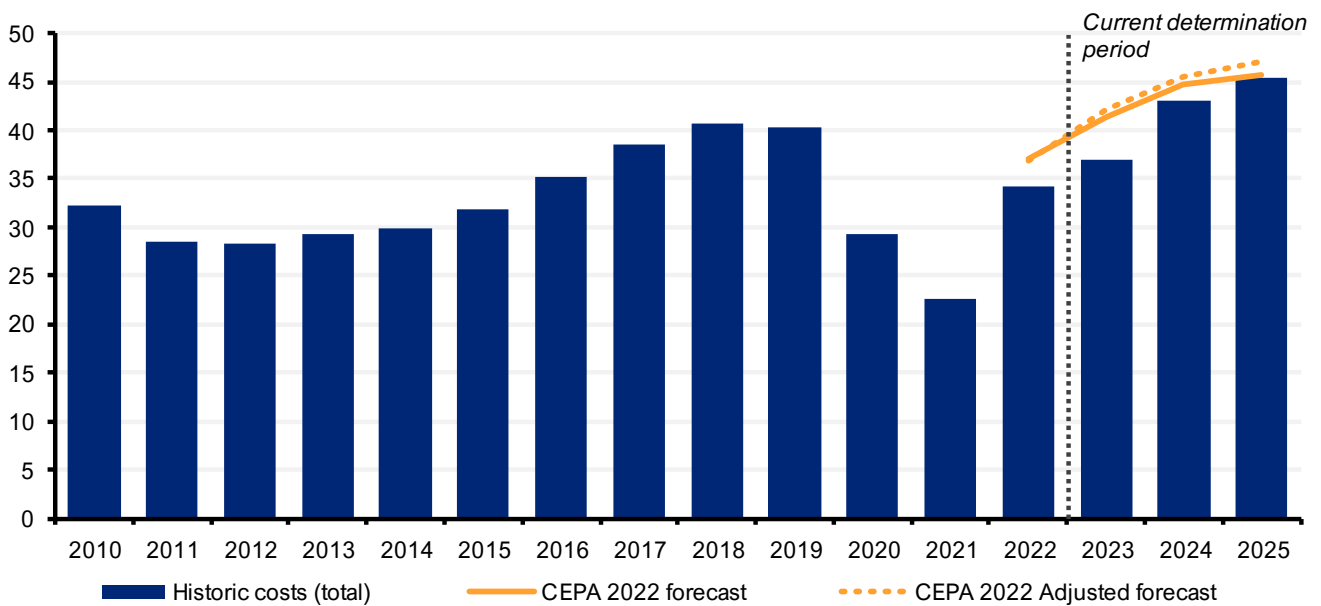
Maintenance expenditure covers both pay and non-pay costs. The function covers general asset care (i.e. day-to-day repairs and maintenance), the maintenance of baggage handling systems and airfield assets, as well as gardening, engineering, utilities management, car park repair and maintenance, and maintenance management.

We find that Dublin Airport's outturn 2025 expenditure represents an efficient baseline, but that the evidence does not support the full scale of the real cost growth over 2027–2031 proposed by Dublin Airport. Beyond our passenger driven roll-forward of expenditure, our forecast provides for targeted uplifts in spending for asset ageing, contract cost pressures and CIP impacts. However, we do not include the full range of step-changes proposed by Dublin Airport as the evidence provided has either been incomplete or has not sufficiently demonstrated additionality to existing allowances.

5.1. TRENDS IN HISTORIC EXPENDITURE

Maintenance expenditure in 2025 is consistent with the CEPA 2022 forecast, and marginally below the adjusted CEPA forecast. Total Maintenance costs increased by around one third in real terms between 2022 and 2025.

Figure 5.1: Historic Maintenance expenditure, 2010–2025 (€m, Mar 2026 prices)

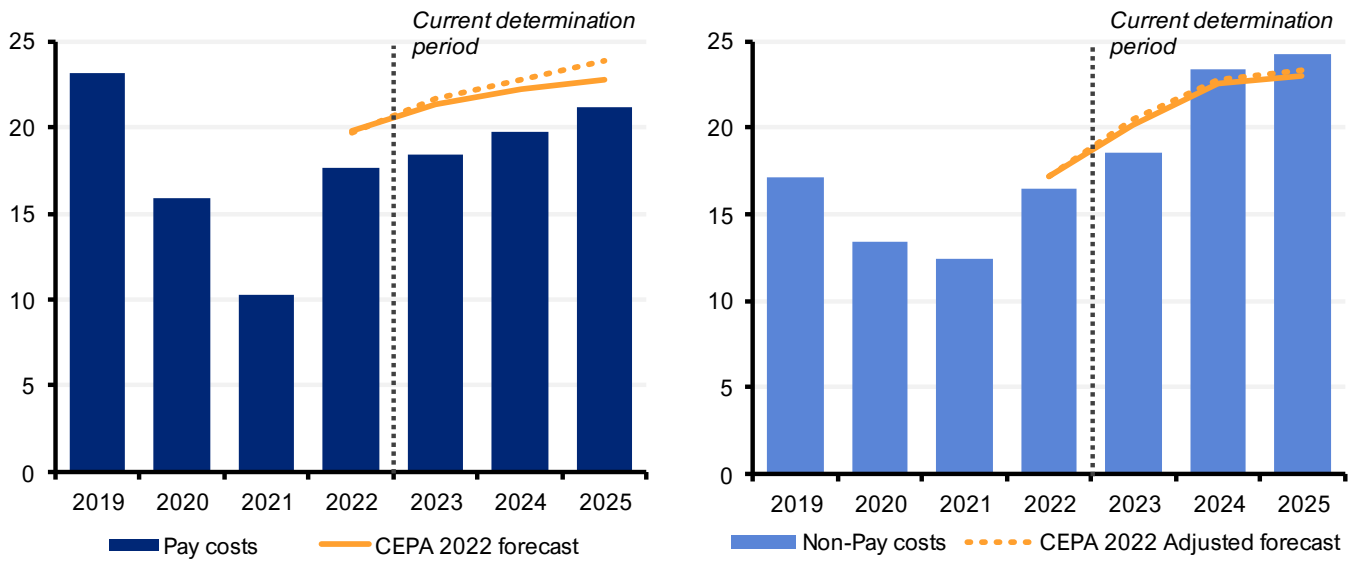


Source: CEPA analysis of Dublin Airport data and IAA 2022 Decision

When looking at payroll and non-pay costs separately, we see that FTEs and payroll costs have grown materially below forecast, while non-pay costs marginally exceed both the CEPA 2022 forecast and the adjusted forecast. Non-pay Maintenance expenditure increased by 47% in real terms between 2022 and 2025.

The increase in non-pay costs cannot be explained by asset growth or ageing alone. Dublin Airport's Regulatory Proposition refers to contract retendering pressures above CPI and construction inflation, though the evidence provided does not identify which contracts drove the increase or whether the increase reflects efficient procurement outcomes.

Figure 5.2: Historic Maintenance pay (left) and non-pay (right) expenditure, 2019–2025 (€m, Mar 2026 prices)

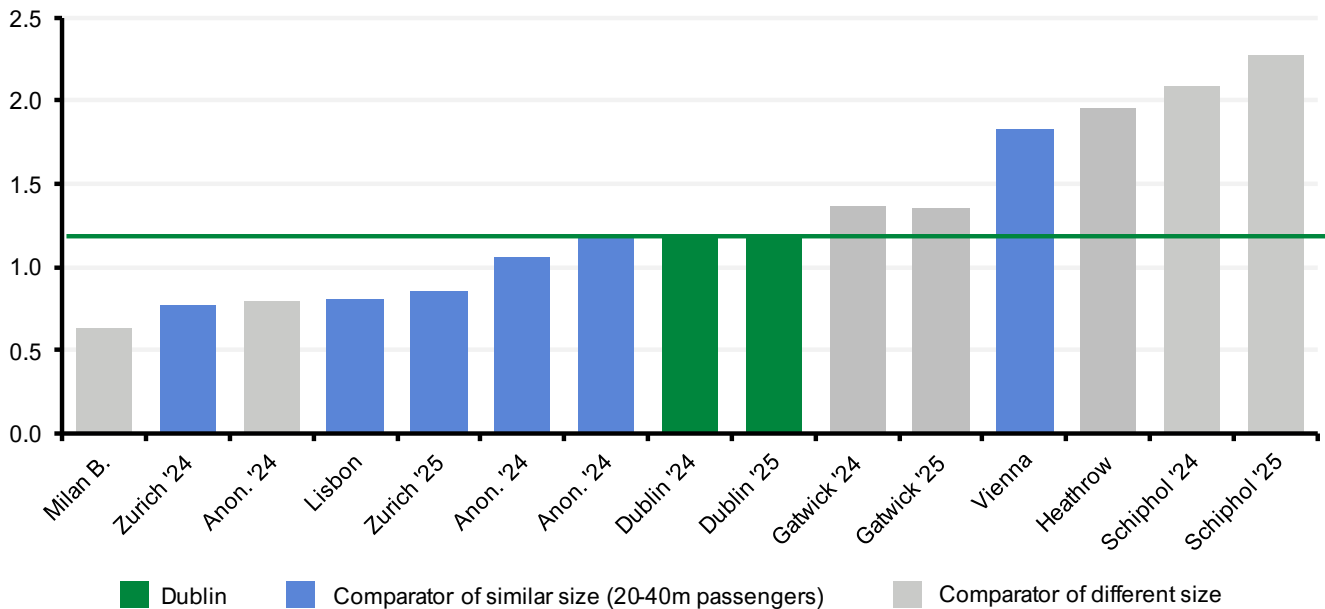


Source: CEPA analysis of Dublin Airport data and IAA 2022 Decision

5.2. BENCHMARKING EVIDENCE AND VIEW ON THE EFFICIENT BASELINE

In Figure 5.3 below, we show Maintenance spend normalised by workload unit (WLU) at Dublin Airport and a range of other airports.²¹ This benchmark comparison is necessarily approximate as airports do not define Maintenance expenditure consistently. Dublin Airport includes some costs that other airports may treat as facilities management, while some comparators combine maintenance with other functions or exclude staff costs. Nevertheless, we have access to more granular financial data for some airports, to allow for a more like-for-like comparison.

Figure 5.3: Normalised Maintenance expenditure by airport, 2024 and 2025 (€ per WLU, Mar 2026 prices)



Source: CEPA analysis of airport annual accounts, published passenger and freight data, and CAA H8 Initial Proposals.

²¹ A WLU is a composite metric used to aggregate and measure airport scale. It equates 1 terminal passenger to 100 kg of cargo or mail.

Note: Amsterdam, Zurich and Lisbon are based on airport group-level accounts allocated by passenger share. Gatwick reports Maintenance and IT together rather than Maintenance alone. Lisbon appears to report only external supplies and services, which may exclude staff-related maintenance costs.

5.3. EFFICIENT COST FORECAST

Cost driver and elasticity

We forecast efficient Maintenance expenditure using passenger growth as driver, but with different elasticities for non-pay costs, for Maintenance roles that we consider passenger driven, and for Maintenance roles we consider are more driven by the size of the asset base.

Within Maintenance payroll, we apply an elasticity of 0.4 to the roles that Dublin Airport identifies as passenger-driven: Baggage Team Leads, Baggage Operatives, and Asset Management technicians and engineers. We do not apply any elasticity to the remaining roles. The 0.4 elasticity is above our econometric point estimate of around 0.3, but we consider it reasonable as it is applied to a targeted subset of roles and is consistent with the elasticity used in our 2022 study.

For Maintenance non-pay, we apply a passenger elasticity of 0.3 to the efficient 2025 baseline for maintenance service contracts. For maintenance service contracts, we do not apply an elasticity, instead, separately considering price pressures.

Asset ageing

Dublin Airport's submission shows a material increase in assets more than 15 years old. The number of assets above this threshold increased by 78% between 2024 and 2025, reaching 3,268 assets, and Dublin Airport forecasts a further increase to 6,977 by 2031. Dublin Airport translates this into a 0.1 elasticity applied to non-passenger driven maintenance staffing and seven repairs-related non-pay cost lines. It does not apply the ageing uplift to passenger-driven staff, which accounted for around 58% of Maintenance FTEs in 2025. In total, the proposed adjustment adds around nine Maintenance FTEs and €2 million of additional annual non-pay costs by 2031.

We accept the principle that ageing assets can increase maintenance requirements. The current evidence, however, does not allow us to validate the scale or form of Dublin Airport's proposed uplift.

We consider there are four main limitations:

1. **There is a material risk of double counting other maintenance step changes.** Dublin Airport's 2025 to 2026 Maintenance step change already includes increases justified by resilience, criticality, inspections and condition monitoring. Additionally, our 2022 forecast included a specific uplift to support an enhanced maintenance regime, now embedded in the baseline, which should mitigate the need for a further uplift.
2. **The uplift is based on an age proxy rather than evidenced maintenance need.** Dublin Airport has not provided any data from its Enterprise Asset Management system (such as failure rates, maintenance hours, repair costs, or asset condition) to support either the 0.1 elasticity or the 15-year threshold. We would expect ageing-related maintenance pressures to emerge as a developing trend in asset condition, work volumes or repair costs, rather than as a sudden inflection point once assets pass a single age threshold.
3. **A single 15-year threshold is a blunt measure for a mixed airport asset base.** It captures assets with very different useful lives and maintenance profiles, including buildings, pavements, cabling and communications equipment. It also captures a large number of Terminal 2 assets commissioned around 2010. An approach based on the count of assets above the threshold implicitly gives the same weight to a core terminal building and a small office asset, despite their very different maintenance cost implications.
4. **The approach does not clearly account for replacements, retirements and refurbishments, particularly given the scale of CIP investment.** Dublin Airport assumes retirements will increase by 25% per year but has not clearly evidenced this assumption. Dublin Airport's CIP also includes significant Asset

Management capex, an increase on the existing level of such expenditure, alongside further investments to maintain, refurbish or upgrade key airport infrastructure.

For example, CIP.27.04.26 relates to the upgrade of Terminal 2 baggage handling systems, while CIP.27.04.17 includes significant mid-life rebuilding works for Terminal 2 MV generators. Under Dublin Airport's approach, assets within these programmes could still be captured by the 15-year threshold and receive an ageing uplift, despite the proposed refurbishment or replacement activity. Dublin Airport presents these capital investments partly on the basis that they will reduce reactive maintenance workload and improve whole-life costs. The ageing adjustment therefore needs a clearer link to the proposed capital programme to provide confidence in the accuracy of the existing retirements adjustment.

For non-pay costs, we also identify a potential formula error in how Dublin Airport has estimated ageing impacts, which it assumes compounds over time. This means an 8% cumulative ageing impact by 2031 translates into a 26% increase in the affected non-pay cost lines.

For our draft forecasts, we include 25% of Dublin Airport's proposed uplift, after correcting for the formula error, as an indicative view of the potential uplift for asset ageing. Despite the limited evidence provided by Dublin Airport in support of the uplift, we recognise that ageing assets can increase maintenance requirements.²² However, for our final forecasts, we will consider all stakeholder submissions on whether an asset-ageing uplift should be included, the scale of any such uplift, and whether a further adjustment is required to reflect planned Maintenance capex within the CIP.

Pay

To estimate efficient staffing levels:

- We apply a 0.4 elasticity with respect to passenger volumes to passenger driven Maintenance roles.
- We include the full 2025 to 2026 step-increase of 16 FTEs, as proposed by Dublin Airport. Dublin Airport has provided a broad narrative on resilience, a growing asset base and ageing to justify this step-increase, though it has not provided role-level evidence. Nevertheless, we determine the increase as likely efficient given its 2026 forecast FTEs would remain marginally below the adjusted CEPA 2022 forecast.
- As noted in the previous section, we also include 25% of Dublin Airport's proposed uplift for asset ageing.

The table below presents our forecast of Maintenance FTEs and payroll (after accounting for our ongoing efficiency assumption), compared with Dublin Airport's forecast.

Table 5.1: Forecast of Maintenance staffing levels and payroll costs, 2025–2031

Maintenance	2025	2026	2027	2028	2029	2030	2031
CEPA forecast							
Total maintenance FTEs	231	247	248	249	250	251	252
Total maintenance payroll (€m)	21.2	22.6	22.8	23.0	23.2	23.4	23.6
Dublin Airport forecast							
Total maintenance FTEs	231	247	250	252	255	257	259
Total maintenance payroll (€m)	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘

Source: CEPA analysis, Dublin Airport Regulatory Proposition

²² See, for example, CEPA and Taylor Airey (2022), [Review of H7 Opex and Commercial Revenues: Final Assessment and Forecasts \(Opex\)](#), pp.59–60

Non-pay

We forecast non-pay Maintenance expenditure using a passenger elasticity of 0.3, excluding maintenance service contracts. For step-changes:

- **We include a non-CIP step change for the increase in Maintenance contract expenditure between 2025 and 2026.** Dublin Airport has linked this increase to contract renewals, retendering cost pressure and higher expected service levels following incidents in 2024. We do not allow further real growth in maintenance contract expenditure over 2027–2031 because most further renewals relate to contracts tendered since 2024 and should already reflect post-Covid cost conditions.
- **We include 25% of Dublin Airport's proposed uplift for asset-ageing,** after correcting for Dublin Airport's apparent formula error.
- **We do not allow a further uplift in 2031 for the West Apron Vehicle Underpass.** This is a rollover CIP20 project. We consider that in principle the underpass should be viewed as additional, but Dublin Airport has provided limited evidence to support its estimate of a €0.5 million uplift in 2031. Ahead of Final Determination, we will consider any further evidence that might be provided, alongside ensuring there is a balanced estimate of the potential offsetting impact of CIP investments in reducing reactive maintenance, and thus Maintenance expenditure (see below).

Dublin Airport proposes 31 step changes in non-pay Maintenance expenditure related to CIP projects, of which one ('Commercial Products') is inclusive of 11 individual CIP projects. All of these are additions to Maintenance expenditure, with no offsetting impacts from new investments that should reduce reactive Maintenance presented. We consider these as follows:

- **We include CIP Maintenance impacts where the cost is incremental to the passenger-linked elasticity.** This includes 16 initiatives relating to significant new assets, operational resilience and cargo-related schemes, and sustainability initiatives that are not directly passenger-driven. Examples are 27.02.12 - MVHV Network Expansion, 27.01.01 - Terminal 2 Renewable Heat, and 27.02.06 - Cargo to Eastlands. We note that some of these assets accrue opex prior to commissioning, and further evidence could be provided on this.
- **We do not include a separate step change where the proposed increase should already be captured by the passenger elasticity or where it primarily relates to replacement or refurbishment of existing assets.** The evidence presented does not establish that these costs represent incremental maintenance requirements rather than renewal of the existing cost base. This includes 14 proposed initiatives, such as 27.04.20 - Passenger Boarding Bridges and Fixed Electrical Ground Power Upgrades and 27.02.04 - Terminal 2 CBP and Transfer Extension.
- **We accept but apply a separate 50% efficiency challenge to Dublin Airport's proposed Commercial Products uplift.** The evidence supports an incremental operating cost requirement from an expanded commercial asset base, including car parks, lounges, retail areas and other passenger-facing commercial assets. However, Dublin Airport has not yet demonstrated that the full uplift is additional to the passenger-linked elasticity or separable from other cost categories that support the same assets, noting significant growth in related Other Non-Staff and Retail staffing costs.

Dublin Airport provided supplementary data of the total opex impacts for commercial projects, along with some Maintenance cost narrative. The data provided suggests that this cost estimate includes costs beyond those attributable to Maintenance expenditure and a significant proportion of the total opex impact over 2027–31 relates to projects that are primarily refurbishments of existing assets. In these cases, the associated costs should already be accommodated within the baseline allowance. We note that no parallel uplift to Executive Lounge Direct Costs (within Other Non-Staff Non-Pay) occurs within Dublin Airport's forecast despite an expansion in lounge capacity, and so will consider any additional evidence on the

relationship between these two costs to support a final view on the need, additionality and efficiency of the uplift ahead of the Final Determination.

Taken together, our adjustments enable around 60% of the CIP-related Maintenance cost increases proposed by Dublin Airport over 2027–2031. This provides an allowance for genuinely incremental maintenance requirements while avoiding double counting with passenger growth, refurbishment activity and baseline cost allowances.

Table 5.2 presents our forecast of Maintenance non-pay costs, relative to Dublin Airport's.

Table 5.2: Forecast of Maintenance non-pay costs, excluding and including CIP, 2025–2031 (€m, Mar 2026 prices)

Maintenance	2025	2026	2027	2028	2029	2030	2031
CEPA forecast							
Total maintenance non-pay (excl. CIP)	24.2	25.8	25.9	26.0	26.2	26.3	26.4
Total maintenance non-pay (incl. CIP)	24.2	25.8	25.9	26.3	27.3	29.2	29.8
Dublin Airport forecast							
Total maintenance non-pay (excl. CIP)	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘
Total maintenance non-pay (incl. CIP)	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘

Source: CEPA analysis, Dublin Airport Regulatory Proposition

6. OTHER NON-STAFF NON-PAY

This section covers a broad category of expenditure covering around 40 individual cost lines. The largest single component of this is regulatory costs (i.e. IAA and ANCA's costs), followed by costs associated with executive lounges.

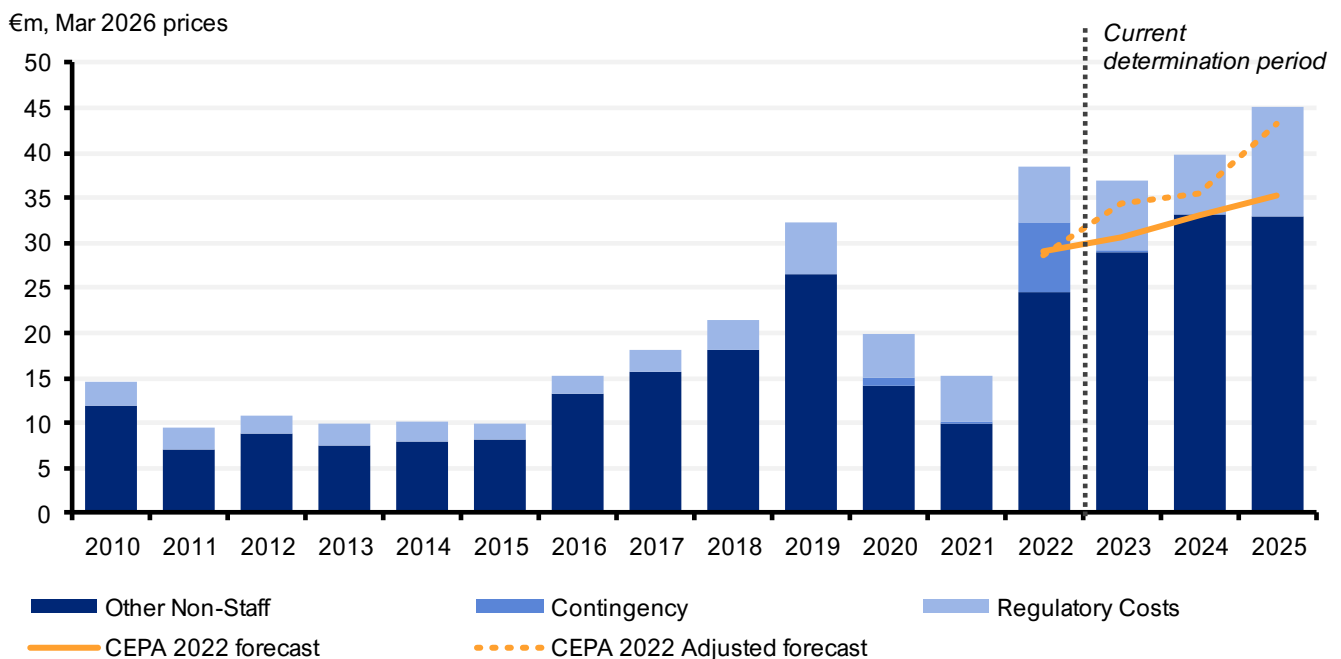
We use Dublin Airport's 2025 expenditure as the starting point for most cost lines but make targeted adjustments where the evidence does not support the reported cost level or proposed trend. The main baseline adjustments relate to Executive Lounge Direct Costs and Other Overheads. We then apply line-specific forecast assumptions, reflecting the different drivers across the category, and assess Dublin Airport's proposed step changes using the Need-Additionality-Efficiency framework.

By 2031, our forecast is €49.7 million including CIP, compared with Dublin Airport's proposal of €57.7 million. The difference is mainly driven by our decision not to include new cost lines and step-increases to existing cost lines that we consider have been insufficiently evidenced.

6.1. TRENDS IN HISTORIC EXPENDITURE

Figure 6.1 shows that Other Non-Staff Non-Pay expenditure has grown by around 17% in real terms over the current determination period. It has consistently exceeded the CEPA 2022 forecast, but the gap narrows materially once the forecast is adjusted for outturn passenger growth and passthrough Regulatory Costs.

Figure 6.1: Historic Other Non-Staff Non-Pay expenditure, 2010–2025 (€m, Mar 2026 prices)



Source: CEPA analysis of Dublin Airport data and IAA 2022 Decision

Excluding those categories, the largest drivers of Other Non-Staff cost growth since 2022 are as follows:

- **Executive Lounge Direct Costs** – an increase of €4.7 million (99%).
- **Apron Shuttle Bus Hire** – an increase of €2.8 million (186%).
- **Security Outside Contractors** – an increase of €1.8 million (55%).
- **Licence Renewals** – an increase of €1.1 million (125%).
- **Other Overheads (payment to ARI for use of the Dublin Duty Free brand)** – an increase of €0.6 million (41%). We note that this title is also used by the IAA to describe a broader set of costs.

Across the remaining cost lines, annual cost growth was relatively limited, increasing by only €0.7 million between 2022 and 2025. Finally, we note that excluding regulatory costs, expenditure was flat in real terms between 2024 and 2025.

6.2. BENCHMARKING EVIDENCE AND VIEW ON THE EFFICIENT BASELINE

Given the large number of items within Other Non-Staff, we prioritise our assessment on items that are material (e.g., >€1 million), have grown materially since 2022 (e.g., >€0.5 million), are new, and/or are within Dublin Airport's direct control. Applying these criteria, we focus our assessment on the Executive Lounge Direct Costs, Apron Shuttle Bus Hire, Security Outside Contractors and Other Overheads costs. The subsections below assess each of these areas in turn. A proportion of the Licence Renewals line item that relates to IT expenditure has been considered separately within our IT assessment.

Executive Lounge Direct Costs

Dublin Airport's 2025 cost position for Executive Lounge Direct Costs was affected by temporary lounge closures and we consider it does not provide a reliable starting point for the forecast.

Table 6.1: Comparison of real-terms historic lounge revenues to contract costs (€m, Mar 2026 prices)

Metric	Previous determination		Current determination period		
	2019	2022	2023	2024	2025
Total lounge revenues	11.9	9.7	13.6	15.3	14.3
Lounge contract costs	5.6	4.8	7.2	8.6	9.5
Costs as % of revenues	47%	49%	53%	56%	67%

Source: CEPA analysis of Dublin Airport data and IAA 2022 Decision

As Table 6.1 shows, lounge contract costs represented 67% of reported lounge revenues in 2025, compared with an average of 53% over the 2022–2024 period. This was driven by a reduction in real revenues and an increase in real operating costs, materially impacted by the closure of the T1 and 51st & Green (T2) lounges for renovation from August and October 2025, respectively.

Given this, Dublin Airport's 2025 lounge cost ratio should not be used mechanically because temporary closures reduced revenues and distorted the cost-to-revenue relationship. We use the 2022–2024 average share of lounge revenues as the baseline contract cost, reducing the adopted base year cost by €1.9 million to €7.6 million.

As a supplementary efficiency cross-check, we reviewed lounge costs as a proportion of revenues at other airports where public data is available. To improve comparability, for Dublin Airport we included a small number of additional lounge-related costs outside the main contract, based on information provided by Dublin Airport.

The available evidence is limited because many airports do not separately disclose lounge revenues and costs, and operating models differ. We therefore treat the benchmark evidence as a cross-check rather than the primary basis for the baseline adjustment. Table 6.2 summarises the available public reference points.

Table 6.2: Public references - costs as a percentage of revenues for airport lounge-related businesses

Reference	Reporting year	Costs as % of revenues
Dublin Airport	2022-24 average	≈ ≈
(inclusive of all lounge-related costs)	2025	≈ ≈
Manchester Airports Group (MAG) CAVU segment	Year ending March 2025	69%
(UK / global, products include lounges)		
TAV Airports Operation Services segment	2024	81%
(Turkey / global, products include lounges)		

Reference	Reporting year	Costs as % of revenues
No1 Airport Lounges Ltd. (UK, airport lounge-only business)	2024	72%

Source: CEPA analysis of Dublin Airport data and published airport lounge company accounts

Note: MAG and TAV figures are calculated from reported revenue and EBITDA. For No1 Airport Lounges, rent costs, depreciation and development cost amortisation have been removed from operating expenses.

The benchmark evidence does not change our baseline adjustment. Dublin Airport's 2025 cost-to-revenue position is broadly in line with some external comparators, but its own pre-closure performance was stronger. We therefore use Dublin Airport's 2022–2024 average to set the baseline.

Apron Shuttle Bus Hire

These costs relate to the shuttling of passengers to South Gates. A significant step change in Apron Shuttle Bus Hire costs was reflected in the CEPA 2022 forecast from 2024 onwards. This was attributed to both anticipated passenger growth and the need to transition to electric buses.

When adjusted for inflation, Dublin Airport's 2025 apron shuttle bus hire costs are broadly consistent with the CEPA 2022 forecast for the same year (€4.3 million compared with €4.5 million respectively), despite passenger numbers having exceeded expectations.

Dublin Airport does not collect data on bussing kilometres, so directly comparable benchmark data is limited. We therefore assess efficiency using growth in bussing hours and passenger volumes, supported by public bus cost benchmarks as a cross-check. Table 6.3 illustrates this comparison since 2022.

Table 6.3: Growth in Apron Shuttle Bus hours per day relative to attributed costs, 2022–2025 (Mar 2026 prices)

Metric	2022	2023	2024	2025
Bussing hours per day	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘
Total cost of service (€m)	⌘	⌘	⌘	⌘
Implied cost per hour (€)	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘
Cost per airport passenger (€)	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘

Source: CEPA analysis of Dublin Airport operational and cost data

This data suggests growth in demand for bussing has exceeded broader airport growth, reflected in a relatively flat cost per hour between 2023 and 2025, while cost per airport passenger increased in real terms over this period.

2022 to 2023 saw a circa 27% step change increase in costs per hour, which Dublin Airport has not explained in materials provided. However, we note that:

- 2022 appears to be reflective of post-Covid demand recovery, with total costs of service much closer to 2020–21 levels than 2019 levels (c.€2.7 million) - it may not provide a reliable point of comparison.
- Dublin Airport has transitioned to electric buses over the period, which are assumed to be more expensive to operate than traditional diesel variants. Our CEPA 2022 forecast applied an assumption of compliance with legislation, by achieving 45% electric bus penetration and an uplift of 30% on costs, reflecting available evidence that electric buses were approximately 30% more expensive to operate.
- Dublin Airport's cost per hour compares favourably to approximate benchmarks developed from public bus data in the UK and Ireland. By applying UK Department for Transport and industry data, we estimate the cost for UK public bus services outside London to be approximately €70 per hour in 2025. Irish published data is less robust. However, calculating implied cost per hour from National Transport Authority (NTA) statistics for revenues and public subsidy, and varying average speed assumptions within a plausible range suggests a comparable figure of approximately €75–100 per hour in 2024.

Drawing this evidence together, we consider the 2025 position for Apron Shuttle Bus Hire to be an efficient base.

Security Outside Contractors (US Customs and Border Protection officers and Hold Baggage Screening)

Most of the increase in Security Outside Contractors costs since 2022 reflects higher US Customs and Border Protection (CBP) officer costs. We consider these costs largely outside Dublin Airport's control and necessary to facilitate US passenger growth. The remainder relates to Hold Baggage Screening (HBS) running costs, which grew by 34% in real terms between 2022 and 2025 but remain broadly consistent with the CEPA 2022 forecast.

To test the efficiency of HBS costs, we compare Dublin Airport's cost per departing passenger with airports that publish separate HBS charges. The comparator pool is limited because many airports do not publish these charges separately, so we treat Table 6.4 as a cross-check rather than a direct benchmark.

Table 6.4: Comparison of HBS-related charges at other airports to Dublin costs on a per departing passenger basis (€ per departing passenger, Mar 2026 prices)

Airport	2022	2025	% growth (2025 v 2022)
Dublin Airport	⌘ ⌘	⌘ ⌘	⌘ ⌘
Closest benchmarks - operations / labour-only			
Birmingham	0.74	0.84	+13%
Bristol	0.51	0.49	-2%
Manchester	0.32	0.37	+13%
Others - likely inclusive of equipment costs			
Liverpool John Lennon	1.28	1.31	+2%
Milan Bergamo	1.78	1.23	-31%
Rome Fiumicino	3.23	2.65	-18%

Source: CEPA analysis of Dublin Airport data and published airport charging schedules

Table 6.4 illustrates two points:

- Real growth in HBS costs on a per departing passenger basis has been relatively modest at Dublin Airport.
- Benchmark data, while limited, suggests that Dublin Airport's costs are competitive against other European airports.

On this basis, we consider 2025 Security Outside Contractors costs to be an efficient base.

Other Overheads (ARI Dublin Duty Free brand charge)

This cost item captures a charge paid by Dublin Airport for use of the Dublin Duty Free brand. It was reallocated into its own Other Overheads line item from 2022 onwards and has increased in real terms from €1.4 million in 2022 to €1.9 million in 2025.

We understand that the charge is linked to turnover, and historical data indicates that it has typically represented around 1.5% of direct retail revenues. Supplementary information provided by Dublin Airport suggests that EY's review of the charging arrangements concluded that a charge of 0.5–1.5% of net sales was not uncommon, although EY's analysis assumed a charge of 1% of net sales.

We accept that a charge may be appropriate, but Dublin Airport has not evidenced a charge at the top end of the EY range. We therefore set the efficient baseline at 1% of direct retail sales, reducing the cost from €1.9 million to €1.3 million.

6.3. EFFICIENT COST FORECAST

We develop our forecast starting from 2025, with the following adjustments to produce an efficient base year:

- Executive Lounge Direct Costs are adjusted down to maintain the 2022–2024 average ratio of costs to revenues. This adjustment does not affect the 2027–2031 forecast because we then apply a separate step change for lounge capacity.
- A downward adjustment to Other Overheads, to maintain the ARI Dublin Duty Free charge at 1% of direct retail sales.
- We take a three-year average of costs that are particularly variable and not related to passenger growth - this affects around 15% of base year costs.
- Collectively, these adjustments produce an efficient base year of €42.2 million, relative to €45.1 million of actual Other Non-Staff operating costs in 2025.

We then roll-forward costs by applying the following baseline assumptions:

- The majority of line items (32 of 42) are assumed to remain fixed in real terms over the forecast period.
- Lounge, VIP and retail-related costs are assumed to grow partially in line with passengers, applying a 0.5 elasticity. Bank and Credit Card Charges are assumed to grow fully in line with passengers, applying a 1.0 elasticity. This approach seeks to retain consistency with CEPA's 2022 forecast methodology.
- We apply more bespoke adjustments to the trend forecast for the following categories:
 - **Regulatory Costs including Security Regulatory Charge** – we adopt the IAA's latest forecasts for these costs, which have been provided to us by the IAA and show a marginally different profile to Dublin Airport's estimates.
 - **Apron Shuttle Bus Hire** – these costs are highly sensitive to tipping point assumptions around apron usage and the point at which an additional bus service is required. Dublin Airport has produced a bottom-up assessment based on anticipated flight schedules. We adopt Dublin Airport's forecast in full (with the exception of the step change related to EV bussing – see below).

We note that the growth implied by Dublin Airport's forecast is significantly below the ratio of historic apron bus costs growth to passenger growth between 2023 and 2025, and for this reason appears broadly reasonable.
 - **Security Outside Contractors** – we grow these costs in line with economy-wide real wage growth. Unlike the approach taken in the CEPA 2022 forecast, we assume no change in staffing levels, consistent with Dublin Airport's forecast.
 - **CBP Queue Management** – we grow these costs linearly in line with anticipated growth in both US CBP passengers and real wages.
 - **Other Overheads (the ARI Dublin Duty Free charge)** - this is assumed to remain at 1% of Dublin Airport's forecasted retail revenue.

Step changes

We consider three main step changes proposed by Dublin Airport within their Regulatory Proposition using the Need-Additionality-Efficiency framework. Our approach to these is as follows:

- **Executive Lounge Direct Costs (accepted in part)** – a step change in available lounge capacity drives a large increase in revenues from 2027 onwards. This provides a need-based rationale for an increase in opex. We therefore enable a step change in costs so that they equate to the historic average achieved as a proportion of revenues in that year, implicitly assuming that growth in revenues in that year is primarily

driven by usage rather than yields. We then apply a 0.5 elasticity with respect to passengers beyond 2027. We consider this approach to provide a proportionate uplift. Dublin Airport has not provided sufficient evidence to support the efficiency of a larger increase in costs present in their own forecasts, which would see lounge costs as a proportion of revenues remain at elevated levels similar to 2025 outturn, despite that position being affected by significant lounge closures. Additionally, there are two significant CIP-related lounge projects with estimated revenue impacts within the determination period (from 2029 – the post CBP lounge and Terminal 2 IDL lounge). In line with Dublin Airport's forecast, we assume no related impacts of these projects on lounge contract costs, noting operating cost impacts accruing within Maintenance.

- **Apron Shuttle Bus Hire (accepted in part)** – Dublin Airport proposes a €€€€ per year uplift related to the electrification of the bussing fleet. No information has been provided on the assumptions underpinning this estimate. As with the CEPA 2022 forecast, we recognise the potential for electric buses to be associated with higher lifecycle costs and so hire costs, which supports a needs case. However, the CEPA 2022 forecast base already assumed a significant proportion of electrification took place (45%) in the current determination period. As a draft position, we assume that only an additional 20% of the fleet is electrified between 2027 and 2031, based on a planned increase in minimum procurement targets from the EU Clean Vehicles Directive, and retain our 2022 assumption that efficient lifecycle costs are 30% higher than diesel variants. This produces an uplift of approximately €€€€ per year from 2028, around half of Dublin Airport's forecast.
- **Security Outside Contractors (accepted in part)** – we have allowed for an increase of 1 FTE in the number of Dublin Airport-funded US CBP officers between 2025 and 2026 on the basis that this is assumed largely outside of Dublin Airport's control and necessary to support US passenger growth, although we note that this increase has not been explicitly justified in the Regulatory Proposition. Dublin Airport's forecast includes a larger step change in 2026 than this item alone, but this has not been evidenced.
- **Special Projects Fees and Professional Services (Enhanced Mobility Scheme, not added):** Dublin Airport proposes a new staff mobility scheme intended to reduce demand for staff car parking by providing employees with a travel allowance of approximately €€ per person. Its forecast cost rises from nil in 2026 to €€€€ in 2031.

We recognise the potential operational and sustainability rationale for encouraging modal shift among airport staff, particularly where staff and passenger car parking capacity is constrained. However, Dublin Airport has not provided sufficient evidence to support the proposed €€ allowance, the expected level of staff uptake, or the relationship between the scheme and the parking capacity requirement. Nor has it demonstrated that the avoided staff parking demand would not generate an offsetting, or relatively greater, commercial revenue benefit. This is a benefit which Dublin Airport expressly recognises in principle but does not appear to take account of in its own revenue forecast - and we understand that the IAA's Car Parks revenue forecast does not include any associated adjustment. On these bases, we consider it does not meet the Additionality or Efficiency criteria.

Summary of the efficient cost forecast

Table 6.5 below summarises our forecast for Other Non-Staff Non-Pay costs, including and excluding CIP impacts and incorporates our ongoing efficiency assumption. This is compared to Dublin Airport's forecast presented on the same basis.

Our forecast increases over the 2027–2031 regulatory period from €47.2 million in 2027 to €49.7 million in 2031, including a minor CIP impact. Dublin Airport's forecast increases from €52.4 million in 2027 to €57.7 million by 2031, implying a gap of circa 14% to our forecast over the full determination period.

Table 6.5: Forecast of Other Non-Staff Non-Pay costs, excl. and incl. CIP, 2025–2031 (€m, Mar 2026 prices)

Other Non-Staff-Non-Pay	2025	2026	2027	2028	2029	2030	2031
CEPA forecast							
Regulatory Costs incl. Security Charge	12.0	13.5	12.8	13.0	13.1	13.0	12.8
Executive Lounge Direct Costs	7.6	7.7	11.3	11.4	11.6	11.7	11.8
Other Overheads	8.7	8.8	9.0	9.1	9.2	9.2	9.3
Security Outside Contractors	5.0	5.3	5.4	5.5	5.6	5.7	5.7
Apron Shuttle Bus Hire	4.3	3.8	4.0	4.2	4.2	4.4	4.6
Bank and Credit Card Charges	3.2	3.3	3.4	3.5	3.6	3.6	3.7
Telephone Print and Stationery	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Corporate Trade Subscriptions	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Foreign Exchange Costs	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Special Projects Fees and Professional Services	-	-	-	-	-	-	-
Total Other Non-Staff Non-Pay excl. CIP	42.2	43.7	47.1	48.0	48.4	48.8	49.2
<i>CIP retail uplift to Other Overheads</i>	-	-	-	0.1	0.1	0.1	0.1
Total Other Non-Staff Non-Pay incl. CIP	42.2	43.7	47.1	48.0	48.5	48.9	49.3
Dublin Airport forecast							
Regulatory Costs incl. Security Charge	12.0	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘
Executive Lounge Direct Costs	9.5	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘
Other Overheads	9.7	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘
Security Outside Contractors	5.0	⌘	⌘	⌘	⌘	⌘	⌘
Apron Shuttle Bus Hire	4.3	⌘	⌘	⌘	⌘	⌘	⌘
Bank and Credit Card Charges	3.2	⌘	⌘	⌘	⌘	⌘	⌘
Telephone Print and Stationery	0.8	⌘	⌘	⌘	⌘	⌘	⌘
Corporate Trade Subscriptions	0.4	⌘	⌘	⌘	⌘	⌘	⌘
Foreign Exchange Costs	0.1	⌘	⌘	⌘	⌘	⌘	⌘
Special Projects Fees and Professional Services	-	⌘	⌘	⌘	⌘	⌘	⌘
Total Other Non-Staff Non-Pay	45.1	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘

Source: CEPA analysis, Dublin Airport Regulatory Proposition

7. CENTRAL FUNCTIONS

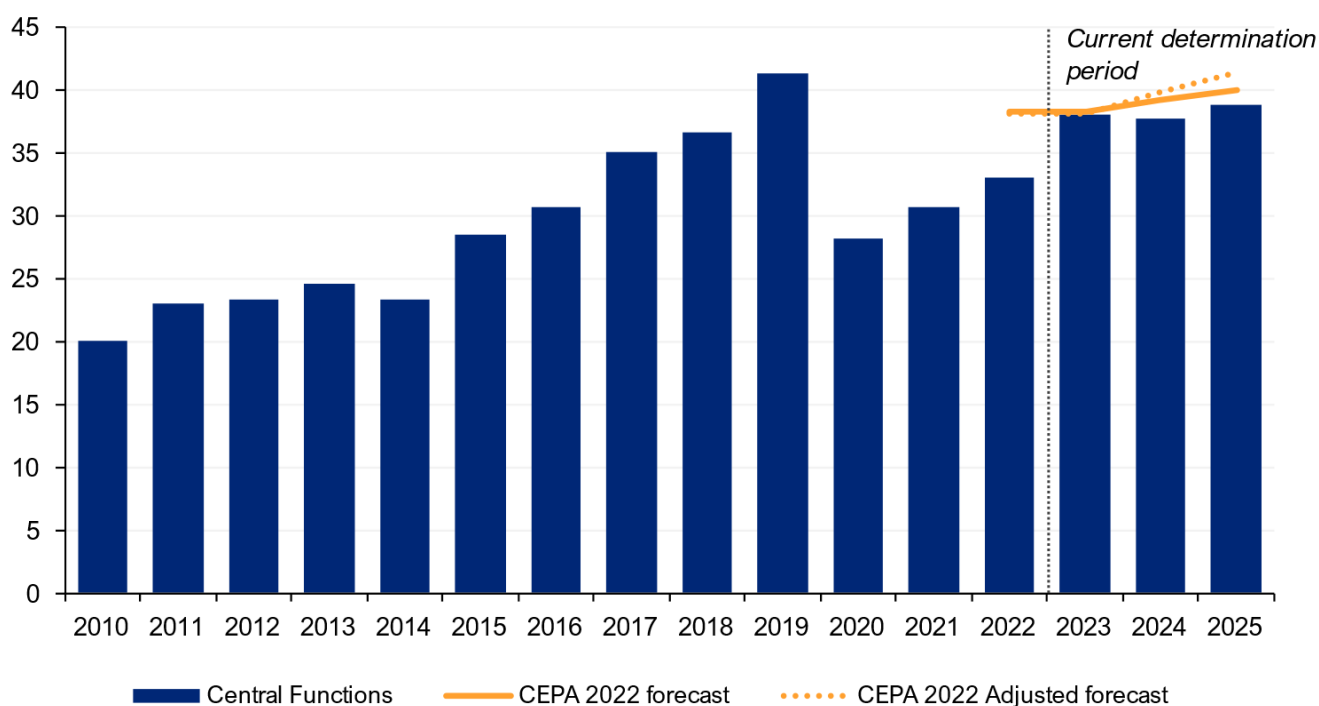
Central Functions includes a range of roles that provide airport-wide corporate functions such as commercial, finance, HR, procurement, strategy and regulation, and communications. It also includes the Platinum Services function, which is a commercial revenue generating activity.

We find that the 2025 Central Functions baseline is broadly efficient at the aggregate level, but that HR staffing should be subject to a targeted efficiency challenge over the 2027–2031 period.

7.1. TRENDS IN HISTORIC EXPENDITURE

Central Functions FTEs have increased materially since 2022, but this has not translated into a proportionate increase in payroll costs. As shown in Figure 7.1, payroll expenditure has grown steadily and remains below the CEPA 2022 forecast. This suggests that the increase in headcount has been offset by changes in workforce mix and a lower average payroll cost per FTE.

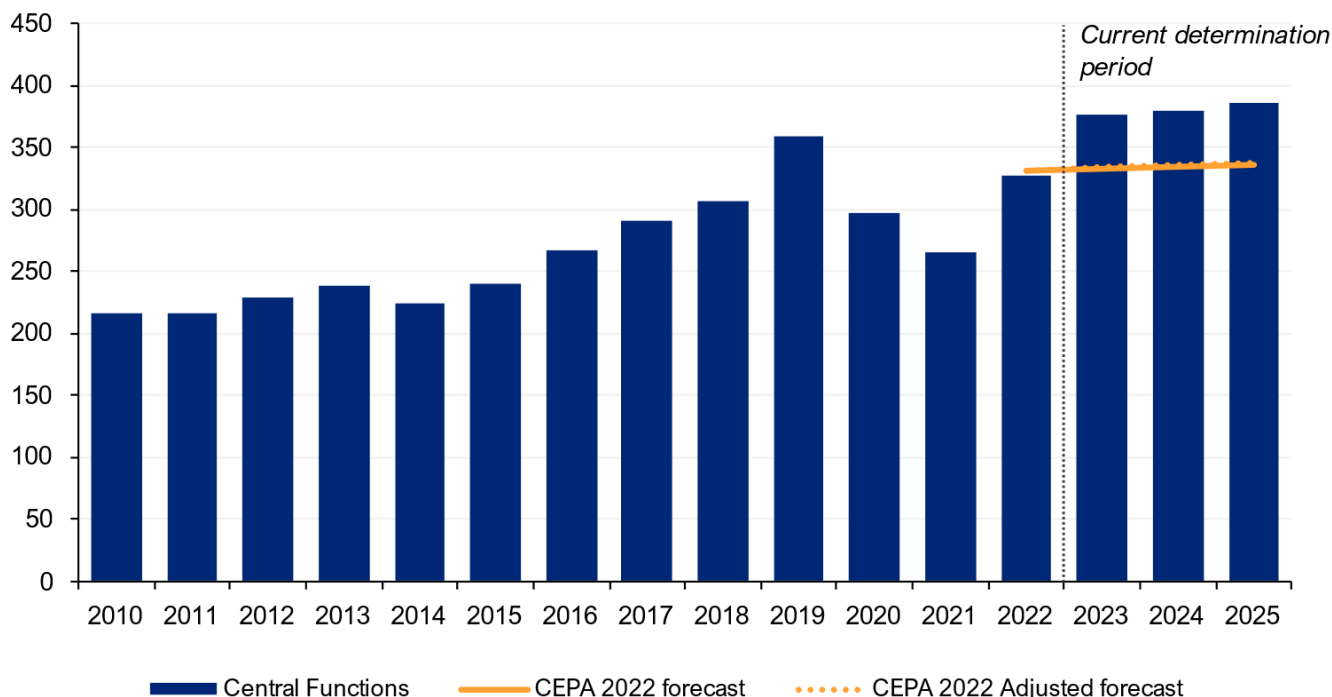
Figure 7.1: Historic Central Functions expenditure, 2010–2025 (€m, Mar 2026 prices)



Source: CEPA analysis of Dublin Airport data and IAA 2022 Decision

The divergence between FTEs and payroll costs is clearer when actual headcount is compared with the CEPA 2022 forecast. Figure 7.2 shows that Central Functions FTEs have risen above the level assumed in the CEPA 2022 forecast, with most of the increase occurring in 2023. This is consistent with the risk identified in the 2022 forecast that headcount growth could exceed the efficient benchmark, although the payroll impact has been moderated by the competing effects described above.

Figure 7.2: Historic Central Functions staffing levels, 2010–2025 (FTEs)



Source: CEPA analysis of Dublin Airport data and IAA 2022 Decision

The headline increase in FTEs is concentrated in a limited number of sub-categories. Table 7.1 shows that the largest increases since 2022 are in Commercial, HR, long-term absent staff and Other roles. These increases do not all represent like-for-like growth in corporate overhead. Some reflect changes in how Dublin Airport organises its workforce, including the centralisation of graduate roles and the in-sourcing of recruitment activity.

Table 7.1: Breakdown of Central Functions FTE growth by sub-category

Category	2019	2022		2025	
	FTEs	FTEs	Δ from 2019	FTEs	Δ from 2022
Commercial					
Platinum Services	26.6	24.2	-9%	34.1	+41%
Car Parks	6.2	6.1	-2%	8.0	+31%
Property and Concessions	13.6	13.5	-1%	23.3	+73%
Other Commercial	25.8	22.8	-12%	21.0	-8%
Finance					
Finance	30.0	22.5	-25%	21.8	-3%
Shared Services	54.3	41.4	-24%	52.8	+27%
HR					
HR	67.8	66.2	-2%	78.3	+18%
Long-term absent	-	29.4	-	37.9	+29%
Support					
Strategy and Regulation	21.8	17.0	-22%	18.3	+8%
Procurement	16.2	15.4	-5%	16.4	+6%

Category	2019	2022		2025	
	FTEs	FTEs	Δ from 2019	FTEs	Δ from 2022
Communications	8.4	10.0	19%	10.2	+2%
Legal	5.3	4.5	-15%	4.4	-3%
Safety and Sustainability	9.3	7.6	-18%	10.6	+40%
Administration	67.2	41.2	-39%	23.8	-42%
Other					
Airport Management	6.1	6.0	-2%	9.1	+51%
Graduates	-	-	-	15.3	-

Source: CEPA analysis of Dublin Airport data

Some increases in support roles have also been offset by reductions elsewhere. Administration FTEs have fallen materially since 2022, which partly offsets growth in other Central Functions sub-categories.

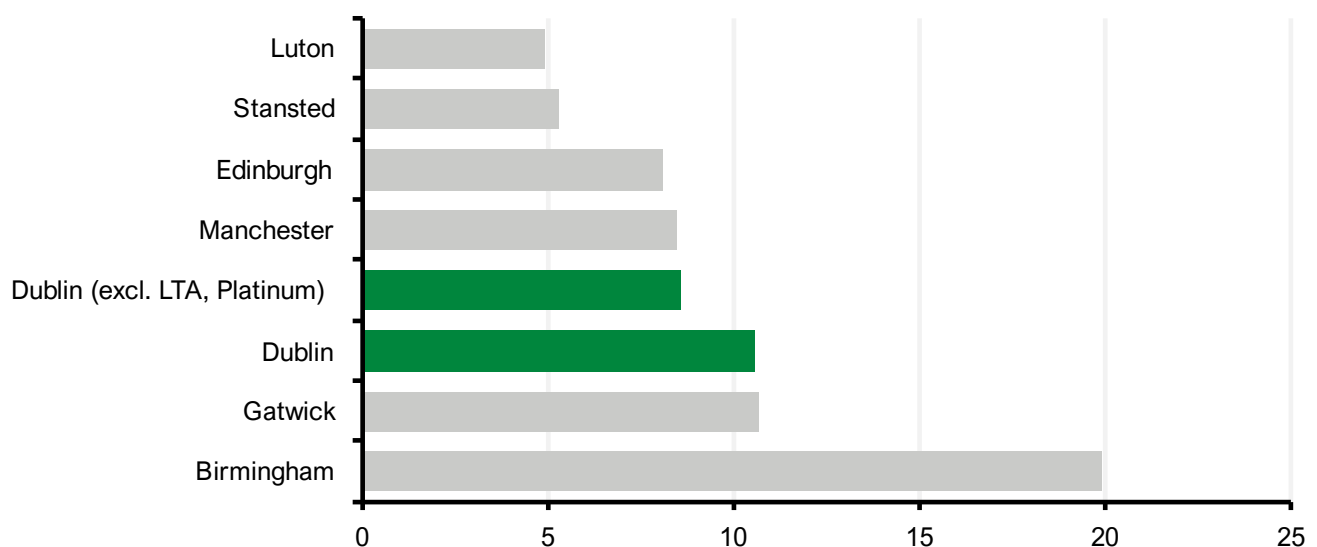
Long-term absent staff should be treated separately when interpreting the headline FTE increase. These staff are included in the reported FTE count, but they do not represent deployable Central Functions capacity. We therefore exclude them from the main benchmark of efficient payroll headcount.

Graduate roles should also be treated differently from a conventional increase in Central Functions staffing. Dublin Airport has centralised graduate roles that were previously fewer in number and distributed across the business. This affects the allocation of headcount across categories, but does not by itself indicate inefficiency.

7.2. BENCHMARKING EVIDENCE AND VIEW ON THE EFFICIENT BASELINE

In the figure below, we benchmark Central Functions staffing using administrative, support or non-operational employee numbers reported in airport annual accounts, divided by passenger volumes. This is an indicative benchmark rather than a precise like-for-like comparison: airports define operational and support staff differently.

Figure 7.3: Administrative or support staff per million passengers at comparator airports
(FTEs per million passengers)



Source: CEPA analysis of Dublin Airport data, published airport reporting and published traffic data

On this measure, Dublin Airport does not appear to have an excessive Central Functions headcount. Excluding long-term absence and Platinum Services staff, which are primarily operational, Dublin Airport had around 310

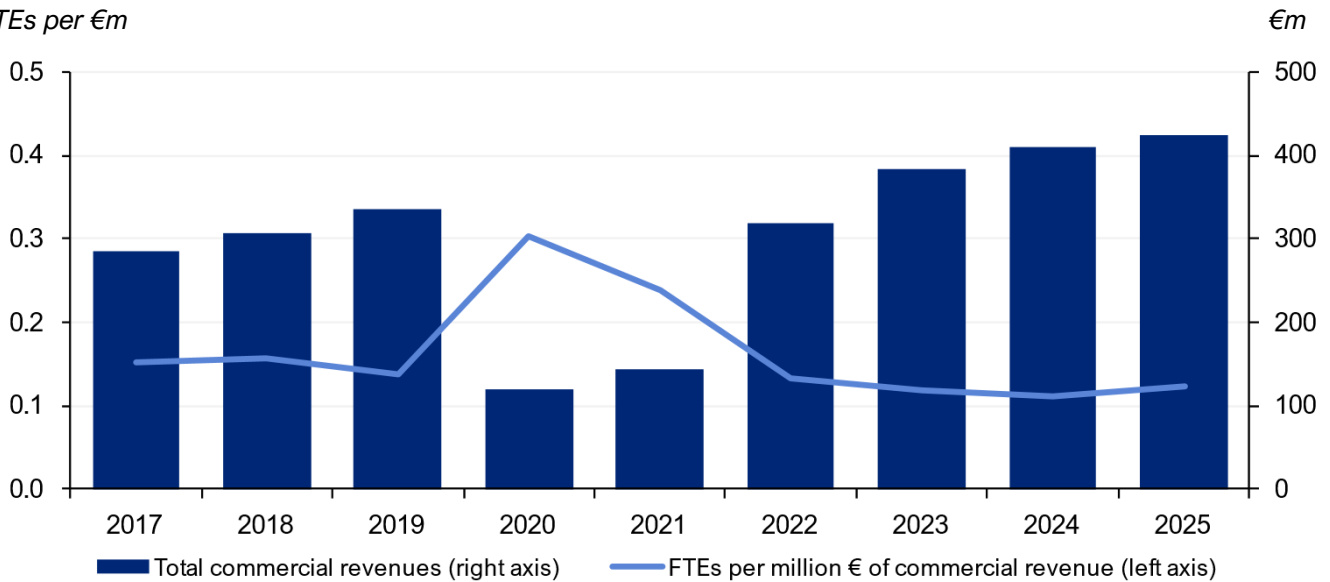
Central Functions FTEs in 2025. This is 8.6 FTEs per million passengers. Including long-term absent staff and Platinum Services staff increases the ratio to 10.6 FTEs per million passengers, which remains close to Gatwick.

This evidence supports using the 2025 outturn as the starting point for overall Central Functions staffing. It does not support a top-down efficiency reduction across the whole category. As such, our efficiency assessment focuses on sub-functions where staffing has grown materially, or where targeted functional benchmarks are available.

Commercial staff (excl. Platinum Services)

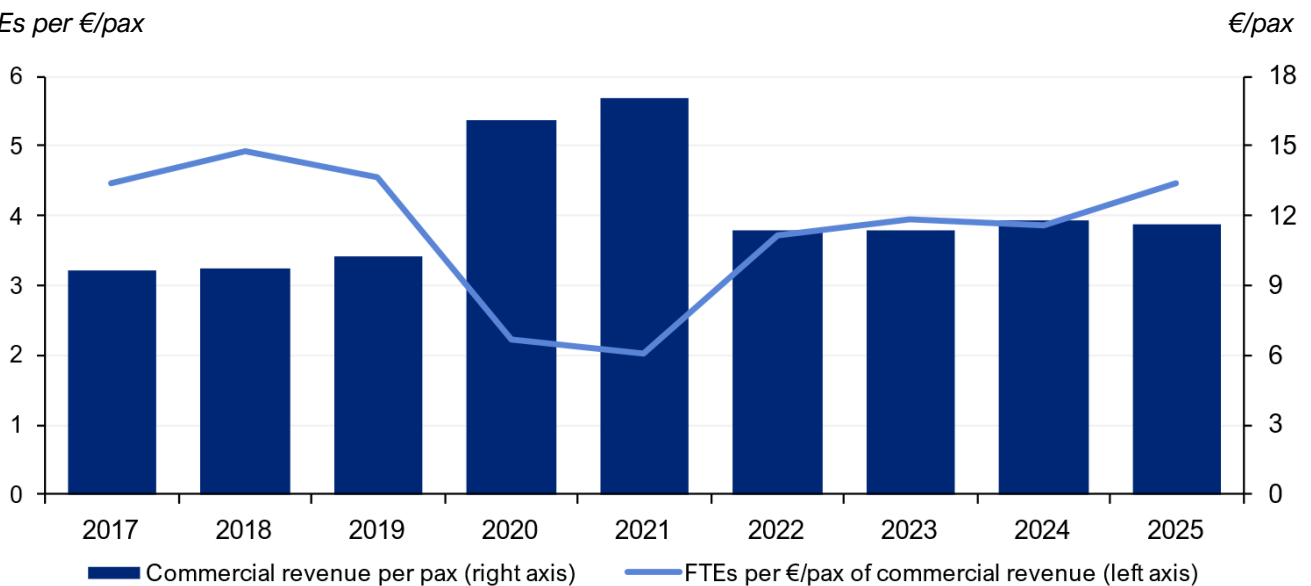
For commercial revenue staff, the key consideration is whether staffing is proportionate to the revenue supported. We benchmark commercial staffing in two ways: staff per €m of commercial revenue, and staff per € of commercial revenue per passenger, shown in Figure 7.4 and Figure 7.5 below. The first metric tests whether headcount has grown faster than revenue. The second tests whether staffing remains proportionate after allowing for both passenger growth and changes in revenue yield.

Figure 7.4: Commercial revenue staff per €m of revenue relative to total revenues, 2017–2025 (Mar 2026 prices)
FTEs per €m



Source: CEPA analysis of Dublin Airport data

Figure 7.5: Commercial revenue staff relative to commercial revenue per passenger (Mar 2026 prices)
FTEs per €/pax



Source: CEPA analysis of Dublin Airport data

Excluding the two Covid-19 years, the two metrics show a broadly stable relationship. There is some year-to-year variation, but the 2025 position does not indicate a clear structural deterioration. The staff-per-€m revenue metric shows a small uptick in 2025, which may warrant a modest adjustment.

To test whether outturn 2025 Commercial staffing levels were efficient, we take the average relationship observed between 2017 and 2025, excluding the two Covid-19 years. The staff-per-€m revenue metric implies an efficient baseline of 57 FTEs, which is above Dublin Airport's 2025 outturn of 52 FTEs. The revenue-per-passenger metric implies an efficient baseline of 50 FTEs. Averaging the two gives an efficient baseline of 53 FTEs, which is slightly above outturn but within the margin of error.

Platinum Services

Platinum Services is considered alongside Other Non-Staff Non-Pay costs, because its staffing is linked to the service proposition and direct costs of that activity. We do not propose a separate Central Functions efficiency adjustment for Platinum Services based on this analysis.

HR

HR is the only Central Functions sub-category where the external functional benchmarks support a targeted efficiency challenge. Dublin Airport had 2.5 HR FTEs per 100 total FTEs in 2025. This is above the average HR staffing ratios reported by SHRM²³ and CIPD,²⁴ both of which indicate a central tendency of around 1.7 HR staff per 100 employees, though within the interquartile range of 1 to 2.7 quoted by CIPD.²⁵ CIPD also reports a wider 10th and 90th percentile range of 0.4 to 4.2 HR staff per 100 employees, which shows that the benchmark range is wide and depends on the organisation's operating model.

There are good reasons not to apply the central benchmark mechanically to Dublin Airport. The HR function supports a large operational workforce, a unionised environment, complex rostering and workforce planning requirements, and a material recruitment workload. Dublin Airport has also in-sourced recruitment activity, which increases HR headcount but may reduce outsourced recruitment costs and support lower attrition. These factors justify using a benchmark above the general cross-sector average.

However, these factors do not fully explain the current level of HR staffing. Dublin Airport's investment in technology and workforce planning systems should reduce the manual burden in parts of the HR function over time. The in-sourcing of recruitment also means that the benefit should be visible elsewhere, either through lower outsourced recruitment costs or improved retention. We therefore do not consider it efficient to maintain the 2025 HR ratio throughout the next price control period.

We propose setting HR staffing on a glidepath from Dublin Airport's 2025 outturn ratio towards 2.0 HR FTEs per 100 total FTEs by 2031. This target end point is above the SHRM and CIPD central benchmark, reflecting the operational complexity of the airport, but below Dublin Airport's current level. This approach recognises the uncertainty in the external benchmarks while still applying a targeted efficiency challenge where the evidence is strongest.

Our updated evidence supports a different conclusion from previous CEPA assessments of Central Functions. Earlier reviews identified this as an area with broader scope for efficiency challenge. In this review, the evidence is more mixed: FTEs have increased, but payroll costs remain below the CEPA 2022 forecast and aggregate airport benchmarking does not indicate that Dublin Airport is an outlier. We therefore do not consider that a broad top-down adjustment to Central Functions is justified. The evidence supports a targeted challenge focused on HR.

²³ <https://www.shrm.org/topics-tools/news/talent-acquisition/how-many-hr-staff-members-is-best-shrm>

²⁴ <https://www.cipd.org/en/views-and-insights/thought-leadership/insight/technology-data-hr-functions/>

²⁵ This range is also in line with the interquartile range we estimate from a wider set of industry benchmarks.

7.3. EFFICIENT COST FORECAST

We forecast Central Functions expenditure from the 2025 efficient baseline, with a targeted adjustment to HR. For most Central Functions categories, the 2025 outturn is used as the efficient starting point. We then apply limited cost drivers where staffing requirements can reasonably be expected to vary with airport scale.

The forecast applies the following treatment:

Table 7.2: Summary of approach used to forecast Central Functions staffing

Sub-category	Forecast treatment
HR	Set on a glidepath towards 2.0 HR FTEs per 100 total FTEs by 2031.
Platinum Services	Linked to passenger growth, using an elasticity of 0.4 reflecting the activity-related nature of the service. We retain the same elasticity used in the 2022 study.
Commercial, Shared Services and Graduates	Linked to passenger growth at a low elasticity - These are all activities where we may expect some growth in activity as an airport gets larger. We use an elasticity of 0.15, informed by our econometric benchmarking.
Other Central Functions	Held flat in FTE terms, in line with the approach taken in our 2022 study. These are all areas where we do not expect staffing levels to necessarily increase with airport scale (e.g. communications, legal). As such, we consider it more appropriate to assess increases in staffing through a Need-Additionality-Efficiency framework.

Source: CEPA analysis

The table below presents our resultant FTE forecasts and compares them against Dublin Airport's proposals. We observe that the key difference between our forecast and Dublin Airport's is a result of the efficiency challenge we apply to HR staffing.

Table 7.3: Forecast of Central Functions staffing levels, 2025–2031 (FTEs)

Central Functions	2025	2026	2027	2028	2029	2030	2031
CEPA forecast							
Commercial: Platinum Services	34	35	35	35	36	36	36
Commercial: Car Parks	8	8	8	8	8	8	8
Commercial: Property and Concessions	23	23	24	24	24	24	24
Commercial: Other Commercial	21	21	21	21	21	21	21
Finance: Finance	22	22	22	22	22	22	22
Finance: Shared Services	53	53	53	54	54	54	54
HR: HR	75	74	72	69	67	65	63
HR: Long-term absent	38	38	38	38	38	38	38
Support: Strategy and Regulation	18	18	18	18	18	18	18
Support: Procurement	16	16	16	16	16	16	16
Support: Communications	10	10	10	10	10	10	10
Support: Legal	4	4	4	4	4	4	4
Support: Safety and Sustainability	11	11	11	11	11	11	11
Support: Administration	24	24	24	24	24	24	24
Other: Airport Management	9	9	9	9	9	9	9

Central Functions	2025	2026	2027	2028	2029	2030	2031
Other: Graduates	15	15	15	15	16	16	16
Total	382	382	381	379	378	376	375
Dublin Airport forecast							
Commercial: Platinum Services	34	34	35	36	37	38	39
Commercial: Car Parks	9	9	9	9	9	9	9
Commercial: Property and Concessions	36	36	36	36	36	36	36
Commercial: Other Commercial	12	12	12	12	12	12	12
Finance: Finance	21	21	21	21	21	21	21
Finance: Shared Services	51	51	51	51	51	51	51
HR: HR	78	72	72	72	72	72	72
HR: Long-term absent	38	38	38	38	38	38	38
Support: Strategy and Regulation	16	16	16	16	16	16	16
Support: Procurement	15	15	15	15	16	16	16
Support: Communications	9	9	9	9	9	9	9
Support: Legal	5	5	5	5	5	5	5
Support: Safety and Sustainability	9	9	9	9	9	9	9
Support: Administration	24	24	24	24	24	24	24
Other: Airport Management	8	8	8	8	8	8	8
Other: Graduates	15	35	35	35	35	35	35
Total	385	395	396	397	398	400	401

Source: CEPA analysis, Dublin Airport Regulatory Proposition

Note: We have re-categorised individual business units to better align them with our understanding of their function, which results in a different allocation to the one used by Dublin Airport. We have sought to align the presentation of Dublin Airport with our re-categorisation.

Table 7.4 compares our Central Functions expenditure forecast with Dublin Airport's forecast. We calculate our forecast by multiplying the FTE forecast by our projected unit payroll costs and applying ongoing efficiency.

Table 7.4: Forecast of Central Functions expenditure, 2025–2031 (€m, Mar 2026 prices)

Central Functions	2025	2026	2027	2028	2029	2030	2031
CEPA forecast	39.9	39.9	39.7	39.8	39.8	39.8	39.8
Dublin Airport forecast	38.8	38.8	38.8	38.8	38.8	38.8	38.8

Source: CEPA analysis, Dublin Airport regulatory proposition

8. IT

The IT function covers payroll costs associated with directly employed staff and non-pay costs associated with operations and support contracts.

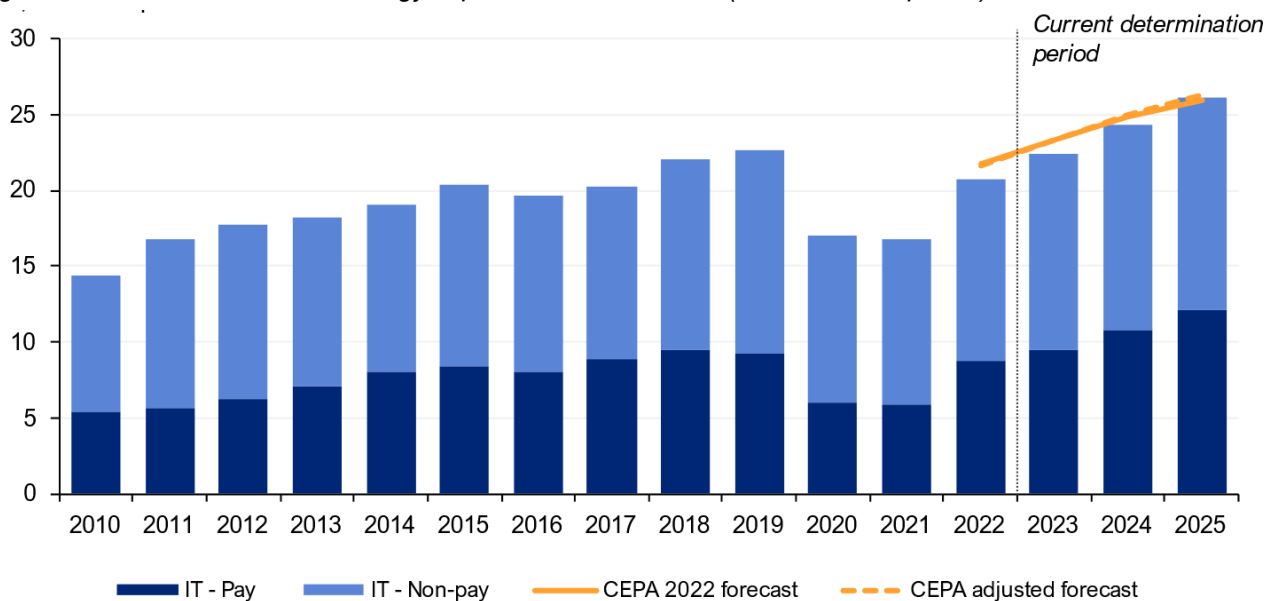
We set the efficient IT baseline at 3.0% of revenue, modestly below Dublin Airport's adjusted 2025 outturn of 3.2% of revenue. Dublin Airport is not a clear outlier relative to airport benchmarks: its non-pay IT expenditure is below the comparator airport range though its combined pay and non-pay IT expenditure is towards the top end of the benchmarking range. As such, our efficiency challenge is concentrated in pay, where Dublin Airport has not sufficiently demonstrated that the scale of its IT staffing growth is genuinely additional to benchmarked efficient expenditure.

We project efficient IT expenditure forward using an elasticity of 0.2 for pay and 0.4 for non-pay to passenger growth and separately address the opex implications of the CIP IT programme.

8.1. TRENDS IN HISTORIC EXPENDITURE

Dublin Airport's IT and Technology expenditure increased by 16% in real terms between 2019 and 2025, broadly in line with the trajectory assumed in the CEPA 2022 forecast. Figure 8.1 sets out total IT expenditure against the 2022 forecast over this period.

Figure 8.1: Historic IT and Technology expenditure, 2010–2025 (€m, Mar 2026 prices)



Source: CEPA analysis of Dublin Airport data and IAA 2022 Decision

Within the aggregate figure, pay and non-pay costs have grown at markedly different rates. Pay costs rose by approximately 30% in real terms between 2019 and 2025; non-pay costs rose by approximately 6%.

Dublin Airport attributes the aggregate increase to four factors:

- a larger technology footprint, with associated increases in licence, support and maintenance costs;
- the movement of some costs from capital to operating expenditure as the business transitions towards software-as-a-service products;
- investment in technology and IT staff intended to deliver efficiencies or revenue growth elsewhere in the business; and
- additional investment in cyber security.

These are plausible drivers of higher IT costs, and we do not dispute them as directional explanations. The question for this review is whether the scale of the increase is consistent with efficient operation.

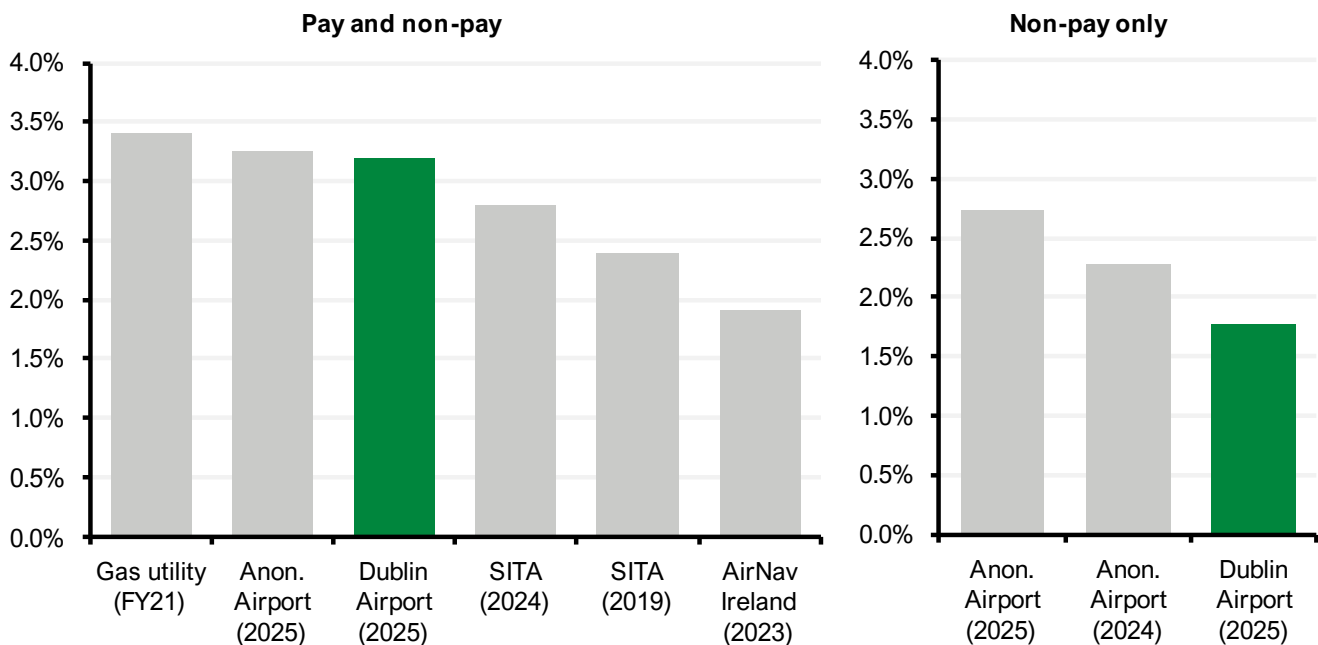
8.2. VIEW ON THE EFFICIENT BASELINE

Benchmarking evidence

Below, we benchmark IT expenditure as a share of total revenue. This metric normalises for differences in scale and operating model across comparators and reflects the broad relationship between the size of a business and the level of IT investment required to support it.

In 2025, Dublin Airport's combined pay and non-pay IT expenditure was equal to 3.1% of total revenue. Including approximately €0.9 million of licence costs captured within Other Non-Pay, which are IT expenditure in substance, the adjusted figure is 3.2% of revenue. Figure 8.2 sets out how this compares with a range of airport and regulated infrastructure benchmarks.

Figure 8.2: Ratio of IT spend to revenues, Dublin Airport and benchmark comparators (%)



Source: CEPA analysis of Dublin Airport data and published and unpublished comparator data

Examining non-pay IT in isolation, Dublin Airport spends approximately 1.8% of revenue against a comparator airport range of 2.3% to 2.8%. On a total IT basis, Dublin Airport's adjusted spend of 3.2% of revenue is modestly below the 3.3% observed at the closest airport comparator but sits above the mean of the wider regulated infrastructure benchmark range of 1.9% to 3.4%, and above the SITA airport benchmarks.

Assessment of IT spending growth

The two principal drivers of IT pay growth to 2025 identified in Dublin Airport's Regulatory Proposition, are an 18 FTE increase in the Digital team, and a 5 FTE increase in Cyber. We apply the Need-Additionality-Efficiency framework to these drivers to assess whether the growth they represent is consistent with efficient operation and whether it justifies setting the efficient baseline above the central airport-relevant benchmark. Table 8.1 sets out the assessment.

Table 8.1: Need-Additionality-Efficiency assessment of IT spending growth drivers

Step change	Need	Additionality	Efficiency	Conclusion
Digital capability, +18 FTE	Partial. The increase supports commercial channel shift and revenue growth but is not primarily driven by an external obligation or unavoidable operating requirement.	Not demonstrated. To the extent the additional Digital FTEs support higher commercial revenue, that benefit is already reflected in the revenue denominator of the IT benchmarking metric.	Not evidenced. The available evidence does not establish that 18 FTEs is the efficient scale of resource required, or that the cost is exceeded by incremental revenues.	Does not justify a higher baseline. A separate allowance would likely risk a double-count against the revenue denominator in the benchmark.
Cyber, +5 FTE	Stronger relative to Digital Capability step-change. The uplift is linked to a worsening cyber threat environment and the need to protect critical airport infrastructure systems.	Not demonstrated. Cyber risk is common across critical infrastructure operators, and mature cyber capability is already reflected in the comparator airport and regulated infrastructure benchmarks.	Not evidenced. Dublin Airport has not provided sufficient evidence on the efficient split between internal cyber FTEs and outsourced monitoring, detection and incident response services.	Does not justify a higher baseline on current evidence. Dublin Airport should provide further evidence on cyber maturity gaps, compliance requirements, and efficiency of step-change.

Source: CEPA analysis of Dublin Airport Regulatory Proposition

Dublin Airport's stated rationale for the Digital capability step change, i.e. increasing B2C penetration of car parking, lounges and Fast Track, and reducing direct marketing and in-path selling costs, is commercially coherent. However, we do not consider these additional to our benchmark. Any revenue benefit from higher digital channel penetration already improves Dublin Airport's benchmark position through the revenue denominator. Recognising the Digital uplift in the baseline on top of this would likely double count.

The Cyber step change has a stronger need case. Dublin Airport points to AI-enabled phishing and ransomware, investment in Zero Trust architecture, vulnerability management, and compliance with NIS2, Part-IS and ISO27001. Cyber investment is a credible requirement for a critical infrastructure operator. Because comparable airports and infrastructure companies face similar risks, some cyber capability is already reflected in the benchmarks; the remaining question is whether Dublin Airport's proposed 5 FTE uplift is incremental and efficiently split between internal and outsourced capability.

Efficient baseline

Having considered the benchmarking evidence and the drivers of IT pay growth, we set the efficient baseline at 3.0% of revenue. This is modestly below the adjusted 2025 outturn of 3.2% of revenue and reflects the average of the SITA benchmark and the comparator airport figure, giving appropriate weight to the higher IT intensity typically observed at airports relative to other regulated infrastructure businesses.

8.3. EFFICIENT COST FORECAST

Cost driver and elasticity

We forecast efficient IT expenditure using passenger growth as a partial driver, with different elasticities for pay and non-pay costs. IT expenditure is partly related to airport scale: higher passenger volumes increase the need for resilient systems, passenger processing capability, digital channels, operational data, cyber protection and vendor support. However, IT costs do not scale directly with passenger volumes. A material share of the IT cost base

supports core infrastructure, architecture, governance, cyber monitoring, network availability, vendor management and business systems that are required regardless of incremental passenger growth.

For IT payroll, we apply a passenger elasticity of 0.2, while for IT non-pay we apply a passenger elasticity of 0.4, drawing on the statistical evidence presented in Appendix C. The differential treatment between pay and non-pay reflects our view that the variable elements of IT expenditure are more likely to sit within non-pay costs than pay, e.g. licences, cloud services, vendor support and system maintenance. Dublin Airport has used an elasticity of 0 for pay costs.

We then separately assess step changes in IT expenditure as a result of the CIP.

Pay

Our application of an elasticity of 0.2 produces a forecast of 94 FTE in 2027, rising to 96 FTE by 2031. Table 8.2 compares this with Dublin Airport's proposition of 97 FTE held flat across the determination period.

Table 8.2: Baseline forecast of IT staffing levels, 2025–2031 (FTEs)

IT staffing	2025	2026	2027	2028	2029	2030	2031
CEPA baseline forecast	93	94	94	95	96	96	96
Dublin Airport forecast	99	97	97	97	97	97	97

Source: CEPA analysis, Dublin Airport Regulatory Proposition

Table 8.3 compares our IT pay forecast with Dublin Airport's forecast. Our forecast, including the ongoing efficiency assumption, is below Dublin Airport's forecast throughout the determination period.

Table 8.3: Baseline forecast of IT pay expenditure, 2025–2031 (€m, Mar 2026 prices)

IT pay expenditure	2025	2026	2027	2028	2029	2030	2031
CEPA baseline forecast	11.4	11.5	11.5	11.7	11.8	11.9	12.0
Dublin Airport forecast	12.1	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘

Source: CEPA analysis, Dublin Airport Regulatory Proposition

Non-pay

In addition to our application of a passenger elasticity of 0.4, we also apply a wage growth allowance to contract costs, on the basis that approximately 30% of IT contract expenditure is labour-related, covering vendor support staff. The non-pay expenditure also incorporates our ongoing efficiency assumption. The remaining 70% is treated as non-labour in nature, comprising intellectual property, scale-based pricing and vendor margin.

This approach produces a materially lower forecast than Dublin Airport's proposition across the determination period. The divergence arises primarily from a step increase Dublin Airport has budgeted in 2026. Dublin Airport has not provided sufficient evidence to demonstrate that this step increase is efficient or additional to the benchmarked baseline, and we do not include it in our efficient forecast.

Table 8.4 compares our baseline IT non-pay forecast with Dublin Airport's forecast.

Table 8.4: Baseline forecast of IT non-pay expenditure, 2025–2031 (€m, Mar 2026 prices)

IT non-pay expenditure	2025	2026	2027	2028	2029	2030	2031
CEPA baseline forecast	14.1	14.3	14.4	14.6	14.8	15.0	15.1
Dublin Airport forecast	14.1	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘

Source: CEPA analysis, Dublin Airport Regulatory Proposition

CIP-related IT opex impacts

A number of CIP projects are expected to have associated technology costs. The relevant projects are not all IT projects in a narrow sense. Some are airport development, sustainability or security projects with associated technology support costs, while others sit within the IT envelope and relate to the refresh or expansion of Dublin Airport's core digital estate.

The CIP27 submission shows that the IT envelope comprises 14 projects, with a total estimated capex of €146.1 million. These projects cover passenger processing, the digital passenger experience, airfield systems, innovation and AI, sustainability reporting, commercial technology, operational devices, cyber resilience, operational reliability, networks, servers and storage, enterprise applications, cloud and disaster recovery, and data integrations. The CIP also identifies security projects relevant to IT opex, including intrusion detection, the T2 staff screening expansion and security innovation and technology.

We have grouped the relevant CIP-related impacts into three categories for the purposes of the IT opex assessment:

- Projects that introduce or expand security screening equipment at different parts of the airport estate.
- Other airport development, sustainability and monitoring projects with small technology support impacts.
- Core IT projects that sit within the 27.06 series in the CIP. These include both (i) genuine expansions, for example digital passenger channels, cyber resilience, airfield technology and data platforms; and, (ii) lifecycle refresh, for example operational devices, networks, servers, storage and enterprise applications.

Dublin Airport's approach of estimating technology opex as a percentage of capex is a reasonable high-level approach at this stage of project maturity. It is consistent with the nature of the costs, which are mainly licences, cloud services, vendor support and system maintenance. However, we do not consider the resulting estimates to be fully evidenced. Dublin Airport has not outlined the percentages applied by project, the supporting calculations, or the evidence from technology and security leads that underpins those percentages.

We have two key areas of concern:

- The technology operating cost associated with the security screening equipment appears to relate to support costs, which have historically been treated as maintenance expenditure. The quantum of the opex estimate also appears large relative to existing security screening support costs.
- There are several projects described as lifecycle replacement or platform refresh, where opex impacts are unlikely to be additional. For example, Operational Devices (CIP.27.06.07) covers the replacement and upgrade of workstations, mobile devices, handheld scanners, telephony, radio systems, digital signage and meeting room technology. Business Efficiency and Enterprise Applications (CIP.27.06.12) covers enterprise application upgrades, automation, ServiceNow, Oracle Fusion and related business systems. The opex impacts associated with these projects are not necessarily incremental to the baseline, particularly where the cost driver is staff numbers, the size of the existing device estate or replacement of systems already supported today.

On this basis, our treatment of the CIP-related IT opex impacts is as follows:

Table 8.5: Treatment of CIP-related IT opex impacts

Category and relevant projects	Treatment
Security screening equipment	Apply a 50% efficiency adjustment to the opex impacts.
Other development, monitoring and CCTV technology	Accept. These costs are small relative to the IT baseline at less than €300,000 over the whole determination period.

Category and relevant projects	Treatment
Core IT projects, general treatment	Accept most proposed impacts as a working position, subject to Dublin Airport providing the project-level percentages and supporting calculations. A 2% of capex rule of thumb appears reasonable for many technology refreshes and expansions.
Operational Devices	Apply a 100% efficiency adjustment to the proposed opex impact. The project is primarily driven by the scale of the device estate and headcount, which are already reflected in the non-pay elasticity and the baseline.
Business Efficiency and Enterprise Applications	Apply a 75% efficiency adjustment to the proposed opex impact. Some incremental licence or cloud costs may be justified, but much of the cost relates to enterprise systems and workforce-facing applications that should already be captured in the baseline or by the elasticity approach.

Source: CEPA analysis of Dublin Airport CIP submission

These adjustments retain an allowance for genuinely incremental CIP-related non-pay costs while avoiding double counting. This is particularly important because the baseline forecast already grows with passenger volumes and includes an allowance for wage-related growth in IT contract costs. A separate CIP uplift should therefore be limited to costs that are additional to the existing technology estate and not already captured by the baseline projection.

Table 8.6 provides our forecast of IT non-pay costs including the adjusted CIP-related impacts and ongoing efficiency assumption.

Table 8.6: CIP-adjusted forecast of IT non-pay costs incl. CIP impacts, 2025–2031 (€m, Mar 2026 prices)

IT non-pay	2025	2026	2027	2028	2029	2030	2031
CEPA forecast	14.1	14.3	14.8	15.4	16.1	17.1	17.9
Dublin Airport forecast	14.1	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘

Source: CEPA analysis, Dublin Airport Regulatory Proposition

9. FACILITIES

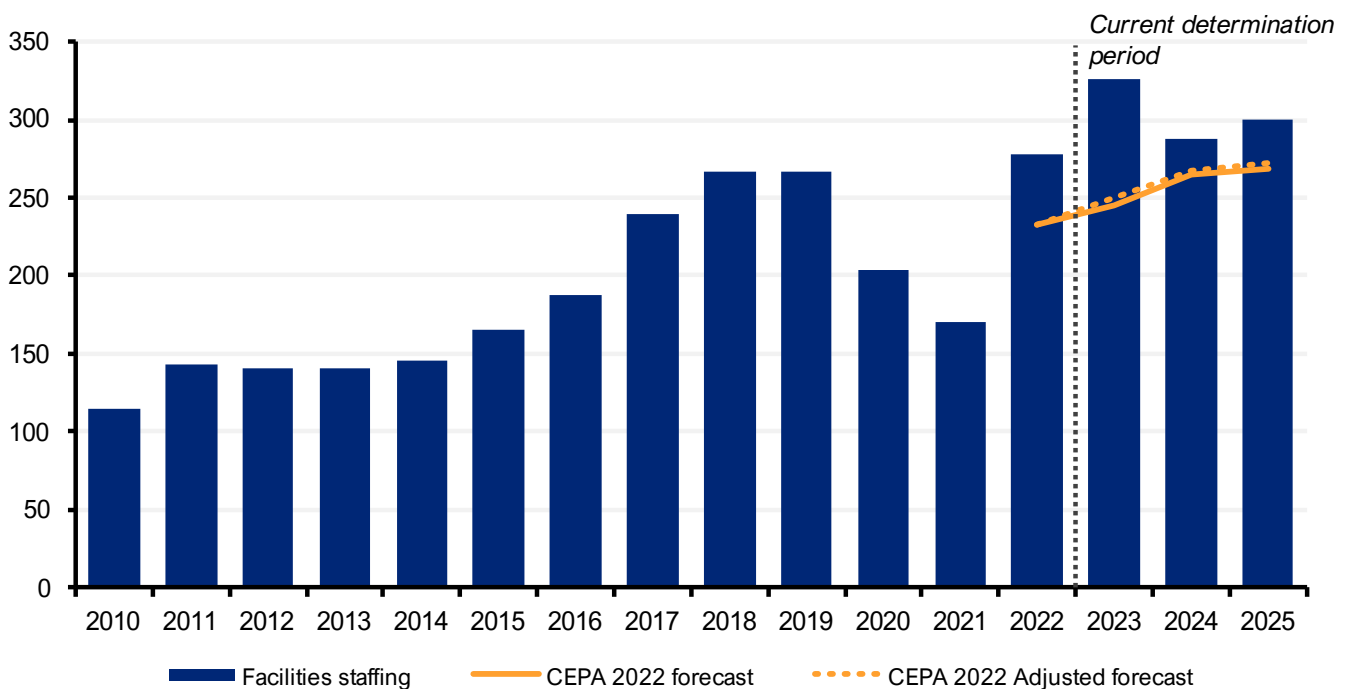
Dublin Airport's Facilities function covers passenger-facing operational support roles (and associated management) as well as control centre staff. Together, these teams support the day-to-day operation of the terminals and landside areas by providing wayfinding and customer support, supporting taxi-rank and ground transport operations, managing trolleys and managing passenger flows at processors such as check-in, arrivals, immigration, transfers and US preclearance.

We set Dublin Airport's efficient Facilities forecast below the level proposed within its Regulatory Proposition, as the projected staffing increase is not sufficiently supported by the evidence provided. Dublin Airport has made a credible case that Facilities staffing needed to increase after 2022. The evidence supports an uplift above the 2022 decision level, but not the full scale of the further increase proposed for 2027–2031.

9.1. TRENDS IN HISTORIC EXPENDITURE

Dublin Airport's Facilities expenditure and staffing have increased gradually since 2022. Outturn staffing levels in 2025 were higher than the levels assumed in the 2022 IAA Determination, as shown in the figure below. This is in part due to the scale of the baseline efficiency challenge proposed in our 2022 forecast.

Figure 9.1: Historic Facilities staffing levels, 2010–2025 (FTEs)



Source: CEPA analysis of Dublin Airport data and IAA 2022 Decision

Note: The 2022 CEPA forecast combined Facilities staffing with Car Parks staffing. For this report, we have separated them and Car Parks are captured in section 15.

The comparison with the 2022 FTE forecast requires care. The CEPA 2022 FTE forecast was developed based on the 2019 mix of experienced and junior staff, while the post-pandemic operating environment includes greater proportion of recently hired staff. This means that direct FTE comparisons between the CEPA 2022 forecast and outturn do not provide, on their own, a reliable indicator of efficiency.

Facilities staffing increased from 278 FTEs in 2022 to 300 FTEs in 2025. Dublin Airport attributes the increase to passenger growth, operating constraints and specific additions in passenger-facing roles. In particular, it identifies 23 FTEs for summer trolley management and outdoor cleaning, and 10 FTEs for taxi ranks and wayfinding. These are plausible areas of operational need, given passenger growth, higher terminal density and landside congestion.

However, Dublin Airport has not provided a detailed audit trail showing how these specific FTE numbers were calculated, how they split across tasks, or what service outcomes they delivered.

The 2025 baseline therefore appears to include some necessary additional resource, but Dublin Airport has not evidenced that the full outturn level is efficient. This is consistent with the broader pattern in the evidence: while Dublin Airport has provided a credible explanation for why Facilities staffing may need to increase, there is less evidence on the right-sized level of resource.

Table 9.1: Facilities staffing productivity indicators, historic and Dublin Airport forecast

Metric	2019	2022	2025	2026 Dublin Airport budget	2031 Dublin Airport forecast
Passengers (millions)	32.9	28.1	36.4	37.5	42.3
Facilities FTEs	267	278	300	303	366
- of which terminal facilities	213	206	237	240	303
- of which control centre	54	72	64	63	63
Facilities FTEs per million passengers	8.1	9.7	8.2	8.0	8.2
- of which terminal facilities	6.5	7.3	6.5	6.3	6.8
- of which control centre	1.6	2.6	1.7	1.6	1.4

Source: CEPA analysis of Dublin Airport data and Dublin Airport Regulatory Proposition

9.2. BOTTOM-UP TASK MODEL

Dublin Airport's 2027–2031 Facilities forecast is based on a bottom-up task model. The model estimates staffing requirements by activity area and then applies assumptions for shrinkage (i.e. absence, training, leave etc.), coverage (i.e. natural inefficiencies in the roster), seasonality, supervision and operational resilience. This is a reasonable framework in principle. Facilities staffing is not driven only by annual passenger volumes. It also depends on passenger waves, terminal layout, fixed posts, queue-management needs and the location of operational pinch points.

However, we do not consider Dublin Airport's model sufficiently reliable as the primary basis for the forecast. There are four main reasons:

- The model does not align well with Dublin Airport's own narrative. Dublin Airport argues that the shoulder periods are becoming busier, increasing the requirement for Facilities staff across a larger part of the year. That is a plausible argument. The evidence also suggests that the number of high-volume days is increasing. However, the bottom-up task model is mainly structured around staffing requirements on a typical busy day. It does not provide a clear audit trail showing how busier shoulder periods, weekly variation or seasonal flattening are converted into annual FTE requirements.
- The forecast implies an increase in terminal facilities staffing intensity. Dublin Airport's 2031 forecast implies a higher terminal facilities FTE per passenger than in 2019, 2025 and 2026, implying diseconomies of scale. This may be justified if congestion becomes materially worse or if there are new activities that require additional fixed posts. However, Dublin Airport has not demonstrated that the relationship between passengers and Facilities staffing should become materially more elastic during 2027–2031 than it was during 2022–2025. We note that, in 2022, Dublin Airport similarly claimed that capacity constraints would soon generate an inflection point where an elastic response in terms of facilities staffing would be required over that period. It also provided a similar task-based model which, as we suggested in 2022, has transpired to significantly overestimate facilities staffing requirements despite expected passenger volumes in 2026 being approximately 4 million higher than Dublin Airport was forecasting.

- Several model assumptions appear to overlap. The bottom-up task analysis is built around a busy-day requirement. Dublin Airport then applies shrinkage, coverage and a separate resilience allowance. Each adjustment may have a role in principle, but Dublin Airport has not shown that they address distinct requirements. In particular, the coverage and resilience adjustments risk double counting flexibility that is already present in the task model and in the ability to redeploy Facilities staff between locations during the day.
- Finally, some proposed activity increases are affected by CIP27 projects. The clearest example is the Terminal 2 CBP and Transfer Extension, which is intended to address peak-period constraints in US preclearance and transfers. If the forecast includes higher staffing for CBP and transfer queue management in 2031, it should also reflect the operational effect of the new facility. Dublin Airport has not provided a post-project Facilities operating model for these areas.

We therefore use Dublin Airport's 2026 bottom-up task model to understand the types of activities currently being undertaken by Facilities staff on a typical busy day, but do not directly use its 2031 task model to set the efficient forecast.

Resilience adjustment

In its bottom-up task model, Dublin Airport includes a 5% resilience uplift for operational Facilities staffing, for the years 2027 to 2031. We do not accept this proposed resilience uplift. We recognise that resilience is a legitimate consideration, but Dublin Airport has not defined the specific resilience risk being addressed, why the need is additional to the 2025 baseline, the response capability it requires, or the role that additional Facilities staff would play in managing that risk. A credible resilience case would distinguish between measures that reduce the likelihood of incidents, usually through asset hardening or targeted capital investment, and measures that reduce the impact of incidents once they occur, such as contingency planning, trained response teams, exercised protocols and stakeholder coordination. Dublin Airport's proposal does not make that distinction. Instead, it applies a blanket 5% uplift to Service Delivery Team Members, without linking the allowance to incident data, scenario modelling, business continuity plans, or defined response roles.

We therefore consider the uplift to be insufficiently evidenced and poorly targeted. The incidents Dublin Airport cites, such as cyber disruption affecting airline check-in systems, would not be materially addressed simply by having a small permanent increase in customer-service headcount. In those circumstances, Dublin Airport's role is primarily to manage downstream congestion, passenger flows and stakeholder coordination, which requires clear contingency plans, trained staff and exercised response protocols. Additional unallocated staff, without a defined deployment model, do not constitute a resilience measure. Allowing a standing percentage uplift would also risk embedding a generic contingency into the baseline, creating a ratchet effect in future determinations. On the current evidence, we consider resilience would be better addressed through a clearly defined business continuity and contingency-planning capability, supported by evidence of risk exposure, scenario testing and lessons learned from past incidents, rather than through a blanket Facilities staffing uplift.

CIP27 implications

We note that many of the projects within CIP27 are explicitly designed to relieve the pinch points identified in Dublin Airport's Regulatory Proposition, such as the proposed Terminal 2 CBP and Transfer Extension, which we consider further weakens the case for a large uplift in Facilities staffing.

Other projects proposed within the CIP may have a more mixed effect, although many of those projects are unlikely to be delivered until after 2031. Pier projects may reduce passenger-flow friction, but they may also create additional space that needs to be staffed. Landside projects, including the Integrated Transport Hub and junction upgrades, may reduce ground transport congestion, but some benefits appear late in the period or after 2031. We therefore do not apply a broad CIP-related adjustment.

9.3. EFFICIENT COST FORECAST

We use two approaches to setting an efficient baseline for 2025 and forecasting efficient Facilities staffing over 2026–2031.

- **Approach 1: roll forward the 2025 outturn using recent elasticity.** This approach uses Dublin Airport's 2025 outturn as the starting point and applies an elasticity of 0.5 to passenger growth for terminal facilities staff and 0.1 for control centre staff. This reflects the implied relationship between Facilities FTEs and passengers between 2022 and 2025. It gives weight to Dublin Airport's recent operating experience, including the post-pandemic increase in Facilities staffing, while recognising that Facilities requirements should not grow one-for-one with passengers.
- **Approach 2: use the bottom-up task model as a cross-check.** For 2025 staffing levels, we take Dublin Airport's task model and adjust it where the assumptions are not well evidenced. Specifically, we remove the roster coverage allowance as the staffing model assumes no daily variation in activity requirements (and so, limited need for a coverage adjustment), and we reduce the shrinkage adjustment to 25%.²⁶

For 2031, we use Dublin Airport's 2026 task analysis as a starting point but amend the seasonality assumption to proxy the impact of the shoulder periods becoming fuller and operational demand becoming less seasonal. Dublin Airport's task model applies a winter seasonality adjustment of 0.85, which we change to 0.90. A higher seasonality factor is more consistent with Dublin Airport's stated driver of Facilities demand than a model that relies primarily on a busy-day requirement and a stronger winter reduction.

These two approaches provide a range for the efficient 2025–2031 Facilities requirement. We propose to use the midpoint as our central forecast, as shown in the table below. Ahead of the Final Determination, we will consider whether to put full weight on one or the other of these approaches, or alternatively to continue to put weight on both of them.

Table 9.2: Forecast of Facilities staffing, 2025–2031 (FTEs)

Facilities staffing	2025	2026	2027	2028	2029	2030	2031
Approach 1: Roll-forward approach	300	304	308	311	315	318	320
Approach 2: Task-model sense check	282	284	285	286	287	288	289
CEPA forecast	291	294	296	299	301	303	305
Dublin Airport forecast	300	300	300	300	300	300	300

Source: CEPA analysis, Dublin Airport Regulatory Proposition

Our forecast recognises that Dublin Airport requires more Facilities resource than was assumed in the CEPA 2022 forecast. This reflects passenger growth, higher terminal density, landside pressures and the operational role Facilities staff play in managing passenger flows. However, we do not include the full step change implied by Dublin Airport's 2031 task analysis. The task model does not adequately explain why Facilities staffing should become materially more elastic to passenger growth over 2027–2031, particularly when Dublin Airport's own narrative emphasises fuller shoulder periods rather than higher busy-day staffing alone.

The table below compares Dublin Airport's payroll forecast with our forecast, which is calculated by multiplying our FTE forecast by our projected unit payroll costs, and applying our ongoing efficiency assumption as an overlay.

²⁶ This is based on 10 days public holiday, 20 days statutory annual leave, 6% absence levels (implying around 16 working days), and 2.5% (6.5 days) for other leave (e.g. family leave).

Table 9.3: Forecast of Facilities payroll expenditure, 2025–2031 (€m, Mar 2026 prices)

Facilities payroll	2025	2026	2027	2028	2029	2030	2031
CEPA forecast	19.4	19.9	20.2	20.6	20.9	21.2	21.4
Dublin Airport forecast	21.4	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘

Source: CEPA analysis, Dublin Airport Regulatory Proposition

10. CLEANING

Cleaning at Dublin Airport covers both pay and non-pay expenditure, reflecting two different operating models. Cleaning in Terminal 1 is primarily outsourced and recorded as non-pay expenditure, while cleaning in Terminal 2 is mainly delivered in-house and recorded as pay expenditure.

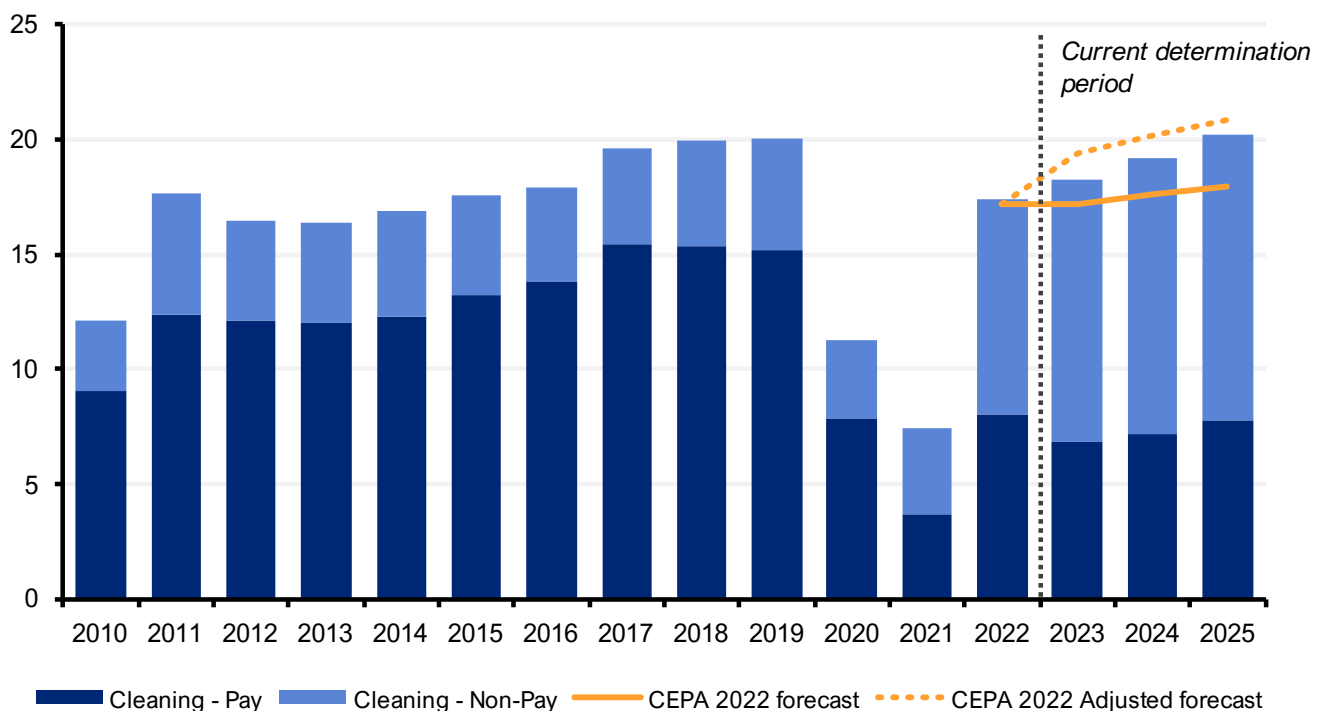
Our analysis finds that pay-related cleaning costs are below the CEPA 2022 adjusted forecast, with cleaning FTEs broadly consistent with the levels assumed in the 2022 Decision. By contrast, non-pay cleaning costs are above the adjusted forecast, and Dublin Airport has not provided sufficient evidence to demonstrate that the full increase is explained by wage pressures, enhanced standards, or higher passenger-related cleaning requirements.

We therefore forecast efficient Cleaning expenditure by using benchmarked unit costs and applying them to passenger volumes and terminal area. We include CIP-related cleaning impacts only where projects create additional cleanable terminal area and treat these impacts as non-pay costs.

10.1. TRENDS IN HISTORIC EXPENDITURE

Cleaning expenditure in 2025 was marginally higher in real terms than in 2019 prior to the Covid-19 pandemic, at just over €20 million. Between 2022 and 2025, total Cleaning expenditure increased by 16%, compared with passenger growth of 30%, implying an elasticity to passenger numbers of slightly above 0.5.

Figure 10.1: Historic Cleaning expenditure, 2010–2025 (€m, Mar 2026 prices)



Source: CEPA analysis of Dublin Airport data and IAA 2022 Decision

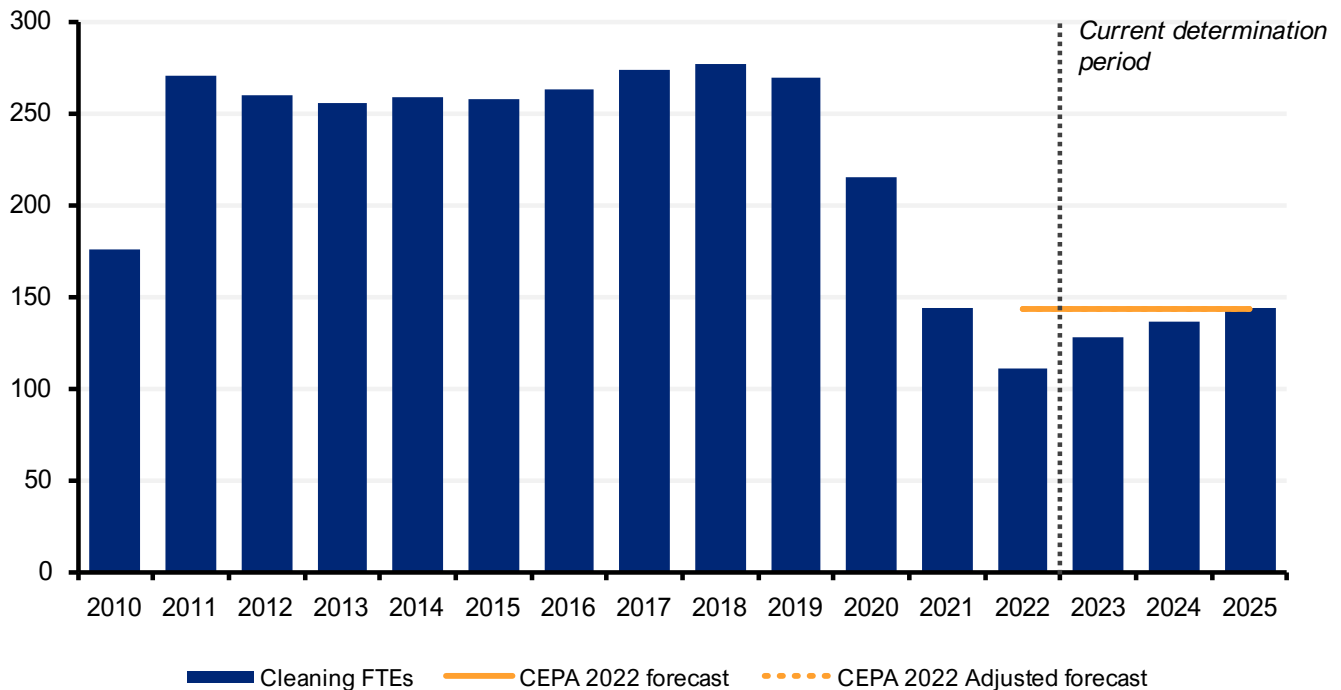
Dublin Airport's outturn Cleaning expenditure has been higher than the CEPA 2022 forecast that informed the IAA's 2022 Decision, but slightly below the adjusted forecast, which reflects outturn passenger and economy-wide wage growth. This suggests that higher passenger volumes and general input cost pressures may explain the increase in Cleaning expenditure compared to the original CEPA 2022 forecast.

However, the aggregate position in Cleaning opex masks a material difference between pay and non-pay expenditure. Compared with the adjusted forecast, pay costs were 15% lower in 2025, while non-pay costs were 6% higher. This distinction is important because non-pay expenditure largely reflects the outsourced cleaning

contract, while pay expenditure largely reflects the in-house cleaning operation. We are not aware of any material changes in the extent of outsourcing that Dublin Airport adopts since the IAA's 2022 Decision, which raises questions as to the underlying drivers of the observed increase in non-pay costs.

Pay cleaning costs do not show the same pattern. As illustrated in Figure 10.2, Cleaning FTEs are broadly in line with the levels assumed in the CEPA 2022 forecast, and the difference in pay expenditure is driven by lower unit payroll costs rather than higher staffing levels for the reasons discussed in Section 3.

Figure 10.2: Historic Cleaning staffing levels, 2010–2025 (FTEs)



Source: CEPA analysis of Dublin Airport data and IAA 2022 Decision

Dublin Airport identifies four explanations for the increase in Cleaning expenditure: underfunding in the 2022 decision, Employment Regulation Orders (ERO) wage inflation, higher cleaning standards and increased cleaning frequency. These factors are relevant, but they do not fully explain the increase in non-pay costs.

The strongest explanation is the higher ASQ cleanliness target, which is likely to have increased cleaning requirements. However, the evidence does not support attributing the full 2023 step change to this factor. After adjusting for wage and passenger growth, around €1.5 million of the 2022–2023 increase remains unexplained. Dublin Airport's own model suggests an annual cost of €0.3 million to €0.6 million for maintaining the 8.5 ASQ score, although this may overlap with other model adjustments.

Overall, while we consider that Dublin Airport's explanations partially account for the increase in non-pay costs, they do not provide a complete explanation for the scale of the increase observed.

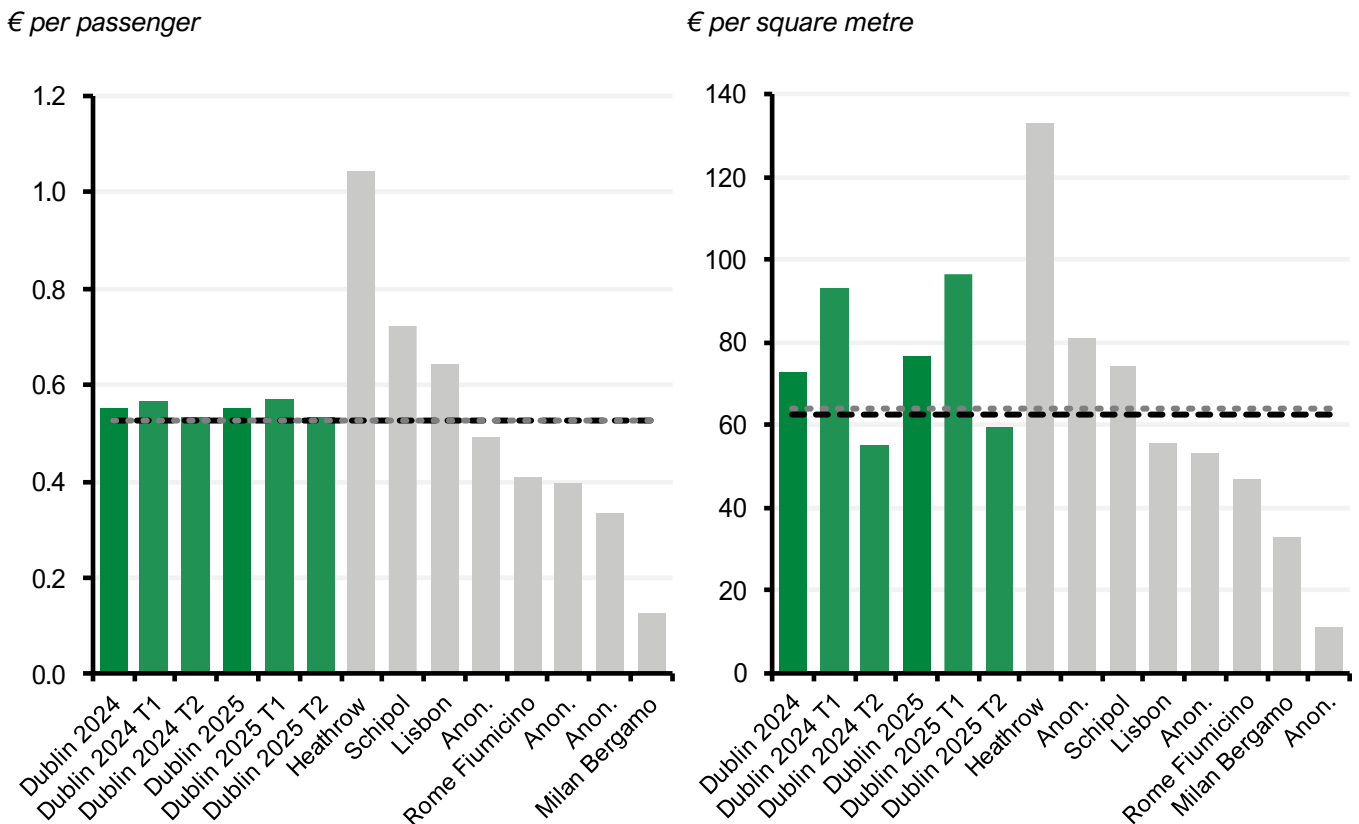
10.2. BENCHMARKING AND VIEW ON THE EFFICIENT BASELINE

Our benchmarking supports a differentiated baseline assessment for Cleaning expenditure. We assess Cleaning expenditure using two unit cost metrics: cost per passenger and cost per square metre of terminal floorspace. These metrics capture different drivers of cleaning activity. Passenger volumes capture the intensity of terminal use, while floorspace captures the fixed-area component of cleaning requirements.

On this basis, Dublin Airport's total Cleaning costs appear broadly aligned with comparator airports on a per-passenger basis. However, the per-square-metre evidence indicates that the main efficiency concern is the

outsourced cleaning operation rather than in-house cleaning, as shown in Figure 10.3, where Terminal 1 outsourced costs are meaningfully above benchmark evidence.

Figure 10.3: Benchmark Cleaning unit costs by passenger and terminal area (€ per pax and m², Mar 2026 prices)



Source: CEPA analysis of Dublin Airport and published and unpublished comparator airport data

Note: The black dashed line shows the average unit cost. The grey dotted line excludes outliers where significant deviations from the average are unexplained or due to factors that limit comparability (Heathrow, Anon. and Milan Bergamo).

There are limitations to this benchmarking. Cleaning cost definitions may differ between airports, particularly where data are drawn from published accounts, and terminal floorspace measures may not be fully comparable. However, the evidence is sufficiently clear to identify where efficiency potential lies. The internal comparison between Dublin Airport's in-house and outsourced operations is based on Dublin Airport's own data and points to the outsourced cleaning contract as the primary area where efficiency potential exists.

We set separate efficient baselines for pay and non-pay Cleaning costs.

- For **pay**, the evidence does not support a downward adjustment: 2025 pay costs were €7.7 million, compared with a benchmarked estimate of €8.1 million.
- For **non-pay**, the evidence supports a downward adjustment: 2025 outturn non-pay costs were €12.5 million, compared with a benchmarked efficient estimate of €9.3 million before any service quality adjustment. We include a €0.9 million service quality adjustment to reflect the possibility that Dublin Airport's cleaning standards, including the 8.5 ASQ target which it did not fully achieve in 2025, require additional expenditure relative to the benchmark. This gives an effective non-pay baseline of €10.2 million.

Overall, our benchmarking produces an efficient 2025 Cleaning baseline of €18.3 million, compared with 2025 outturn expenditure of €20.2 million. This represents an efficiency challenge of 9.3%. The adjustment is concentrated in outsourced cleaning, where the evidence points to an efficiency gap of 25% before the service quality adjustment.

10.3. EFFICIENT COST FORECAST

We forecast efficient Cleaning expenditure consistent with the methodology adopted in the CEPA 2022 forecast. This provides a transparent and replicable framework for projecting efficient Cleaning expenditure over the 2027–2031 regulatory period.

We do not directly adopt Dublin Airport’s Cleaning forecast models within our own forecast. Both models provide useful evidence: the non-pay model identifies drivers of outsourced contract costs, while the pay task model reflects operational requirements such as passenger waves, terminal locations, washroom provision and minimum staffing levels. However, neither model is sufficient as the primary basis for forecasting efficient expenditure. The non-pay model is not sufficiently transparent,²⁷ and the pay model does not demonstrate that the resulting expenditure is efficient or additional. We therefore use both models as supporting evidence rather than as the basis for the forecast.

Based on the benchmarking analysis discussed above, we roll forward the efficient 2025 baseline using the same two cost drivers: passenger volumes and terminal floorspace. We adopt unit costs of €0.53 per passenger and €63.96 per square metre of terminal floorspace, expressed in March 2026 prices. We then combine the two forecast outputs using a 1:2 weighting between passenger volumes and terminal floorspace, consistent with the approach adopted in the CEPA 2022 forecast.

We then apply the forecast separately to pay and non-pay Cleaning expenditure. For non-pay costs, we include a real price effect reflecting wage growth above inflation, recognising the labour-intensive nature of the cleaning contract and the potential significance of ERO wage increases. For pay costs, we derive the implied FTE profile from the expenditure forecast and apply the Facilities and Cleaning unit payroll cost assumptions set out in Section 2.6. We apply the ongoing efficiency challenge to both categories, ensuring the forecast reflects achievable productivity improvements in addition to these cost pressures.

Table 10.1 summarises our Cleaning expenditure forecast including CIP impacts, compared with Dublin Airport’s forecast on the same basis.

Table 10.1: Baseline forecast of Cleaning expenditure, 2025–2031 (€m, Mar 2026 prices)

Cleaning baseline forecast	2025	2026	2027	2028	2029	2030	2031
CEPA forecast							
Non-Pay (T1)	10.2	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘
Payroll (T2)	8.1	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘
Total (excl. CIP)	18.3	18.7	18.9	19.3	19.6	19.8	20.1
Dublin Airport forecast							
Non-Pay (T1)	12.5	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘
Payroll (T2)	7.7	⌘	⌘	⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘
Total (excl. CIP)	20.2	21.9	23.3	24.4	25.4	26.7	27.8

Source: CEPA analysis, Dublin Airport Regulatory Proposition

The difference between forecasts is driven by non-pay Cleaning expenditure. This reflects our lower starting baseline for non-pay costs, based on the benchmarking evidence, and our view that Dublin Airport’s non-pay model may include overlapping adjustments for ASQ-related and passenger-related cost drivers.

²⁷ Certain inputs are hardcoded, the basis for some assumptions is unclear, and some adjustments appear to overlap. In particular, the treatment of ASQ-related costs lacks clarity. The model does not establish whether the cost of maintaining the 8.5 ASQ target is incremental to the fixed contract cost or already embedded within the contract baseline. This creates a risk that some costs are double counted within the forecast through being reflected both in the baseline and elsewhere in the model.

CIP-related forecast impacts

Dublin Airport has identified several CIP-related projects that are expected to affect cleaning expenditure requirements, primarily through changes to terminal area.

We include separate CIP-related Cleaning impacts only where a project increases the amount of cleanable terminal area during 2026–2031. The relevant additionality test is whether the project creates incremental cleanable area that is not already captured within the baseline forecast, passenger growth assumptions, or the terminal-area driver. A separate forecast adjustment is appropriate only where this test is satisfied.

Consistent with Dublin Airport’s approach, we treat these impacts as non-pay costs rather than allocating them between terminals. This reflects the way Dublin Airport has modelled CIP-related cleaning impacts and avoids introducing an unsupported pay/non-pay split. This is a modelling treatment for forecasting purposes only and does not imply that each project is located within, or will be serviced under, the existing outsourced Terminal 1 cleaning contract.

We include three CIP-related cleanable-area impacts in the non-pay forecast. We exclude the Pier 3 Corridor Arrivals Washroom because it is only relevant from Q4 2031 and has an immaterial part-year effect.

Table 10.2: Treatment of CIP-related Cleaning impacts

CIP project	Treatment	Net impact on terminal area (m ²)
27.02.04: T2 CBP and Transfer Extension	Include from 2030	+7,986 (net of demolitions)
27.02.05A: Pier 5 (South Gates)	Include from 2029	-2,205
27.02.18: Pier 1 West, First Floor Extension	Include from 2029	+814
27.02.25: Pier 3 Corridor Arrivals Washroom	Excluded as not expected to be completed until end 2031	+200

Source: CEPA analysis of Dublin Airport CIP submission and Dublin Airport data

Table 10.3 summarises our efficient Cleaning expenditure forecast including CIP impacts, compared with Dublin Airport’s forecast on the same basis.

Table 10.3: Forecast of Cleaning expenditure including CIP impacts, 2025–2031 (€m, Mar 2026 prices)

Cleaning expenditure	2025	2026	2027	2028	2029	2030	2031
CEPA forecast							
Non-Pay (T1)	10.2	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘
Payroll (T2)	8.1	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘
Total (incl. CIP)	18.3	18.7	18.9	19.3	19.5	20.1	20.4
Dublin Airport forecast							
Non-Pay (T1)	12.5	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘
Payroll (T2)	7.7	⌘	⌘	⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘
Total (incl. CIP)	20.2	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘

Source: CEPA analysis, Dublin Airport Regulatory Proposition

The difference in pay expenditure is unchanged relative to the forecast excluding CIP impacts, as CIP-related Cleaning impacts are treated as non-pay costs in both forecasts.

CIP impacts explain only a small proportion of the difference between the two forecasts. The principal divergence between the forecasts remains the underlying non-pay expenditure forecast, rather than the treatment of additional cleanable area, for the reasons discussed above.

11. RETAIL

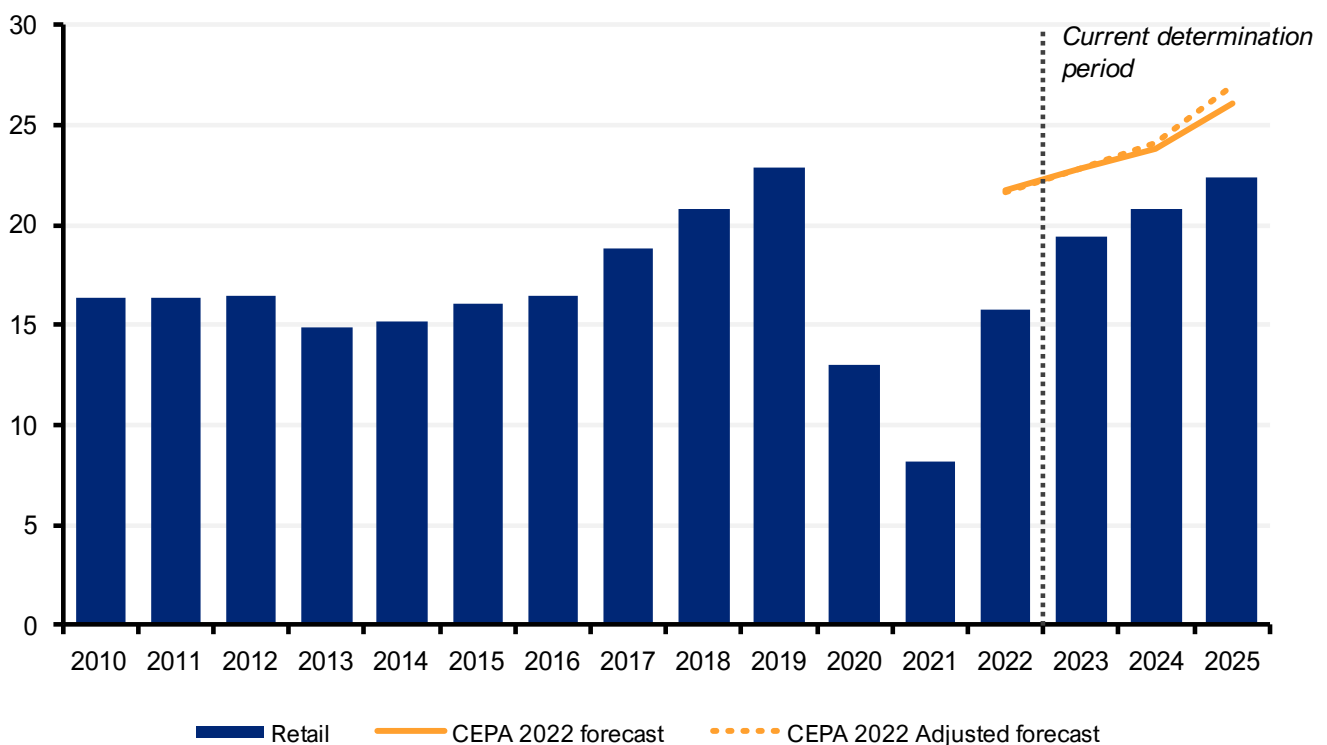
Dublin Airport directly operates the majority of its retail outlets through its subsidiary ARI, with the remaining stores, principally specialist shops and food and beverage outlets, let to concessionaires. As a result, retail staff are employed directly by Dublin Airport and their costs appear in the operating cost base, rather than sitting with third-party operators as is the case at most airports. The Retail category therefore consists entirely of payroll costs.

We use Dublin Airport's 2025 retail payroll costs and FTE levels as the efficient baseline. For the 2027–2031 period, our efficient forecast is below Dublin Airport's proposition, principally because we use passenger volumes rather than commercial revenues as the cost driver and apply a passenger elasticity that reflects the evidence from the historical relationship between staffing levels and passenger volumes.

11.1. TRENDS IN HISTORIC EXPENDITURE

Retail payroll costs and FTE levels have increased over the current determination period and have followed the trajectory of the allowance but consistently below CEPA's 2022 forecast. As shown in Figure 11.1, payroll costs increased gradually before the pandemic, peaked in 2019, fell during the Covid-19 period, and recovered to close to their 2019 level by 2025. Costs remain slightly below the 2022 forecast level.

Figure 11.1: Historic Retail expenditure, 2010–2025 (€m, Mar 2026 prices)

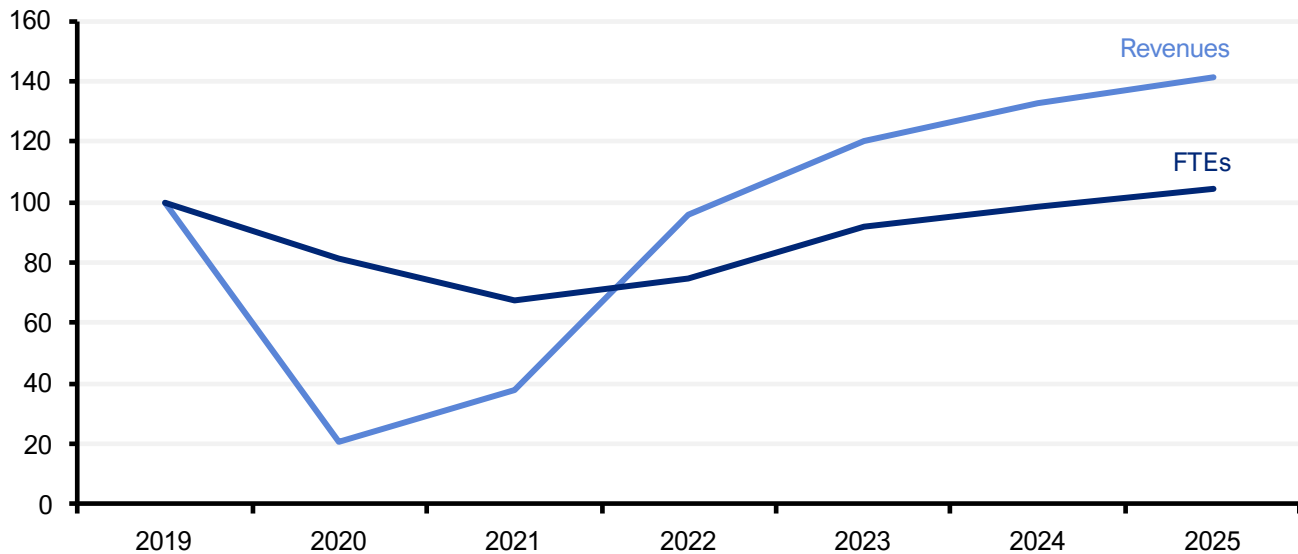


Source: CEPA analysis of Dublin Airport data and IAA 2022 Decision

Retail FTEs follow a similar trajectory, peaking in 2019, falling during the pandemic, and recovering to 360 FTEs by 2025, which compares with CEPA's 2022 forecast of 375 FTEs. The fact that both costs and FTEs have remained below the 2022 forecast throughout the current period is a relevant efficiency indicator. ARI retail staff represent the dominant component of the category, accounting for 92% of total retail FTEs in 2025.

A further relevant efficiency indicator is the divergence between retail revenue growth and FTE growth over the current period. As shown in Figure 11.2, direct retail revenues were approximately 40% above 2019 levels by 2025, while retail FTEs were only approximately 5% higher. Dublin Airport has therefore generated substantially higher direct retail revenues without a proportionate increase in staffing.

Figure 11.2: Retail staffing levels and direct retail revenues, 2019–2025 (Index, 2019=100)



Source: CEPA analysis of Dublin Airport data

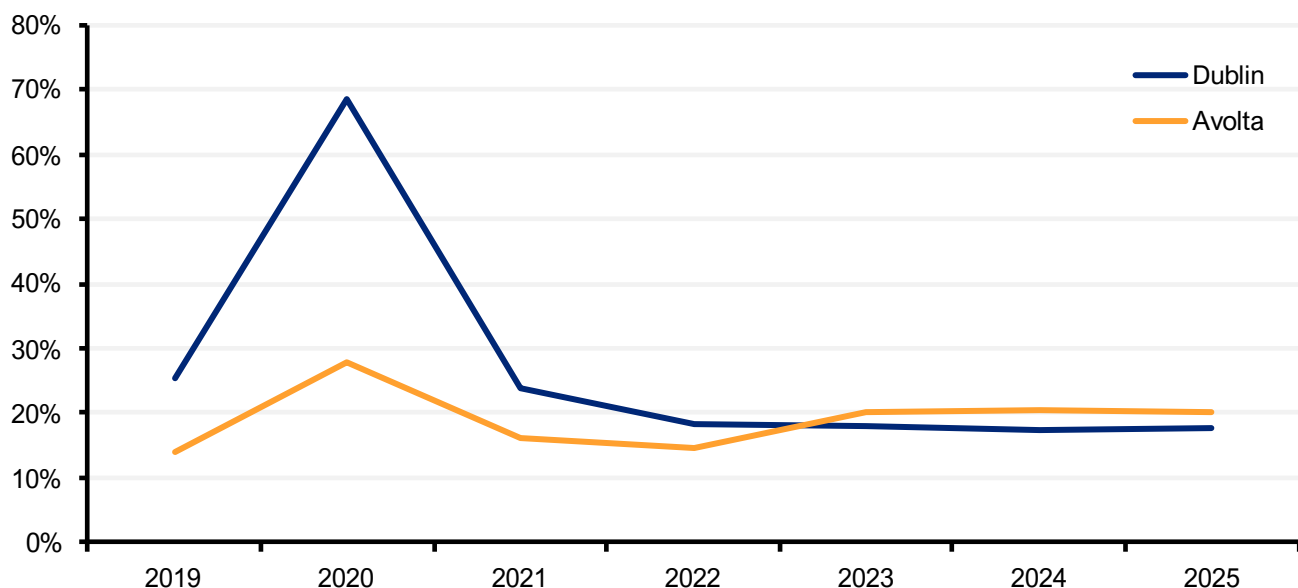
11.2. BENCHMARKING EVIDENCE AND VIEW ON THE EFFICIENT BASELINE

We accept Dublin Airport's 2025 retail payroll costs and FTE levels as the efficient baseline. The outturn data set out above is consistent with this conclusion: both costs and FTEs have remained below the 2022 forecast, staffing has been broadly stable since 2019, and Dublin Airport has absorbed substantial revenue growth without a proportionate increase in headcount.

Benchmarking Dublin Airport's retail payroll costs against other airports is not straightforward because Dublin Airport directly operates many of its own retail outlets. This distinguishes it from the more common airport model, under which retail activity is largely concession-based and staff costs sit with third-party operators.

Figure 11.3 compares Dublin Airport's staff costs as a proportion of direct retail revenues with Avolta, a major duty-free and travel retail operator.

Figure 11.3: Staff costs as a proportion of direct retail revenues, 2019–2025 (%)



Source: CEPA analysis of Dublin Airport data and Avolta annual reporting

The Avolta comparison is not determinative, because Avolta operates across a wider portfolio of markets and does not have the same operating model as Dublin Airport. However, it provides a useful cross-check. Since 2023, Avolta's staff costs as a share of direct retail revenues have been slightly above Dublin Airport's, by around three percentage points. This supports our view that Dublin Airport's 2025 retail payroll costs provide a reasonable efficient baseline.

11.3. EFFICIENT COST FORECAST

We forecast Retail payroll expenditure using passenger volumes as the main cost driver, with separate allowances for evidenced CIP-related staffing uplifts. This approach reflects the historical relationship between passenger volumes and retail FTEs, while avoiding the risk of treating commercial yield growth as a direct staffing requirement.

Baseline forecast

We use passenger volumes, rather than commercial revenues, as the driver for retail staffing. This reflects the evidence in Section 11.1: Dublin Airport has materially increased direct retail revenues since 2019 without a proportionate increase in FTEs. Commercial revenues can increase through pricing, product mix and yield improvement, none of which necessarily creates a corresponding staffing requirement.

We apply a passenger elasticity of 0.4. This sits towards the lower end of our estimated range of 0.34 to 0.64, reflecting two factors. First, retail FTEs have remained below the CEPA 2022 forecast despite passenger volumes exceeding it. Second, we separately allow for evidenced CIP-related staffing uplifts, so a lower baseline elasticity avoids double-counting capital-driven staffing growth.

Additionally, an elasticity of 0.4 reflects our view that, while front-of-house roles (which account for 92% of the retail staffing base) are partially volume-driven, a material proportion of staffing does not vary directly with passenger numbers and is more reflective of the volume of retail space.

Table 11.1 shows the resulting baseline FTE forecast, before CIP-related uplifts.

Table 11.1: Baseline forecast of Retail staffing levels, 2025–2031 (FTEs)

Retail staffing	2025	2026	2027	2028	2029	2030	2031
CEPA forecast	360	364	368	372	376	380	383
Dublin Airport forecast	360	%<	%<	%<	%<	%<	%<

Source: CEPA analysis, Dublin Airport Regulatory Proposition

CIP project step changes

Table 11.2 summarises our assessment of CIP projects against the Need-Additionality-Efficiency framework. We accept an incremental staffing uplift only where the project creates a requirement above the passenger-driven baseline.

Table 11.2: Assessment of CIP retail project step changes (FTEs)

Project	Reference	Assessment
Terminal 2 CBP and Transfer extension	CIP27.02.04	We include an uplift. The project includes new retail units of 200 sqm on the ground floor and 165 sqm and 80 sqm on the first floor. We include a specific uplift because this creates additional directly operated retail space that is not fully captured by the passenger-driven baseline.
Terminal 2 IDL ARI refurbishment	CIP27.03.10B	We include an uplift. The project is a transformational redevelopment of Dublin Airport's directly operated duty-free store, with a 2,700 sqm footprint and a clear expectation of enhanced retail activity beyond the passenger-volume trend.

Project	Reference	Assessment
Pier 1 existing	CIP27.03.10A	We do not include a separate uplift. The project is a small extension to existing retail space; any staffing impact should be absorbed within the baseline forecast.
Pier 300	CIP27.03.10A	We do not include a separate uplift. The relevant Pier 3 retail unit is small and the Pier 2 and 3 ARI retail units are identified as deferred elements, so there is insufficient evidence of an in-period incremental requirement.
Pier 200	CIP27.03.10A	We do not include a separate uplift. The relevant Pier 2 retail unit is small and grouped with deferred Pier 2 and 3 ARI retail units; any incremental staffing need is not sufficiently certain for the 2027–2031 forecast period.
ARI innovation	CIP27.03.10A	We include a small uplift. The project includes pop-up units and passenger-facing retail initiatives that may require limited additional staff cover; however, the wider scope encompasses marketing, logistics, and future-ready retail solutions, so the staffing impact is modest.

Source: CEPA analysis of Dublin Airport CIP submission

Draft forecast adjusted for step changes

Table 11.3 sets out our CIP-adjusted forecast of retail staffing levels alongside Dublin Airport's forecast.

Table 11.3: Forecast of Retail staffing levels including CIP impacts, 2025–2031 (FTEs)

Retail staffing	2025	2026	2027	2028	2029	2030	2031
CEPA forecast excl. CIP	360	364	368	372	376	380	383
T2 CBP and Transfer extension	-	-	-	-	-	10	10
T2 IDL ARI refurbishment	-	-	-	10	10	10	10
Pier 1 existing	-	-	-	-	-	-	-
Pier 300	-	-	-	-	-	-	-
Pier 200	-	-	-	-	-	-	-
ARI innovation	-	-	-	1	1	1	1
CEPA forecast incl. CIP	360	364	368	383	387	401	404
Dublin Airport forecast	360	⌘	⌘	⌘	⌘	⌘	⌘

Source: CEPA analysis, Dublin Airport Regulatory Proposition

Table 11.4 sets out our forecast of retail payroll expenditure alongside Dublin Airport's forecast. This incorporates our consistent ongoing efficiency assumption.

Table 11.4: Forecast of Retail payroll expenditure excl. and incl. CIP, 2025–2031 (€m, Mar 2026 prices)

Retail payroll expenditure	2025	2026	2027	2028	2029	2030	2031
CEPA forecast							
Payroll excl. CIP	22.4	22.7	23.1	23.6	24.0	24.4	24.7
Payroll incl. CIP	22.4	22.7	23.1	24.3	24.7	25.7	26.0
Dublin Airport forecast							
Payroll excl. CIP	22.4	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘
Payroll incl. CIP	22.4	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘

Source: CEPA analysis, Dublin Airport Regulatory Proposition

12. RENT AND RATES

Most Rent and Rates expenditure relates to local authority rates. We assess rent and rates separately because they have different cost drivers. Rates are largely outside Dublin Airport's ultimate control and depend on rateable valuation and the Annual Rate on Valuation (ARV). Rent is more discretionary and includes cross-charges where Dublin Airport uses daa Group assets.

We reduce Dublin Airport's rent forecast by removing the temporary rent uplift associated with office space outside the single till and do not include separate CIP-related rent uplifts. For rates, we use Dublin Airport's 2025 actual local authority rates paid as the starting point, apply the 2026 ARV and hold the ARV flat in nominal terms over the forecast period. This results in a lower forecast than Dublin Airport's Regulatory Proposition.

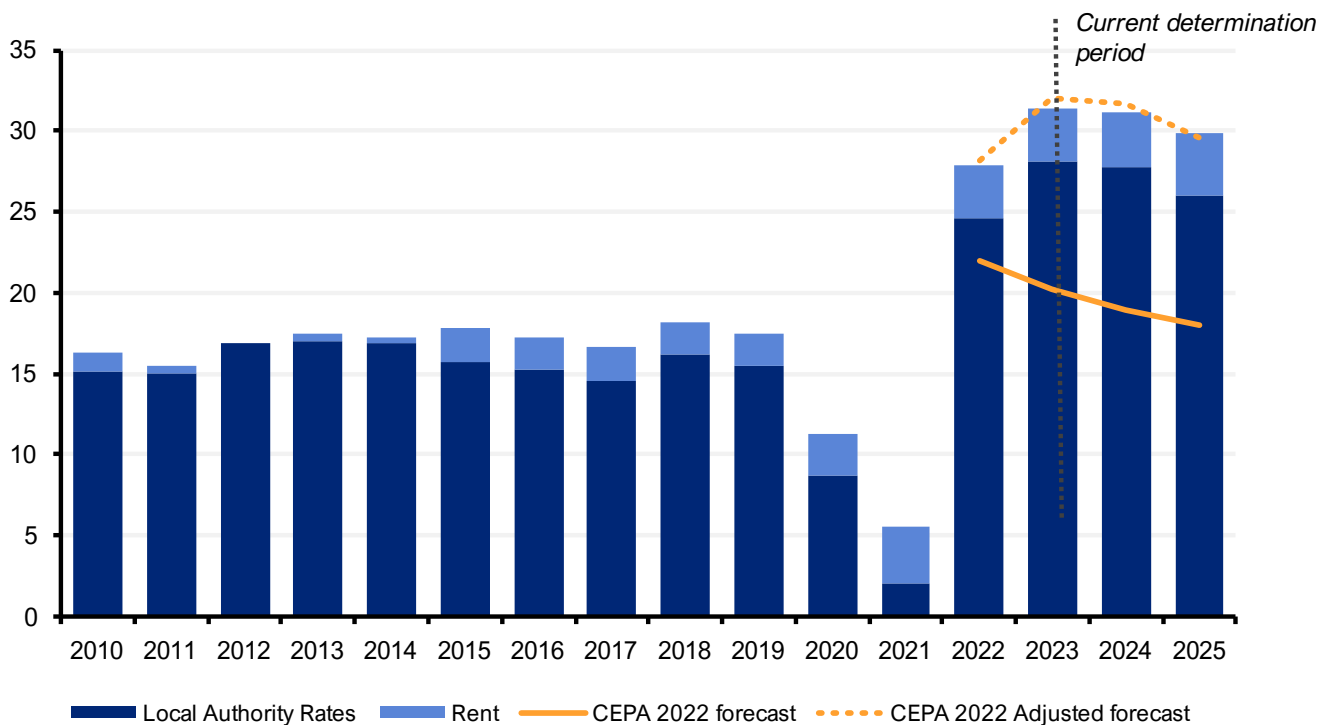
12.1. TRENDS IN HISTORIC EXPENDITURE

Rent and Rates expenditure was broadly flat between 2010 and 2019. It then fell in 2020 and 2021, mainly because Dublin Airport benefited from a local authority rates waiver during the Covid-19 period, which remained in place until March 2022. Rent expenditure increased materially over the same period, growing by 68% between 2019 and 2021. From 2022, Rent and Rates expenditure increased substantially. This was driven mainly by local authority rates, following the revised rateable valuation issued by the Valuation Office.

Dublin Airport has appealed the revised valuation to the Valuation Tribunal. We understand that the appeal is ongoing and that a final value has not been determined. For forecasting purposes, we use the higher valuation because it is consistent with Dublin Airport's current actual expenditure and with its own forecast treatment.

Figure 12.1 illustrates that the CEPA 2022 forecast reflected the lower valuation available at the time of the previous determination. The adjusted forecast reflects the higher valuation. We understand that the IAA intends to continue treating local authority rates as a pass-through item.

Figure 12.1: Historic Rents and Rates expenditure, 2010–2025 (€m, Mar 2026 prices)



Source: CEPA analysis of Dublin Airport data and IAA 2022 Decision

The increase in rent expenditure since 2019 appears to reflect temporary occupation of office space outside the single till (DAC Three). We remove this uplift from the 2025 efficient rent baseline. This reflects the expected opex

savings from the Terminal 1 Level 4/5 refurbishment project, which was identified in the 2022 process. It also reflects that Dublin Airport no longer intends to progress the OCTB project referred to in our 2022 report.

12.2. EFFICIENT COST FORECAST

We forecast rents and rates separately because the two cost items have different drivers.

For rent, we start from the 2025 outturn and remove the temporary uplift described above. For rates, we start from Dublin Airport's 2025 actual local authority rates paid, before recoveries and appeal costs, and apply the 2026 ARV of 0.1864.

This approach produces a lower forecast than Dublin Airport's for two reasons:

- We remove the temporary **rent** uplift from the baseline.
- We hold the **rates** ARV flat in nominal terms from 2026, which means gross rates decline in real terms over the forecast period. Dublin Airport instead assumes that gross rates remain flat in real terms.

Rents

Table 12.1 shows our baseline efficient rent forecast alongside Dublin Airport's Regulatory Proposition.

Table 12.1: Baseline forecast of rent expenditure, 2025–2031 (€m, Mar 2026 prices)

Rent	2025	2026	2027	2028	2029	2030	2031
Actual rent	3.9	-	-	-	-	-	-
Removal of DAC Three rent	-1.2	-	-	-	-	-	-
CEPA forecast	2.7	2.7	2.7	2.7	2.7	2.7	2.7
Dublin Airport forecast	3.9	%	%	%	%	%	%

Source: CEPA analysis, Dublin Airport Regulatory Proposition

Table 12.2 summarises our assessment of the CIP projects identified by Dublin Airport as giving rise to a rent step-change. We do not include a separate uplift because Dublin Airport has not provided project-specific evidence of an incremental rent liability, and so the proposed uplifts do not meet the Additionality criterion. This is also consistent with Dublin Airport's own CIP opex methodology, which treats rent payable or receivable as outside the CIP opex estimate.

Table 12.2: Assessment of CIP rents uplifts

Project	Reference	Assessment
CBP and Transfer Extension	CIP.27.02.04	We do not include a separate uplift. The project is primarily a CBP, transfer and passenger-flow capacity scheme; while it may include associated commercial space, Dublin Airport has not provided evidence of a new rent liability or shown that the proposed adjustment is incremental to the baseline forecast.
Pier 1 West (First Floor Extension)	CIP.27.02.18	We do not include a separate uplift. The project includes a small F&B shell and core unit, but Dublin Airport has not provided lease terms, rent assumptions or timing evidence to demonstrate an incremental rent liability over the 2027–2031 period.
Pier 5	CIP.27.02.05A	We do not include a separate uplift. The project is primarily a gate, stand and transatlantic capacity scheme; any commercial or retail space should be assessed through the commercial revenue forecast, and Dublin Airport has not evidenced a specific incremental rent liability, particularly given we do not expect it to be completed during the determination period.

Source: CEPA analysis of Dublin Airport CIP submission

We do not make any step-change adjustments to the rent forecast. Table 12. compares our final rent forecast to Dublin Airport's Regulatory Proposition forecast.

Table 12.3: Forecast of rent expenditure, 2025–2031 (€m, Mar 2026 prices)

Rent	2025	2026	2027	2028	2029	2030	2031
CEPA final forecast	2.6	2.7	2.7	2.7	2.7	2.7	2.7
Dublin Airport forecast	3.9	∞	∞	∞	∞	∞	∞

Source: CEPA analysis, Dublin Airport Regulatory Proposition

Rates

We forecast rates using Dublin Airport's 2025 actual local authority rates paid as the starting point, before recoveries and appeal costs. We use this and the 2025 ARV to infer the implied rateable value. We then apply the 2026 ARV and hold the resulting ARV multiplier flat in Mar 2026 prices over the forecast period.

For rates, we start from IAA data on Dublin Airport's 2025 actual local authority rates paid, before recoveries and appeal costs. We use this and the 2025 ARV as published by Fingal County Council (0.1864) to infer the implied rateable value. We then apply the 2026 ARV and hold the resulting ARV multiplier flat in real prices over the forecast period. Finally, we apply Dublin Airport's assumed recovery rate to our gross rates forecast. These recoveries relate to rates paid by Dublin Airport on behalf of third-party concessionaires, which Dublin Airport subsequently recovers from those operators.

Table 12.4 compares our baseline forecast with Dublin Airport's Regulatory Proposition. The two approaches produce a very similar outcome.

Table 12.4: Forecast of net rates expenditure, 2025–2031 (€m, Mar 2026 prices)

Rates	2025	2026	2027	2028	2029	2030	2031
CEPA forecast	26.0	∞ ∞	∞ ∞	∞ ∞	∞ ∞	∞ ∞	∞ ∞
Dublin Airport forecast	26.0	∞ ∞	∞ ∞	∞ ∞	∞ ∞	∞ ∞	∞ ∞

Source: CEPA analysis, Dublin Airport Regulatory Proposition

13. PASSENGERS WITH REDUCED MOBILITY

PRM costs relate to Dublin Airport's assistance for Passengers with Reduced Mobility (PRM), including wheelchair assistance and support during check-in, security and boarding.

We find that Dublin Airport's PRM expenditure is broadly efficient. We apply no adjustment to the baseline. Although costs have increased materially relative to the CEPA 2022 forecast, this increase appears to be driven mainly by higher PRM usage rather than inefficient delivery.

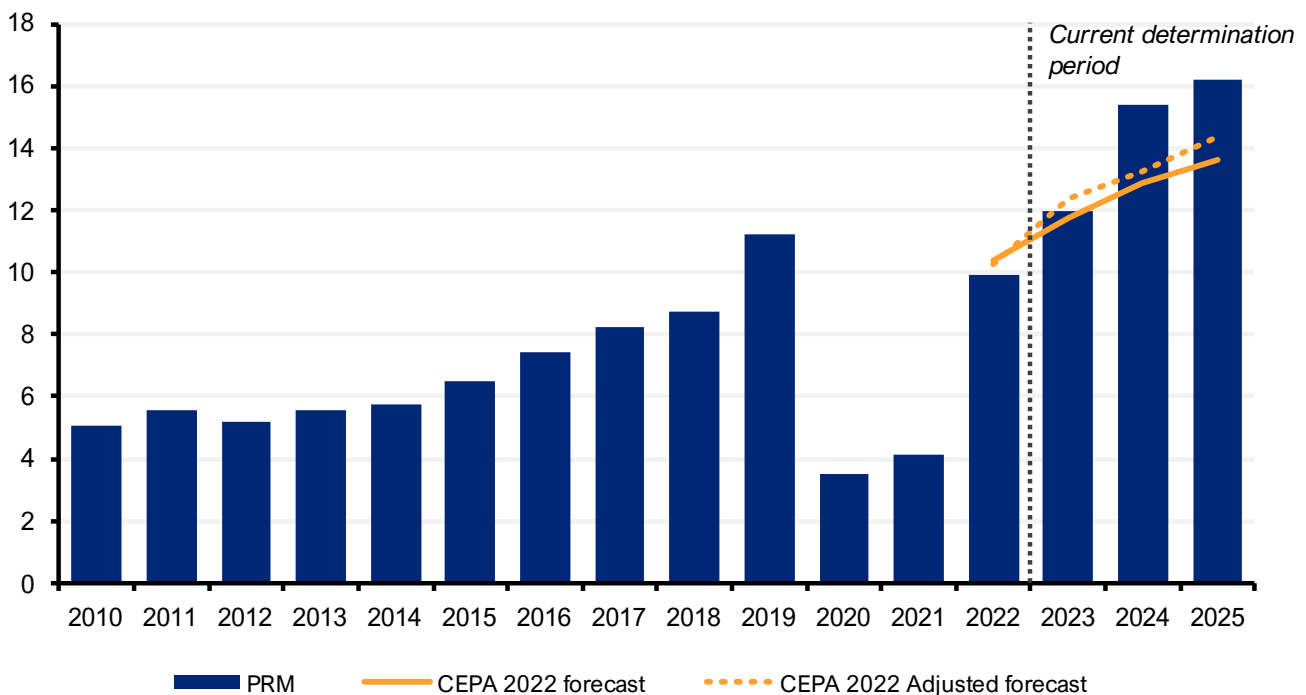
We also accept the 2026 increase in the PRM contract price. Dublin Airport's resulting tariff remains within a reasonable range relative to comparator airports, following a competitive tender process in which airport users participated. We therefore adopt Dublin Airport's proposed PRM forecast for 2027–2031.

13.1. TRENDS IN HISTORIC EXPENDITURE

Historic PRM costs have risen over time, with a temporary fall in 2020 during the pandemic. Costs recovered in 2022 and then rose above pre-pandemic levels and the CEPA 2022 adjusted forecast from 2023 onwards.

Figure 13.1 shows that the largest increase occurred in 2024, with the gap between forecast and outturn costs widening further in 2025, suggesting an underlying cost driver beyond wage growth.

Figure 13.1: Historic PRM expenditure, 2010–2025 (€m, Mar 2026 prices)



Source: CEPA analysis of Dublin Airport data and IAA 2022 Decision

The increase in outturn PRM costs appears to have been driven mainly by higher PRM usage, which is largely outside of Dublin Airport's control. PRM costs are mainly driven by two factors: the number of passengers using PRM services, known as the propensity, and the unit cost of those services.

Table 13.1 shows that the actual PRM propensity was materially higher than forecast. Actual PRM propensity increased from 2.4% in 2023 to 2.6% in 2024, compared with the CEPA 2022 forecast assumption of 2.2%. The service contract did not change during this period, which suggests that higher usage, rather than higher contract unit costs, explains most of the variance.

Table 13.1: PRM propensity compared with the CEPA 2022 forecast, 2022–2025 (% of departing passengers)

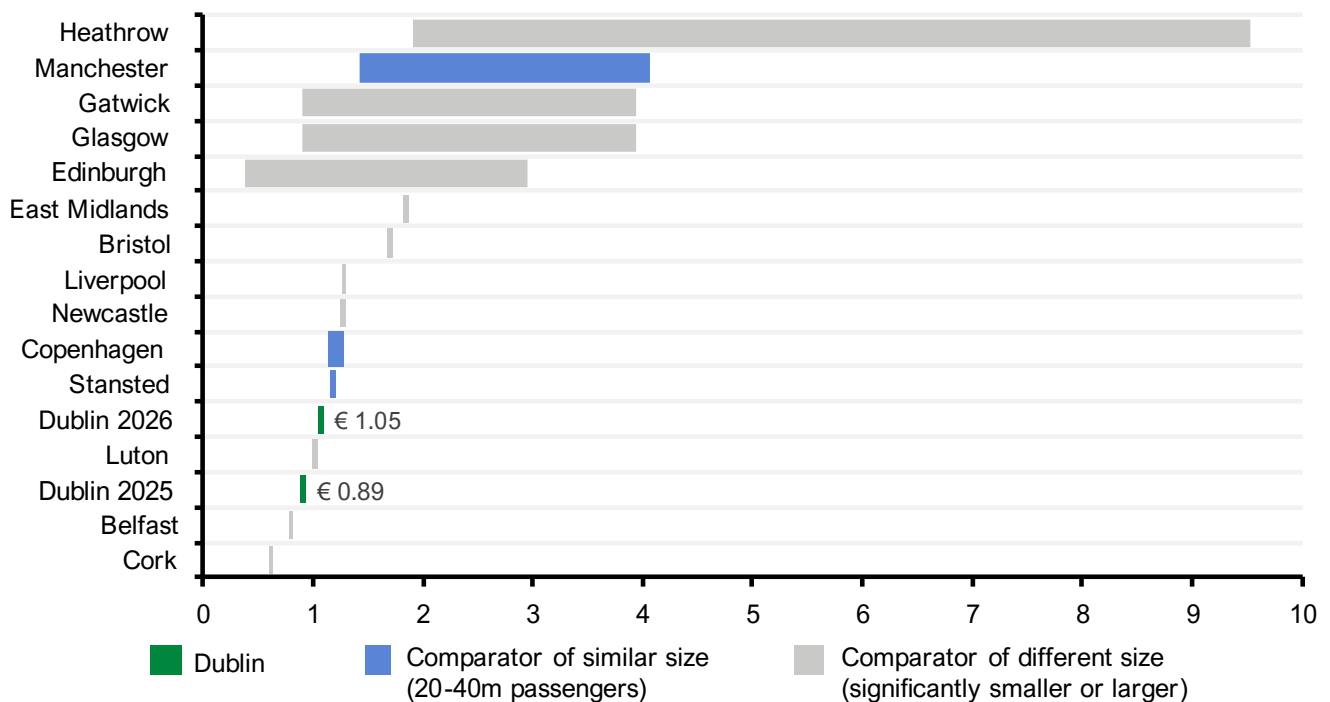
	2022	2023	2024	2025
Departing passengers	13,750,714	16,505,000	17,191,087	18,157,901
PRM passengers	319,242	319,393	446,244	475,284
Historic outturn propensity	2.3%	2.4%	2.6%	2.6%
CEPA 2022 forecast propensity	2.2%	2.2%	2.2%	2.2%

Source: CEPA analysis of Dublin Airport data and IAA 2022 Decision

13.2. BENCHMARKING EVIDENCE AND VIEW ON THE EFFICIENT BASELINE

We compare Dublin Airport’s current PRM charges with those at a range of benchmark airports. Figure 13.2. shows that Dublin Airport’s 2026 PRM charge remains within the range of comparator airport tariffs and towards the lower end of the range for airports of a broadly similar size.

Figure 13.2: Current PRM tariffs at comparator airports (€, Mar 2026 prices)



Source: CEPA analysis of published airport PRM charges

Note: Bars show the range between the minimum and maximum published PRM tariffs for airports with multiple reported tariffs. Thin vertical markers show airports with a single published PRM tariff.

Although Dublin Airport’s tariff is higher in 2026 than in 2025, it remains within the range observed across comparator airports. The increase in 2026 reflects the higher contract price per user under the new PRM contract, which was competitively re-tendered in 2025 and came into effect from the start of 2026.

Overall, our analysis suggests that the 2025 PRM baseline is broadly efficient. The increase in costs relative to forecast appears to be driven primarily by higher realised PRM usage. Benchmarking also indicates that the 2026 PRM tariff under the new contract remains within a reasonable range relative to comparator airports.

13.3. EFFICIENT COST FORECAST

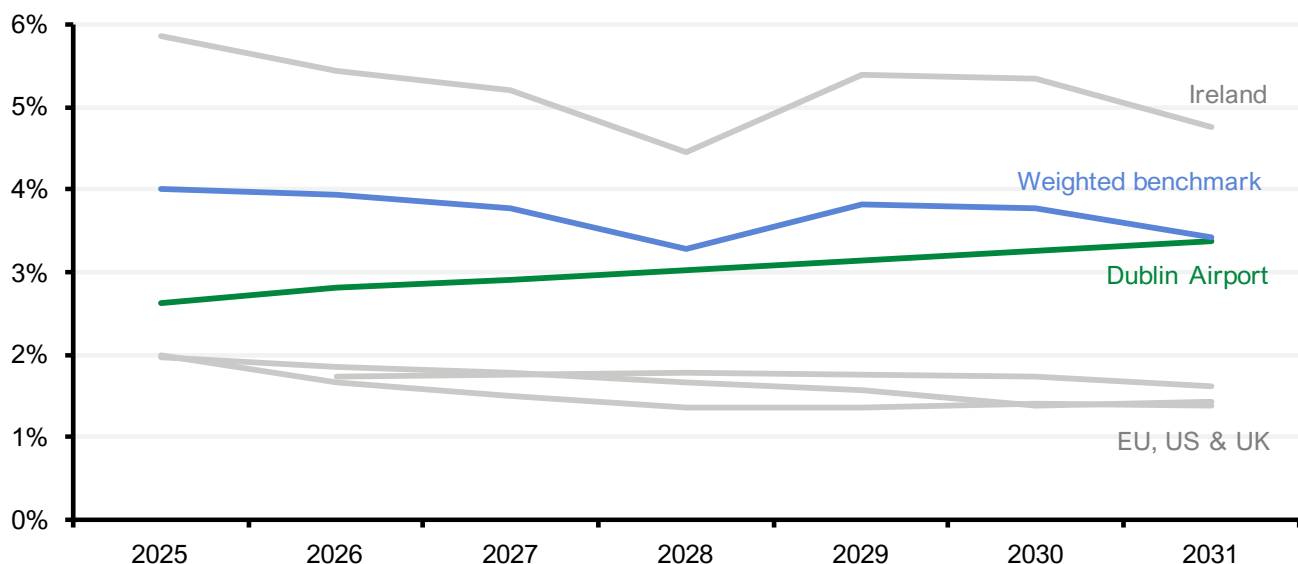
For our forecast, we adopt Dublin Airport’s assumptions around the propensity to consume PRM services and unit PRM costs. Dublin Airport’s forecast propensity is broadly supported by expected growth in the key passenger demographic groups at Dublin Airport, as shown in Figure 13.3.

PRM service charges are driven by PRM propensity, which measures the proportion of departing passengers requiring PRM assistance. Dublin Airport's forecast starts from a 2026 PRM passenger forecast of 525,000, which implies a propensity of around 2.8% of departing passengers. It then applies annual propensity growth of around 3.7%. The resulting propensity forecast is applied to departing passenger volumes to estimate PRM users. The forecast then combines forecast PRM users with the contract cost per PRM passenger, uplifted using Dublin Airport's contract cost escalation assumptions.

To assess whether Dublin Airport's forecast is reasonable, we compare its PRM propensity forecast with expected growth in the population aged over 60 across its key passenger demographic groups: Ireland, the EU, the US and the UK. Together, these groups accounted for 98% of Dublin Airport's passenger profile in 2022.

We weight the demographic benchmark using Dublin Airport's 2022 passenger profile,²⁸ rather than applying equal weights to each geography. Ireland has the largest weighting and the strongest forecast growth in the population aged over 60, so it has a material upward effect on the weighted benchmark.

Figure 13.3: Forecast growth in Dublin Airport's PRM propensity compared with growth in key passenger groups aged over 60 (% year-on-year growth in PRM propensity and population aged over 60)



Source: CEPA analysis of Dublin Airport Regulatory Proposition and published national statistics data

Overall, Dublin Airport's forecast PRM propensity remains below our weighted demographic benchmark for most of the period, before converging with it in 2031: we consider its forecast reasonable. Table 13.2: Forecast of PRM expenditure, 2025–2031 (€m, Mar 2026 prices) sets out our forecast - we adopt Dublin Airport's proposed approach and have not applied any efficiency adjustment.

Table 13.2: Forecast of PRM expenditure, 2025–2031 (€m, Mar 2026 prices)

PRM	2025	2026	2027	2028	2029	2030	2031
CEPA forecast	16.2	18.4	19.9	21.5	23.3	25.0	26.9
Dublin Airport forecast	16.2	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘

Source: CEPA analysis, Dublin Airport Regulatory Proposition

²⁸ The weighted benchmark reflects Dublin Airport's 2022 passenger profile [here](#): Ireland 58%, EU 14%, US 13% and UK 13%.

14. CAMPUS SERVICES

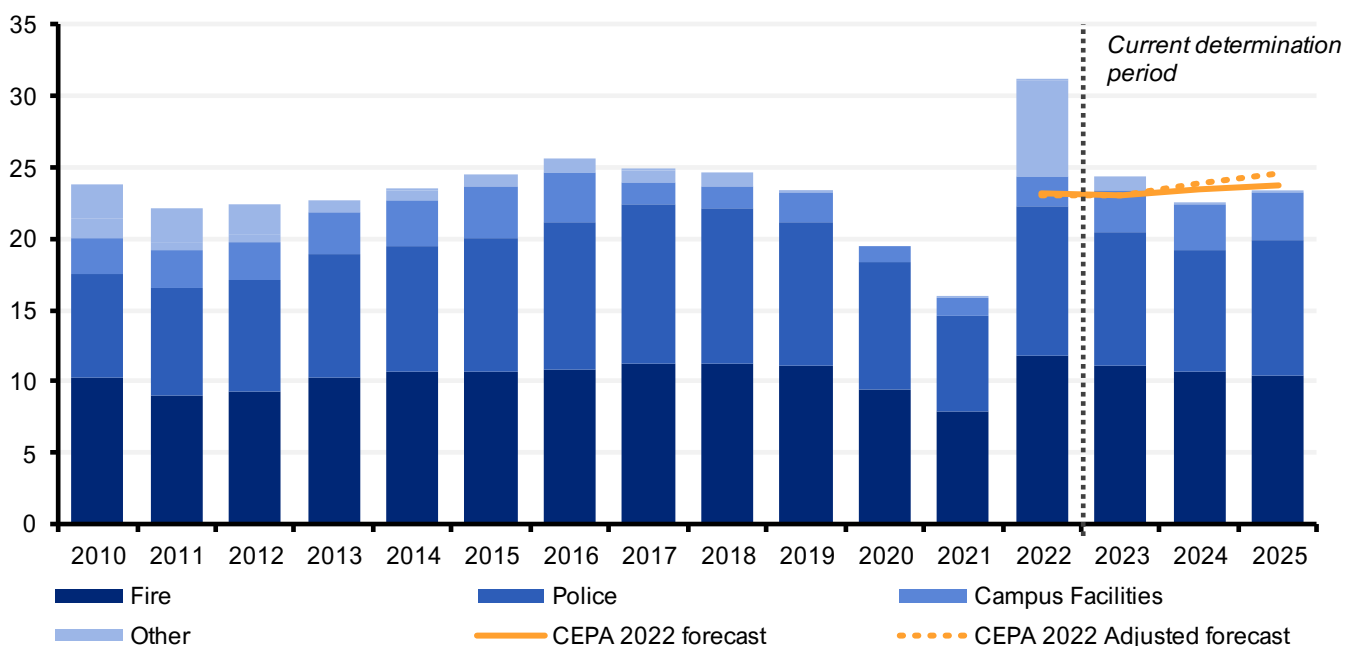
Campus Services comprises the airport Police service, the airport Fire and Rescue service, and Campus Facilities. Campus Facilities cover operations training, the Airport ID Centre and operational safety. We find that Dublin Airport's 2025 outturn expenditure is consistent with an efficient operation and use the 2025 outturn of 237 FTEs as the efficient baseline.

Dublin Airport's Regulatory Proposition includes a step increase of approximately 10 FTEs in 2026, mostly within the Fire and Rescue service. We do not include this step change in our forecast because Dublin Airport has not provided sufficient evidence to support it. Our efficient forecast projects the 237 FTE baseline forward using an elasticity of 0.10.

14.1. TRENDS IN HISTORIC EXPENDITURE

Outturn Campus Services expenditure was slightly below the CEPA 2022 forecast in 2024 and 2025, as shown in Figure 14.1. The underspend appears to be driven mainly by lower unit payroll costs rather than lower headcount, with FTE levels remaining broadly in line with the CEPA 2022 forecast. This pattern is consistent with the economy-wide wage dynamic discussed in Section 2.6.

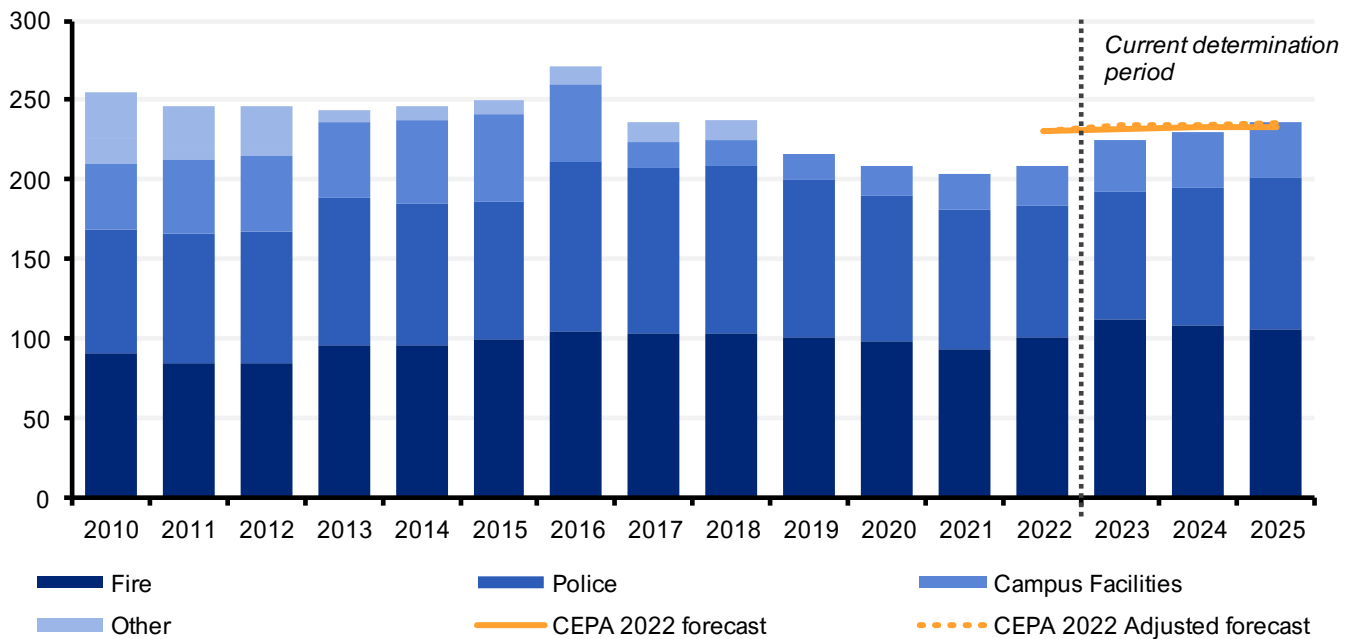
Figure 14.1: Historic Campus Services expenditure, 2010–2025 (€m, Mar 2026 prices)



Source: CEPA analysis of Dublin Airport data and IAA 2022 Decision

FTE levels have remained broadly stable despite growth in passenger volumes, air traffic movements and the airport footprint following the opening of the north runway, as shown in Figure 14.2. Airport police and fire service staffing has remained broadly in line with, or below, historic levels. Although each of these factors would be expected to place some upward pressure on staffing requirements, this has not resulted in a material increase in headcount. Campus facilities FTEs have increased over the period, partly reflecting team transfers into the function and the requirement to maintain a full complement at the Airport ID Centre. These changes were anticipated in the CEPA 2022 forecast; the increase beyond the forecast level is not material.

Figure 14.2: Dublin Airport Campus Services staffing levels, 2010–2025 (FTEs)



Source: CEPA analysis of Dublin Airport data and IAA 2022 Decision

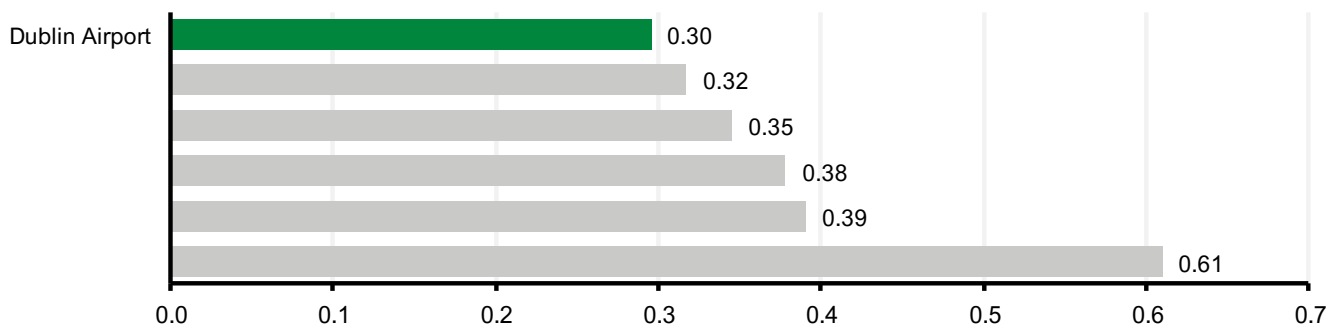
14.2. BENCHMARKING EVIDENCE AND VIEW ON THE EFFICIENT BASELINE

The available evidence supports the conclusion that Campus Services is efficiently operated across all three functions.

Police Service

On a per-passenger basis, Dublin Airport's policing costs are below all of the UK airports for which we have data, as shown in Figure 14.3. Some of this difference may reflect lower unit payroll costs or differences in the precise scope of airport policing activities. However, the scale and consistency of the difference provide evidence that Dublin Airport's airport police service is operated efficiently.

Figure 14.3: Benchmark Policing costs per passenger (€ per passenger, Mar 2026 prices)



Source: CEPA analysis of Dublin Airport data and unpublished comparator data

Note: Airport data is a mixture of 2023 and 2024 data across the anonymised benchmarks.

Fire and Rescue Service

Direct benchmarking of Fire and Rescue Service costs is not readily available, as costs are not commonly reported separately. Our assessment is therefore inferential. Fire service staffing has remained broadly stable over the period and is broadly similar in scale to the Police complement. Given the growth in passenger volumes, air traffic

movements and the airport footprint over the period, the maintenance of a broadly stable staffing level is consistent with efficient operation.

Campus Facilities

Campus facilities FTEs have increased over the period, but the main drivers of this increase are explainable and were partly anticipated in the CEPA 2022 forecast. The increase above forecast is not material. We therefore treat the 2025 outturn as an efficient baseline for this function.

14.3. EFFICIENT COST FORECAST

We use Dublin Airport's 2025 outturn as the efficient baseline for Campus Services, comprising 237 FTE in total. We then project efficient staffing levels using an elasticity of 0.10 applied to all three sub-functions. This reflects the predominantly regulatory and safety-led character of Campus Services (particularly for Police and Fire and Rescue), where staffing requirements are driven by fixed operational minima and compliance obligations rather than by passenger throughput directly. Our baseline forecast of Campus Services staffing levels is in Table 14.1.

Table 14.1: Baseline forecast of Campus Services staffing levels, 2025–2031 (FTEs)

	2025	2026	2027	2028	2029	2030	2031
Campus Facilities	35	36	36	36	36	36	36
Police Service	95	95	96	96	96	96	97
Fire and Rescue Service	106	107	107	107	108	108	108
CEPA forecast	237	238	238	239	239	240	241
Dublin Airport forecast	237	⌘	⌘	⌘	⌘	⌘	⌘

Source: CEPA analysis of Dublin Airport data and Dublin Airport Regulatory Proposition

Dublin Airport's Regulatory Proposition includes a step increase of approximately 10 FTEs between 2025 and 2026, mostly within the airport Fire and Rescue service. We do not include this step increase because Dublin Airport has not provided a structured Need-Additionality-Efficiency case. Applying the criteria in turn:

- **Need** - Dublin Airport has not identified the operational requirement driving the 2026 increase. The stable historic staffing trend is inconsistent with an unevidenced step change at this point in time. Growth in passengers, movements and the airport footprint is already captured through the passenger elasticity.
- **Additionality** - No evidence has been presented that the identified requirement cannot be met within the existing complement.
- **Efficiency** - Dublin Airport has not provided evidence to validate the scale of the proposed step change. While Dublin Airport's policing costs are below the mean of available UK comparators, this does not in itself provide a case for additional resource.

We therefore apply no step change adjustment and adopt the baseline forecast as our efficient staffing forecast for Campus Services. This is a primary driver of the difference between our forecast and Dublin Airport's. We will consider any further evidence provided ahead of the Final Determination using the Need-Additionality-Efficiency criteria. Our draft efficient expenditure forecast for Campus Services is set out in Table 14.2.

Table 14.2: Forecast of Campus Services expenditure, 2025–2031 (€m, Mar 2026 prices)

Campus Services	2025	2026	2027	2028	2029	2030	2031
CEPA forecast	23.2	23.3	23.4	23.6	23.8	24.0	24.1
Dublin Airport forecast	23.2	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘

Source: CEPA analysis of Dublin Airport data and Dublin Airport Regulatory Proposition

15. CAR PARKS

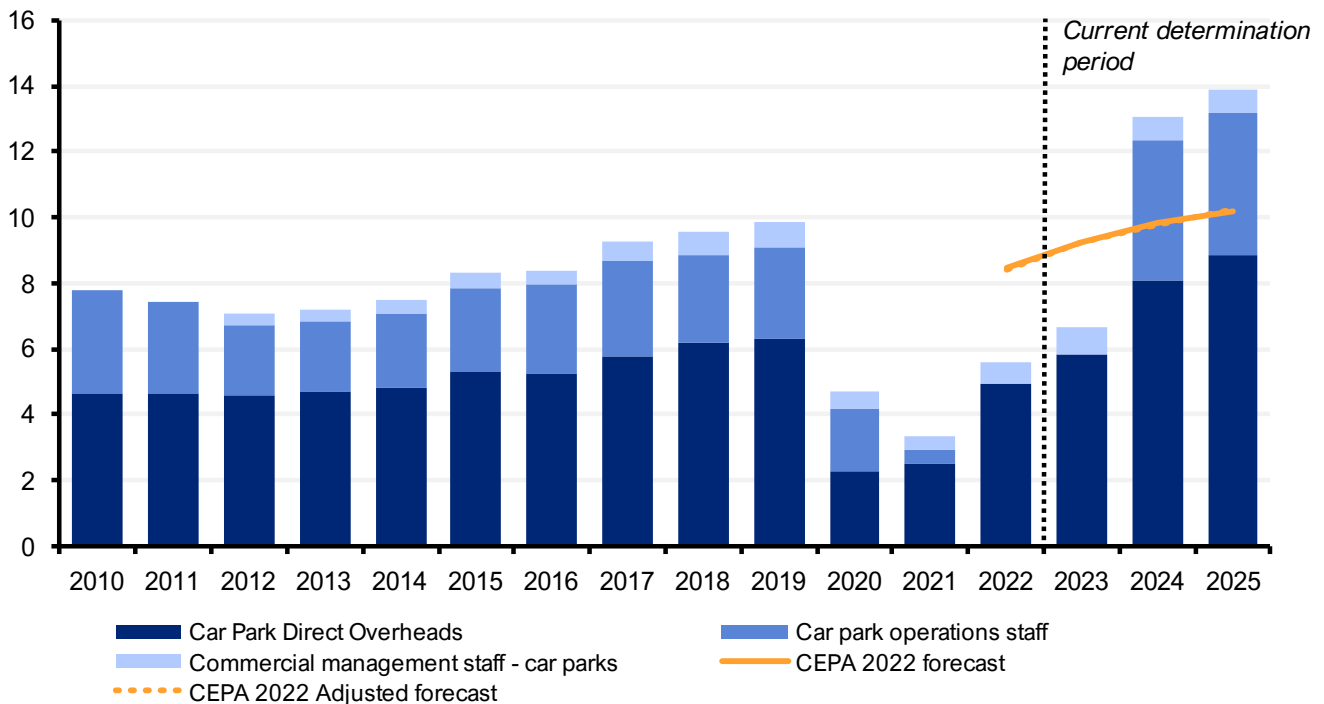
Car Parks expenditure comprises payroll and non-pay costs. Payroll relates to operational staff. Non-pay costs mainly comprise private security and shuttle bus contract costs, with the shuttle bus service transporting passengers and staff from car parks to the terminals.

Although Car Parks costs and FTEs increased materially in 2024 and 2025, available evidence suggests this reflects a more intensive operating environment. We therefore adopt the 2025 outturn as the efficient baseline and roll forward staffing and non-pay costs using passenger volumes as the primary cost driver.

15.1. TRENDS IN HISTORIC EXPENDITURE

Car Parks expenditure was relatively stable before the Covid-19 pandemic, then fell sharply in 2020 and recovered gradually. Figure 15.1 shows that outturn expenditure remained materially below the CEPA 2022 forecast until 2023, before increasing significantly in 2024 and rising above forecast. FTEs follow a similar pattern to expenditure.

Figure 15.1: Historic Car Parks expenditure, 2010–2025 (€m, Mar 2026 prices)



Source: CEPA analysis of Dublin Airport data and IAA 2022 Decision

Note: Data from Dublin Airport suggests a very significant reduction in Car park operations staff and Car Park Direct Overheads related to the pandemic. We assume this impact to be temporary and do not factor it into our assessment.

Dublin Airport has attributed the increase in Car Parks operating costs and staffing since 2024 to a more intensive operating environment, citing higher demand for its car parks and a need for more active operational management.

Dublin Airport identified two main drivers of the increase:

- **Reduced competing parking supply:** QuickPark, a nearby competing long-term car park, closed in September 2020, temporarily reducing competing long-term parking supply by around 25% and increasing demand for Dublin Airport's own car parks. QuickPark reopened in 2025 as Park2Travel. Dublin Airport states that yields have since reverted towards previous levels, with occupancy falling from a peak of 98% in September to 57% in December 2025. Dublin Airport expects this trend to continue into 2026.

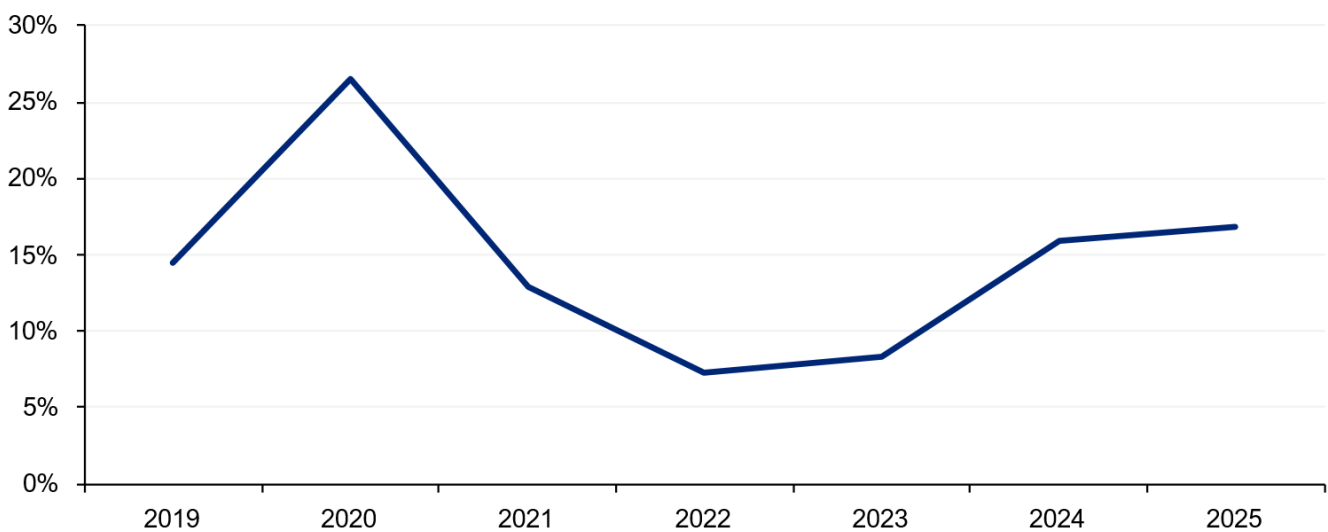
- **New service costs:** Dublin Airport launched Drop & Go in April 2024. This valet-style parking product introduced additional staffing and vehicle-handling costs.

15.2. BENCHMARKING EVIDENCE AND VIEW ON THE EFFICIENT BASELINE

We use total Car Parks expenditure as a proportion of Car Parks revenues as a high-level cross-check of the efficiency of the airport's operations. This metric tests whether costs have moved broadly in line with revenues. While it does not, in itself, demonstrate efficiency, it provides a useful indication of whether costs appear disproportionate relative to the increase in the scale and operational intensity of the car park business.

Figure 15.2 shows that the ratio fluctuated significantly during the Covid-19 period. It increased in 2020, before falling to a low point in 2022. Since then, the ratio has increased to around 17% in 2025.

Figure 15.2: Car Park expenditure as a share of revenue, 2019–2025 (%)



Source: CEPA analysis of Dublin Airport data

The 2025 ratio is broadly consistent with the 2019 level of approximately 15%. This supports the use of Dublin Airport's 2025 Car Parks expenditure as an efficient baseline, because expenditure has not increased disproportionately relative to revenue.

Overall, the available evidence indicates that the increase in Car Parks costs from 2024 reflected a more intensive operating environment. The closure of QuickPark reduced competing supply, while the launch of Drop & Go introduced additional staffing and vehicle-handling costs. We therefore use the 2025 outturn as the baseline for forecasting efficient Car Parks expenditure over 2027–2031.

15.3. EFFICIENT COST FORECAST

We forecast efficient car park payroll and non-pay expenditure for 2027–2031 from the 2025 baseline.

We use passenger volumes as the cost driver for both Car Parks payroll and non-pay expenditure, applying an elasticity of 0.4 in each case. Passenger volumes provide a more direct measure of operational demand than commercial revenue or yield growth. Revenue can increase because of higher yields, higher volumes, or both. Using revenue as a cost driver could therefore overstate efficient costs if Dublin Airport outperforms on yield while losing parking volume to competing operators.

This approach is consistent with the elasticity adopted in our 2022 study. The available econometric evidence does not produce sufficiently reliable estimates to support a more granular specification by cost component.

Pay

Table 15.1 sets out our forecast of car park staffing levels and payroll costs alongside Dublin Airport's Regulatory Proposition. This excludes commercial management staff, who are considered as part of Central Functions, and incorporates our ongoing efficiency assumption.

Our 2025 baseline estimate is lower than Dublin Airport's 2025 outturn. This is because we use a consistent unit payroll cost assumption across Facilities, Cleaning and Car Parks.

Table 15.1: Forecast of Car Parks staffing levels and payroll expenditure, 2025–2031 (Mar 2026 prices)

Car Parks staffing and payroll	2025	2026	2027	2028	2029	2030	2031
CEPA forecast							
Car Parking staffing (FTEs)	58	59	60	60	61	61	62
Car Parking payroll (€m)	3.9	4.0	4.1	4.3	4.4	4.5	4.6
Dublin Airport forecast							
Car Parking staffing (FTEs)	58	61	61	62	62	62	62
Car Parking payroll (€m)	4.3	∞	∞	∞	∞	∞	∞

Source: CEPA analysis, Dublin Airport Regulatory Proposition

Non-pay

For non-pay expenditure, we first roll forward the 2025 baseline using passenger growth with an elasticity of 0.4. We then apply a real wage price effect to 50% of the resulting forecast. This reflects our judgement that part of the category is indirectly wage-driven, particularly where operational services are delivered through third-party contracts and suppliers may pass through higher labour costs to Dublin Airport. We apply the ongoing efficiency assumption to the same 50%, consistent with our treatment of payroll expenditure that is subject to a real wage price effect. Table 15.2: Forecast of Car Parks non-pay costs, 2025–2031 (€m, Mar 2026 prices) shows our resulting forecast for non-pay expenditure alongside Dublin Airport's forecast.

Table 15.2: Forecast of Car Parks non-pay costs, 2025–2031 (€m, Mar 2026 prices)

Car Parks non-pay	2025	2026	2027	2028	2029	2030	2031
CEPA forecast	8.9	9.0	9.1	9.2	9.3	9.4	9.5
Dublin Airport forecast	8.9	∞	∞	∞	∞	∞ ∞	∞ ∞

Source: CEPA analysis, Dublin Airport Regulatory Proposition

16. UTILITIES

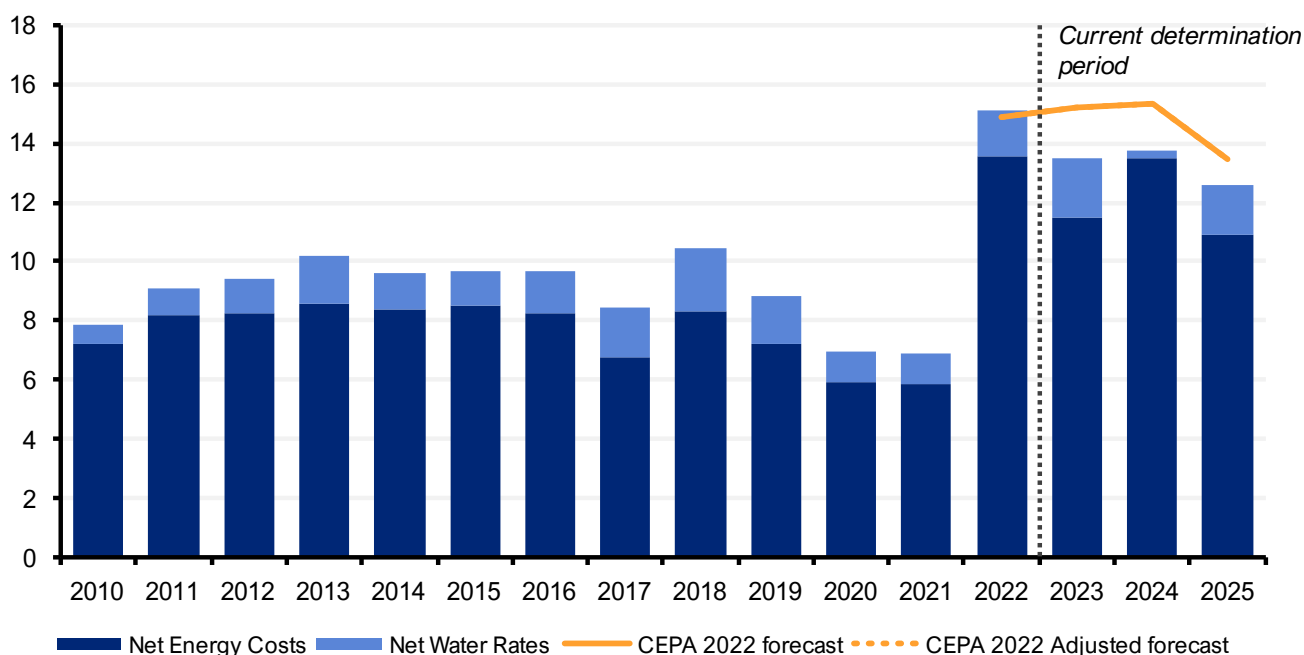
Utilities expenditure covers the electricity, gas, water and fuel oil required to operate Dublin Airport's terminals, piers, airfield, campus buildings and supporting infrastructure. Energy costs (electricity, gas and fuel oil) account for around 90% of historic Utilities expenditure, with water rates providing the remainder.

We consider Dublin Airport's 2025 Utilities expenditure to be broadly efficient, subject to a targeted adjustment to gas costs. Prices and consumption evidence indicates that electricity, gas and water are within a reasonable range relative to available benchmarks. However, Dublin Airport's 2025 implied gas unit price is above the Irish non-domestic average for its consumption band. We therefore reduce 2025 gas expenditure from €2.4 million to €2.1 million. This adjustment affects the base year only; our forecast applies a separate forward-looking unit price assumption.

16.1. TRENDS IN HISTORIC EXPENDITURE

Dublin Airport's Utilities expenditure has increased significantly since 2022, primarily because of higher energy prices. Figure 16.1 shows that Dublin Airport's Utilities expenditure was typically below the CEPA 2022 forecast. However, this does not, in itself, demonstrate efficiency. The CEPA 2022 forecast incorporated expected electricity efficiency benefits from CIP-related initiatives that have not yet been delivered, while outturn expenditure was also affected by volatility in energy markets.

Figure 16.1: Historic Utilities expenditure, 2010–2025 (€m, Mar 2026 prices)

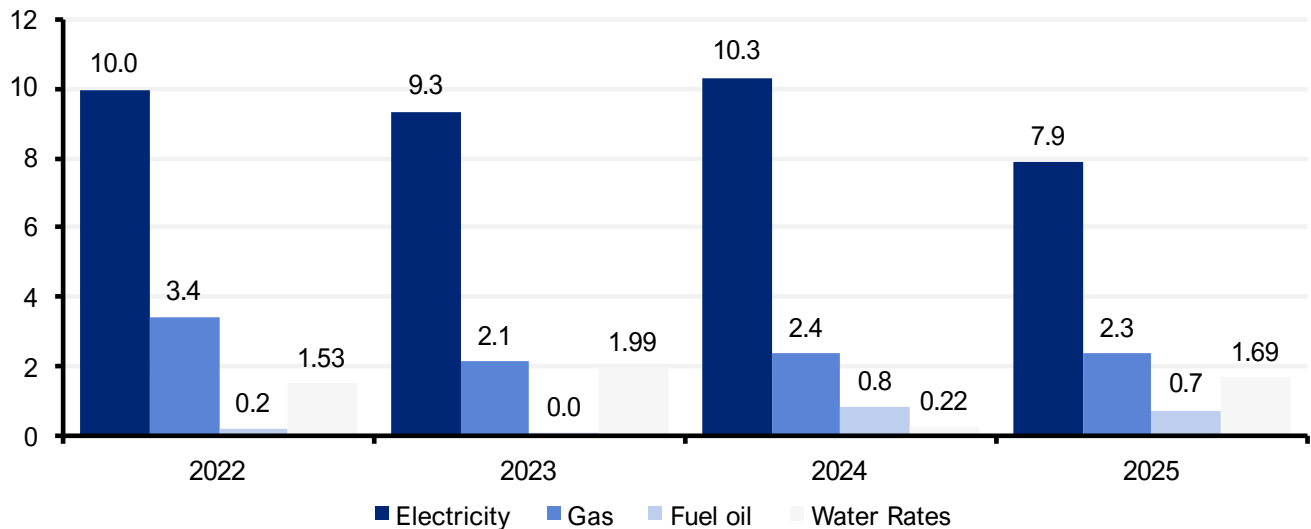


Source: CEPA analysis of Dublin Airport data and IAA 2022 Decision

Note: Costs are presented net of historic recoveries from third-party tenant users. Separable recoveries and surface water drainage cost data has not been provided from 2019 onwards. We therefore assume that total expenditure from this point onwards is already net of recoveries, and inclusive of surface water drainage costs.

Electricity is the largest single component of Utilities expenditure. It represented around 62% of total Utilities expenditure in 2025, down from a peak of 75% in 2024. Figure 16.2 shows the breakdown of expenditure by type during the current determination period.

Figure 16.2: Utilities expenditure by type in the current determination period (€m, Mar 2026 prices)



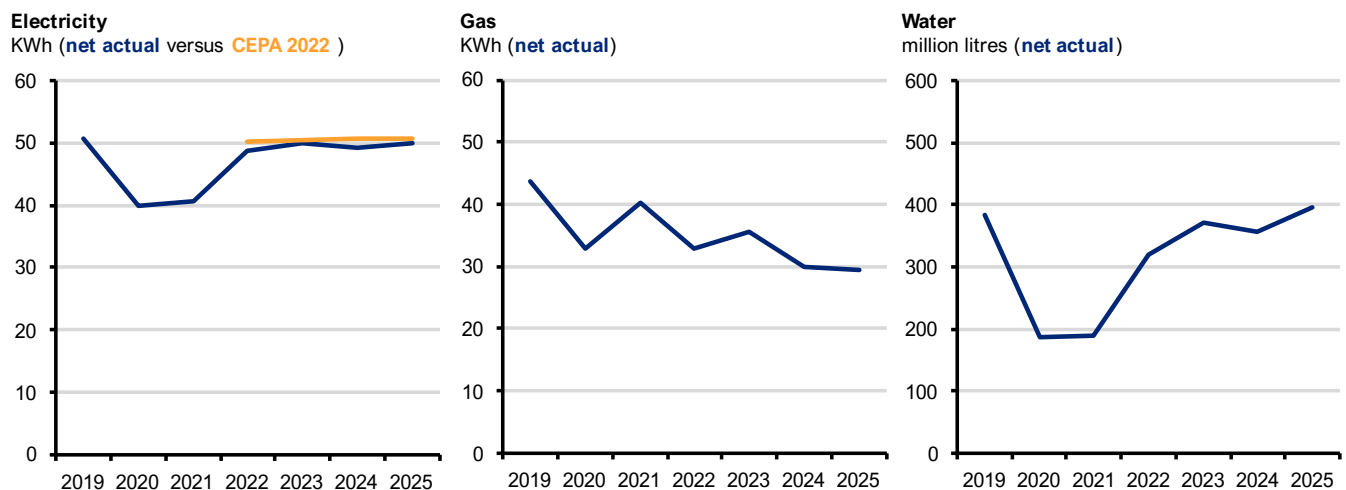
Source: CEPA analysis of Dublin Airport data

16.2. BENCHMARKING EVIDENCE AND VIEW ON THE EFFICIENT BASELINE

Consumption

Dublin Airport's 2025 Utilities consumption appears broadly efficient. Electricity and water consumption in 2025 were broadly similar to 2019 levels, despite passenger numbers being around 11% higher. This implies improved consumption efficiency on a per-passenger basis. Gas consumption reduced in total terms over the same period.

Figure 16.3: Historic utilities consumption, 2019–2025



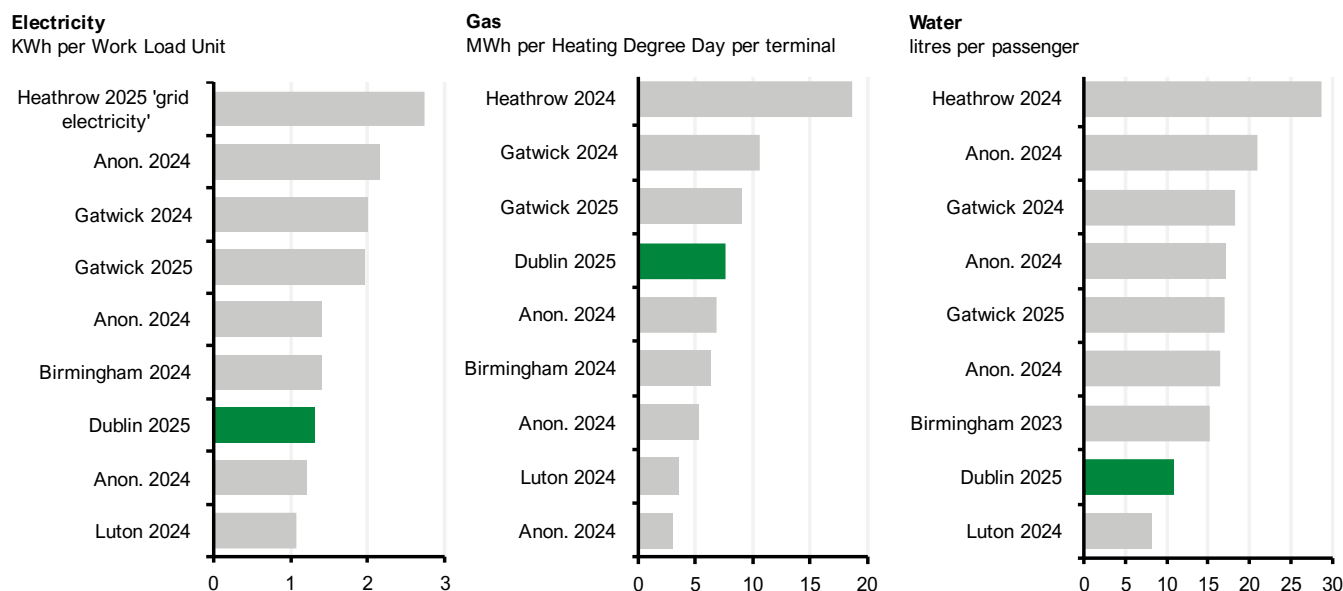
Source: CEPA analysis of Dublin Airport data and IAA 2022 Decision

We have cross-checked Dublin Airport's consumption against published and CEPA-held airport sustainability data. This evidence should be treated as an order-of-magnitude comparison rather than a precise benchmark. Airport utility consumption is affected by site footprint, weather, asset condition, decarbonisation choices and the treatment of third-party tenant consumption. We have normalised for these factors wherever possible. This includes application of Heating Degree Day data for gas, which seeks to remove the impact of variation in outside air temperature by site.

Figure 16.4 illustrates that benchmarking supports the view that Dublin Airport's base-year consumption is reasonably efficient. Dublin Airport performs particularly well on electricity and water and remains within the

comparator range for gas. We do not place weight on small differences between airports because the comparator evidence is not sufficiently consistent to support a precise adjustment.

Figure 16.4: Comparison of normalised consumption of electricity, gas and water across airports



Source: CEPA analysis Dublin Airport data, published airport sustainability reporting, and unpublished comparator data

Unit prices

We assess unit prices using Irish non-domestic reference data rather than airport benchmarks. Energy and water prices are strongly affected by national market conditions, tariff structures and regulatory charging arrangements. Comparisons with airports in other countries are therefore unlikely to provide a reliable efficiency test.

Dublin Airport's 2025 **electricity unit price** appears close to the Irish non-domestic average for its consumption band. We estimate Dublin Airport's implied unit price by dividing total electricity cost by net imported consumption, excluding on-site generation from CHP and phase 1 solar PV. On this basis, Dublin Airport's 2025 unit price was around 1% above the Irish average, sufficiently close to support treating electricity expenditure as efficient.

Dublin Airport's **gas unit price** remains materially above the Irish non-domestic average for its consumption band. Dublin Airport's implied gas price reduced by 23% between 2022 and 2025, compared with a 20% reduction in the Irish average. However, its 2025 unit price remains around €0.08/kWh, compared with an Irish average of around €0.06/kWh. The difference may reflect Dublin Airport's hedging strategy, but the 2025 premium is larger than the average premium observed during the current determination period.

Fuel oil is a relatively small, but volatile cost. We judge the historic average to be more reflective of efficient expenditure than the 2025 base, although developments in international energy markets over the past year may mean that prices remain elevated into the next regulatory period.

Water unit price evidence indicates base year efficiency. Uisce Éireann's published water and wastewater charges imply that Dublin Airport's unit charge should have increased in real terms between 2022 and 2025. Dublin Airport's implied charge instead decreased in real terms over the same period.

Efficient base year

We make two targeted base-year adjustments to the 2025 base year. We reduce 2025 gas expenditure from €2.4 million to €2.1 million, so that Dublin Airport's 2025 premium relative to the Irish non-domestic average is consistent with the average premium observed between 2022 and 2025. We also adjust the fuel oil expenditure to be reflective of the 2022-25 average. We make no base-year adjustment to electricity or water expenditure.

Collectively, this reduces 2025 Utilities expenditure to €11.7 million, versus a €12.6 million outturn expenditure.

16.3. EFFICIENT COST FORECAST

Energy costs baseline forecast

We forecast electricity and gas expenditure using a consumption and unit-price approach. This separates the consumption element, which Dublin Airport can partly influence, from market-driven unit prices.

For **electricity**, we start from 2025 base-year consumption and apply a 0.30 passenger elasticity, consistent with our econometric analysis. We then deduct expected self-generation from the phase 1 solar farm and CHP facilities, totalling 18.3GWh, because Dublin Airport does not incur imported electricity costs for electricity generated and consumed on site. We use Dublin Airport's forecast unit price of €0.19/kWh, which compares favourably to available evidence on non-domestic comparators in their consumption band.

For **gas**, we use average consumption over 2022–2025 as the baseline, reflecting annual weather variability. We then apply the same 0.30 passenger elasticity. We use Dublin Airport's forecast unit price of €0.06/kWh, which also compares favourably to available evidence on non-domestic comparators.

This approach differs from Dublin Airport's forecast, which assumes an implied passenger elasticity of one for electricity and zero for gas. Our elasticity has been estimated based on total Utilities costs, hence we apply it consistently across these categories. We note this approach also aligns with the draft findings of Europe Economics' cost assessment for the CAA for the ongoing H8 price review of Heathrow Airport.²⁹

For **fuel oil**, we roll forward the 2022–2025 average cost, but uplift it by a factor of 1.2, reflecting evidence from the Sustainable Energy Authority of Ireland (SEAI) on changes in commercial oil unit prices between the 2022–2025 average and Q2 2026.

Water rates

For **water rates**, we use a total cost approach. We start from 2025 costs and apply the same 0.3 Utilities passenger elasticity. We then apply known and expected tariff uplifts, including:

- A 7.8% real-terms increase between 2025 and 2026 based on published charging information.
- A €0.4 million real-terms increase in net surface water drainage costs, based on information provided by Dublin Airport. We phase the increase in between October 2026 and 2030, adding 20% of the full uplift each year, based on the Commission for Regulation of Utilities (CRU)'s proposed transition for trade effluent charges.³⁰
- Further 6.8% annual real-terms increases from 2027 to 2029 based on the CRU's minded-to view for Revenue Control 4. This only impacts costs not affected by the drainage uplift.

We hold unit rates for water flat in real terms in 2030 and 2031 – the only increase in these years is driven by passenger-related consumption.

Energy costs non-CIP27 step changes

Dublin Airport's own forecast implies a step change in electricity and gas consumption between 2025 and 2026, which has not been justified. No allowance is made for this in our forecast.

Dublin Airport's forecast includes a 48% reduction in gas CHP electricity output from 2029 onwards, coinciding with the CIP27 Terminal 2 / Pier 1 Renewable Heat initiative (CIP.27.01.01). We have incorporated this as forecast by Dublin Airport, on the assumption it is necessary to enable emissions reduction regardless of the CIP. Additionally, Dublin Airport assumes a partial remaining reduction in consumption from the CIP20 Small Energy Projects

²⁹ Europe Economics and York Aviation (2026), [Opex and Commercial Revenues for H8 – Recommendations](#).

³⁰ Commission for Regulation of Utilities (2026), [CRU Proposed Decision on Uisce Éireann's Non Domestic and Trade Effluent Tariff Framework](#).

initiative (20.02.013), which we have provisionally taken as given, but are requesting more information on this project ahead of Final Determination (see below).

All other non-CIP27 related step changes are minor impacts on electricity consumption assumed to be driven by existing initiatives agreed as part of the previous determination. Given the relatively small size of the impact of these initiatives on consumption (totalling 0.3GWh per year), we have used these estimates within our forecast, though we note that little supporting evidence has been provided by Dublin Airport to justify them.

Energy Costs CIP27-related step changes

We include CIP-related energy impacts where they are sufficiently evidenced or where the direction of impact is clear. Several projects affect consumption through self-generation, electrification, heating changes or additional airport infrastructure. These impacts need to be considered separately from the baseline forecast to avoid either omitting material changes or double-counting passenger-driven growth.

- The most material electricity step change is phase 2 solar PV (27.01.03, previously 20.09.006), which reduces net imported electricity from late 2027. Our high-level validation supports the order of magnitude of Dublin Airport's expected generation from this project, so we include this impact in the forecast.
- The Terminal 2 / Pier 1 Renewable Heat project (CIP.27.01.01, previously 20.09.008) affects both electricity and gas. Dublin Airport assumes that the project increases electricity consumption and reduces gas consumption from 2029. We include these effects because they are consistent with the expected impact of electrifying heat. However, Dublin Airport should provide further evidence on the assumptions used to estimate the scale of change (see below).
- We do not include most other project-specific CIP electricity or gas impacts at this stage. Dublin Airport's model identifies around 30 non-utilities CIP initiatives with material consumption impacts, but the submission does not provide sufficient detail on the line-item breakdown, mapping from CIP20 to CIP27 codes, or assumptions used to estimate each impact. We therefore include the demolition work item for electricity, but exclude the remaining specific estimates.
- Instead, we apply a 0.60 passenger elasticity for the 'including CIP' electricity forecast. This reflects the potential for further consumption growth resulting from initiatives through a significantly higher elasticity than our 'excluding CIP' forecast, and is justified on the basis that many of these schemes (with the exception of sustainability-related ones) are being implemented directly or indirectly as a result of passenger growth.

Additional information requested ahead of Final Determination

To support our Final Determination forecast, we are requesting more information from Dublin Airport on the following:

- A breakdown of the electricity and gas consumption impacts modelled for CIP-related initiatives, including the impact of individual schemes (and the relevant CIP27 codes), underlying assumptions used, justification for the permanence of each impact, and why Dublin Airport considers these to be additional to (rather than duplicative of) an existing passenger growth elasticity.
- A breakdown of the estimate for the increase in electricity consumption driven by the Renewable Heat initiative (1.4GWh per year), which increases net electricity imports in our forecast by 4%.
- Confirmation that the smaller estimated impact of CIP.20.02.013 Small Energy Projects in reducing electricity consumption relative to the CEPA 2022 forecast (by a factor of 2x) is because the majority of the impact of this initiative is already factored into the base year.
- How Dublin Airport's forecast reconciles with its 2030 emissions reduction obligations, specifically a demonstration of the contribution that each of the significant initiatives are making.

Summary of efficient Utilities cost forecasts

Table 16.1 summarises our energy costs forecast compared to Dublin Airport's forecast.

Table 16.1: Forecast of net energy expenditure, excl. and incl. CIP impacts (€m, Mar 2026 prices)

Energy Costs expenditure	2025	2026	2027	2028	2029	2030	2031
CEPA forecast							
Excluding CIP27	10.1	8.6	8.7	8.8	9.7	9.8	9.9
Including CIP27	10.1	8.6	8.3	6.2	6.9	7.1	7.2
Dublin Airport forecast							
Excluding CIP27	10.9	8<	8<	8<	8< 8<	8< 8<	8< 8<
Including CIP27	10.9	8<	8<	8<	8<	8<	8< 8<

Source: CEPA analysis, Dublin Airport Regulatory Proposition

Our forecast is below Dublin Airport's forecast. The difference is mainly driven by electricity, where we use a lower baseline assumption and lower passenger elasticity than Dublin Airport, and exclude a number of CIP-related consumption impacts for the reasons set out above.

Our efficient water rates forecast is similar to Dublin Airport's, though real increases in rates occur more slowly in our forecast. As noted above, the forecast allows for known tariff increases, surface water drainage costs and passenger-related consumption growth.

Table 16.2: Forecast of Water Rates expenditure (€m, Mar 2026 prices)

Water Rates expenditure	2025	2026	2027	2028	2029	2030	2031
CEPA forecast	1.7	1.8	2.0	2.2	2.5	2.6	2.6
Dublin Airport forecast	1.7	8<	8<	8<	8<	8<	8<

Source: CEPA analysis, Dublin Airport Regulatory Proposition

17. AIRSIDE OPERATIONS

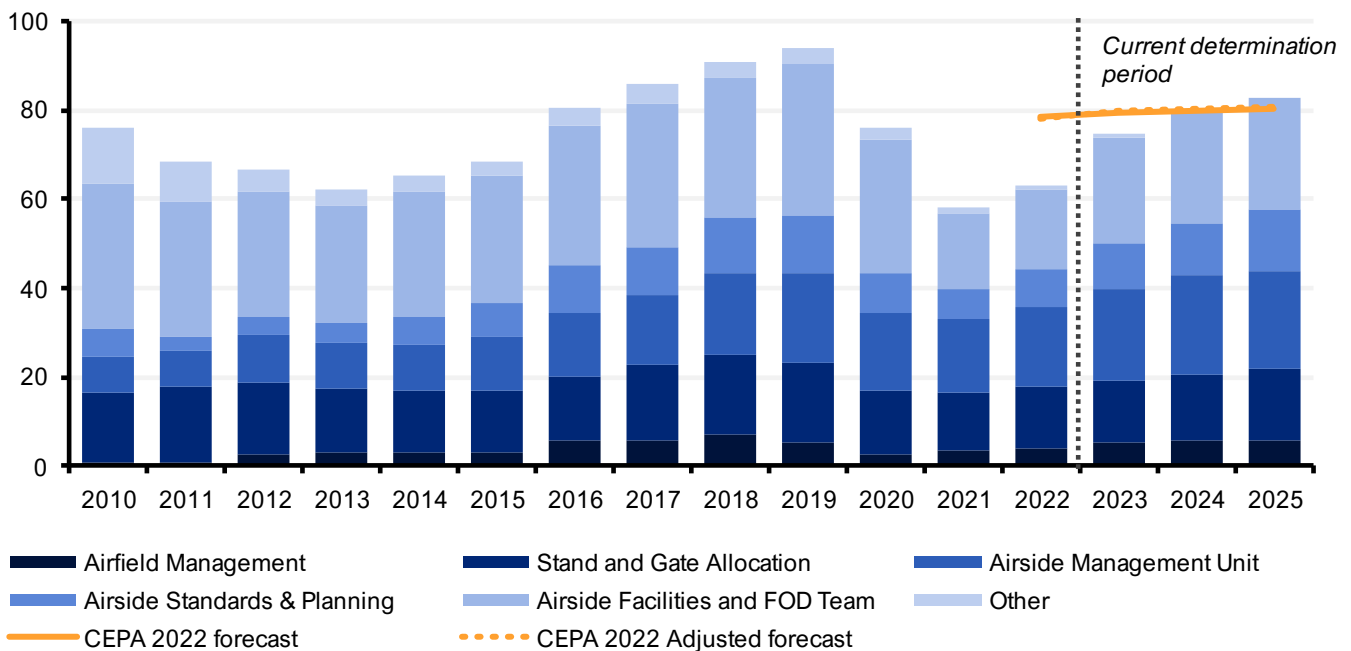
Airside Operations at Dublin Airport comprises five operational sub-teams: Airfield Management, Stand and Gate Allocation, the Airside Management Unit, Airside Standards and Planning, and Airside Facilities and the Foreign Object Debris (FOD) Team. Together, these teams manage the live airfield operation, allocate and optimise stand and gate capacity, coordinate operational interventions and disruption, maintain airside standards and governance, and protect airfield safety and asset condition.

We accept the 2025 outturn staffing level of 83 FTEs as the efficient baseline for Airside Operations. On a like-for-like basis, staffing remains below the 2019 level despite higher passenger volumes and aircraft movements. We forecast efficient staffing using a 0.4 elasticity to passenger volumes and do not accept Dublin Airport's proposed uplift to a 1.0 elasticity. We recognise that construction activity and stand congestion may create specific operational pressures that could justify targeted step-change adjustments. However, Dublin Airport has not provided sufficient evidence to support the scale or timing of its proposed additional FTEs.

17.1. TRENDS IN HISTORIC EXPENDITURE

Total Airside Operations staffing increased from 63 FTEs in 2022 to 83 FTEs in 2025 (slightly above the CEPA 2022 forecast), as shown in Figure 17.1. This trajectory is consistent with the expected recovery of traffic from the pandemic period.

Figure 17.1: Historic Airside Operations staffing levels, 2010–2025 (FTEs)



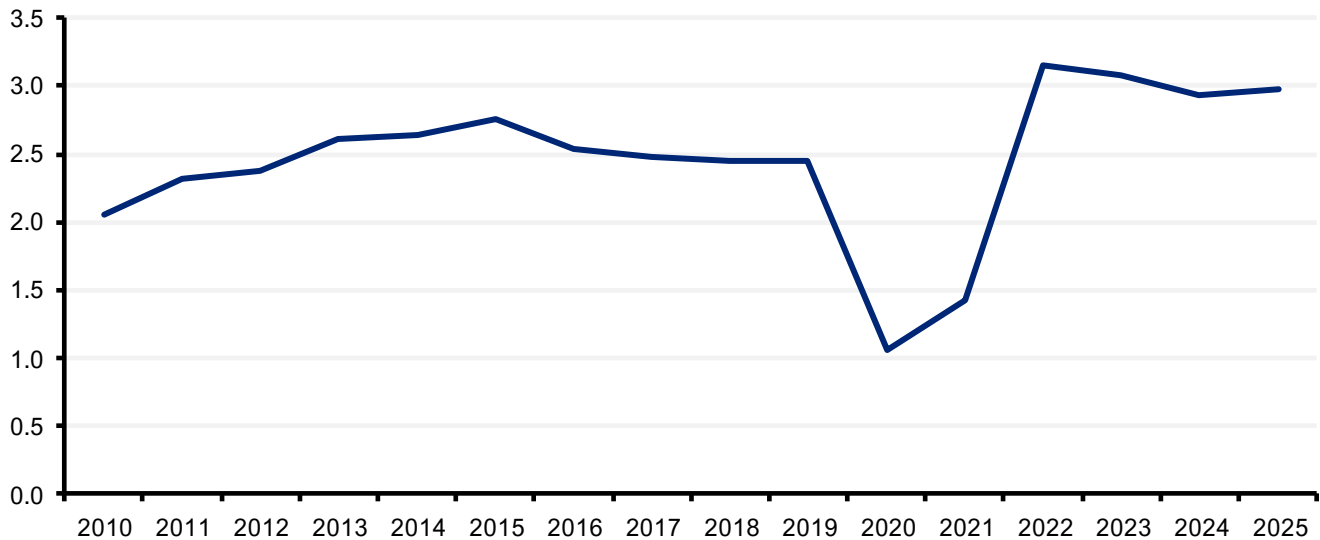
Source: CEPA analysis of Dublin Airport data and IAA 2022 Decision

A like-for-like comparison with the previous determination period requires the exclusion of the Airside Safety function, which was included within the Airside Operations portfolio in the earlier period but is no longer. On a comparable basis, the 2019 staffing level was 90 FTEs compared with a 2025 outturn of 83 FTEs. Over the same period, passenger volumes increased from 32.9 million to 36.4 million and aircraft movements increased from approximately 223,000 to 246,000. The function has, on a like-for-like basis, handled materially more traffic with a lower headcount. The 2025 outturn of 83 FTEs also compares closely with the approximately 81 FTEs assumed in the 2022 forecast, despite the higher traffic volumes served.

17.2. BENCHMARKING EVIDENCE AND VIEW ON THE EFFICIENT BASELINE

Error! Reference source not found. presents this as a productivity measure: aircraft movements per FTE. The 2025 ratio is close to being the highest recorded since 2010. This is consistent with the conclusion that Airside Operations has absorbed passenger and movement growth without a proportionate increase in staffing and supports accepting the 2025 outturn as an efficient baseline.

Figure 17.2: Aircraft movements per Airside Operations FTE, 2010–2025 (movements per FTE)



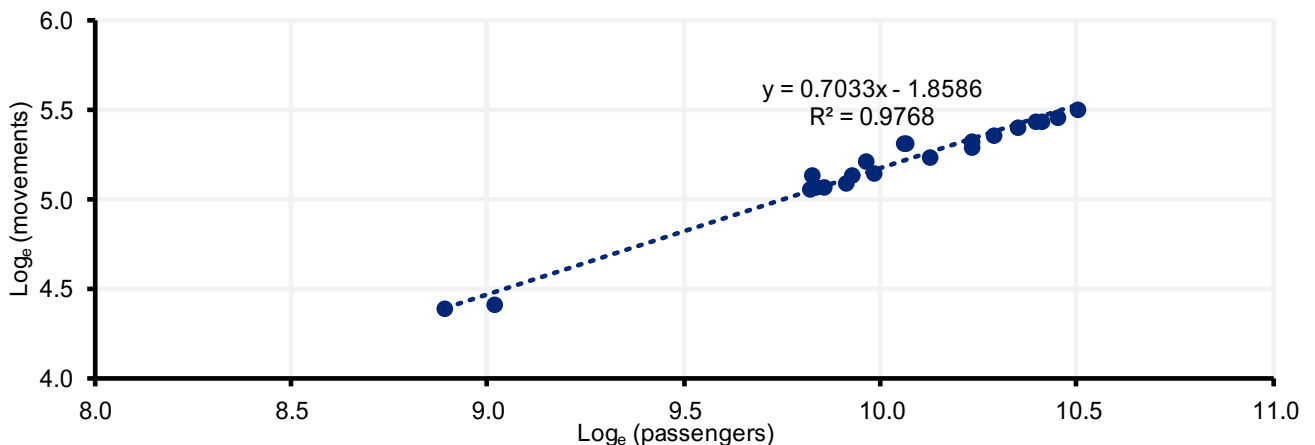
Source: CEPA analysis of Dublin Airport and published CSO data

17.3. EFFICIENT COST FORECAST

Cost driver and elasticity

The primary cost driver for Airside Operations is aircraft movements rather than passenger volumes. Movements determine the volume of taxiway, stand, and apron activity that staff need to coordinate. Passenger volumes remain a practical proxy because there is a strong and statistically significant relationship between passenger volumes and aircraft movements at Dublin Airport, as shown in **Error! Reference source not found.**. The estimated elasticity is 0.70, with a 95% confidence interval of 0.65 to 0.76. Similar relationships are observed at other airports, with elasticities in the range of 0.66 to 0.86. Passenger volumes are therefore a practical and defensible proxy driver for Airside Operations staffing. This is consistent with the approach adopted elsewhere in this study and with Dublin Airport's own submission.

Figure 17.3: Relationship between passenger volumes and aircraft movements at Dublin Airport



Source: CEPA analysis of Dublin Airport data

We also consider the role and responsibilities of individual sub-teams, to understand the relationship each may have with airfield movements and, by extension, passenger volumes.

- **Airfield Management** manages the live airfield operation, covering runways, taxiways, aprons, service roads and the coordination of aircraft and ground vehicle movements. Its workload scales with operational intensity and may increase more than proportionately when the airfield operates close to capacity.
- **Stand and Gate Allocation** allocates aircraft to stands and gates and manages real-time changes. The team optimises a fixed stand inventory, so its size is driven more by the scope and complexity of that task than by traffic volume. A near-zero passenger elasticity is therefore plausible.
- The **Airside Management Unit** provides live operational coordination, incident management and disruption response. Its workload is driven by operational complexity and resilience requirements. In a congested environment, disruption can cascade across stands, gates and piers, meaning workload may increase more than proportionately with traffic growth.
- **Airside Standards and Planning** owns airside rules, procedures, safety governance and future operating model design. Its workload is driven mainly by governance requirements, compliance obligations and operational change activity, rather than day-to-day throughput. Staffing is therefore more likely to change through step changes linked to specific programmes than through a smooth passenger elasticity.
- **Airside Facilities and the FOD Team** protects the physical condition and safety of airside operational areas, including through FOD inspections, facility monitoring and apron road management. The team's size is driven by airfield footprint coverage and asset condition. A near-zero passenger elasticity is therefore plausible because coverage requirements depend on the area managed, not directly on traffic levels.

We estimated historical elasticities for each sub-team using data from 2010, excluding the Covid-19 years 2020 and 2021. The results are presented in Table 17.1. The estimated elasticities range from near-zero for Stand and Gate Allocation and Airside Facilities and FOD, to above 1.0 for Airfield Management, the Airside Management Unit, and Airside Standards and Planning. These results are broadly consistent with the operational characterisation above. The confidence intervals are wide throughout, particularly for the smaller sub-teams.

Table 17.1: Estimated historical elasticities by Airside Operations sub-team, with 95% confidence intervals

Airside Operations	FTE in 2025	Estimated elasticity	95% confidence range
Airside Operations in total	83	0.42	0.18 to 0.65
Airfield Management	6	1.42	0.88 to 1.96
Stand and Gate Allocation	16	0.08	-0.17 to 0.34
Airside Management Unit	22	1.39	1.16 to 1.62
Airside Standards and Planning	14	1.89	1.37 to 2.40
Airside Facilities and FOD	25	-0.05	-0.33 to 0.23

Source: CEPA analysis of Dublin Airport data

Baseline forecast

We do not apply sub-team-specific elasticities to the base forecast. The sub-team time series are short, the confidence intervals are wide, and applying the estimates mechanically would produce implausible results for some teams. For example, applying an elasticity of 1.89 to Airside Standards and Planning would imply a near-doubling of that team's headcount under Dublin Airport's passenger growth assumptions. This is inconsistent with the operational profile of a governance and compliance function.

We therefore adopt an aggregate elasticity of 0.4. The Dublin Airport-specific aggregate estimate is 0.42, with a 95% confidence interval of 0.18 to 0.65. This is consistent with our panel econometric results and wider benchmark

evidence, including the staff elasticity proposed for the CAA's H8 price control for Heathrow. Dublin Airport also uses 0.4 for its own base forecast.

The efficient baseline is 83 FTEs in 2025, prior to application of ongoing efficiency. Applying a 0.4 elasticity to Dublin Airport's passenger growth forecast from this starting point produces the base forecast shown in Table 17.2.

Table 17.2: CEPA baseline forecast of Airside Operations staffing levels, 2025–2031 (FTEs)

Airside Operations	2025	2026	2027	2028	2029	2030	2031
Airfield Management	6	6	6	6	6	6	6
Stand and Gate Allocation	16	16	16	16	17	17	17
Airside Management Unit	22	22	23	23	23	23	23
Airside Standards and Planning	14	14	14	14	14	14	15
Airside Facilities and FOD	25	25	26	26	26	26	27
CEPA baseline FTE forecast	83	84	85	86	86	87	88

Source: CEPA analysis

Step changes for construction activity and congestion

Dublin Airport states that the CIP will generate additional operational demands on Airside Operations during the determination period. It explains that airfield construction will require temporary taxiway diversions and follow-me vehicle coverage, increase FOD risk across a larger operational footprint, and place additional demands on Airside Standards and Planning. It reflects this by increasing the passenger elasticity from 0.4 to 1.0 for the whole Airside Operations portfolio from 2026, and by adding six FOD FTEs from 2030. The combined effect is a forecast of 114 FTEs by 2031, compared with 83 FTEs in the 2025 baseline.

We do not accept the use of an elasticity of 1.0 as the mechanism for making this adjustment. Elasticities are derived from average historical relationships across a full traffic cycle. They are not designed to capture threshold effects, step changes, or time-limited operational pressures arising from a specific construction programme.

Switching the portfolio from a 0.4 elasticity to a 1.0 elasticity from a fixed date implies a permanent and smooth relationship between passenger growth and operational complexity that is not evidenced and cannot be calibrated against observable benchmarks. It also conflates two distinct effects - underlying traffic growth and the specific operational pressures arising from the CIP, making it difficult to scrutinise.

Recent airfield construction provides an important cross-check for Dublin Airport's proposed step changes. Dublin Airport has delivered major airfield works during the current and previous determination periods, including runway, taxiway and apron works, without demonstrating a need for additional Airside Operations staffing beyond normal growth. We therefore require specific evidence on the timing, scale and operational impact of proposed CIP works, and why they amount to a step change and/or are of a fundamentally different nature relative to the works delivered during current and previous periods, before accepting any construction-related FTE uplift.

Our assessment of Dublin Airport's proposed step changes is as follows:

- Dublin Airport adds one additional FTE to Airfield Management from 2027 to cover the general coordination overhead associated with live construction activity on the airfield. We do not include this uplift. Dublin Airport has not provided evidence that the coordination burden during 2027–2031 will be materially greater than during recent periods of airfield construction, or that it cannot be managed within the base forecast.
- Dublin Airport adds one additional FTE to Airside Standards and Planning from 2027. The proposed role is plausible in principle, given the operational readiness, safety case and procedure update requirements associated with airfield-related CIP projects. However, our understanding from the IAA is that a significant proportion of the relevant CIP work is likely to occur beyond 2027–2031. Dublin Airport has not provided a

phased workload profile showing that the additional post is required during this determination period. We therefore do not include this uplift at this stage.

- Dublin Airport adds six FTEs for escort operations associated with temporary taxiway diversions and evolving routings during construction works. We do not include this uplift. Dublin Airport has not provided a phase-by-phase operational schedule showing the location, timing, duration or staffing requirement associated with these escort operations. It is not apparent that the volume of airfield works during 2027–2031 is likely to be consistently materially higher than in recent years. Further, the taxiway network should be better able to absorb disruption following recent investment in the Critical Taxiways and other taxiway projects. Given this, we do not consider the proposed escort-related uplift to be sufficiently evidenced.
- Dublin Airport proposes six additional FTEs for enhanced FOD mitigation. It argues that airfield pavement rehabilitation and the opening of new airfield areas will increase the area requiring FOD surveillance and create additional FOD risks associated with construction interfaces. We do not include this uplift. Dublin Airport has not demonstrated that the relevant airfield footprint or FOD risk will increase sufficiently during 2027–2031 to require six additional FTEs. Our central assumption is also that the operational use of certain airfield areas, such as the West Apron, will not increase materially during the determination period.

We therefore retain the base forecast as the efficient FTE forecast. If Dublin Airport provides specific evidence on the timing, scale and resourcing impact of individual CIP works, together with persuasive evidence of additionality, targeted step-change allowances could be considered, rather than a broad elasticity uplift.

CIP investment

CIP27.06.03 allocates €10 million to airfield technology, including the Airport Operations System, Advanced Visual Docking Guidance Systems, smart stand technologies, on-stand CCTV analytics and automated FOD detection. These investments could reduce manual coordination requirements over time, particularly for Stand and Gate Allocation, Airside Facilities and FOD, and the Airside Management Unit.

We do not apply a technology-driven efficiency offset during 2027–2031. The entry-into-service dates for the components of CIP27.06.03 are not specified precisely, and delivery is planned across the determination period. Stand-specific investments, including Advanced Visual Docking Guidance Systems, on-stand CCTV and Fixed Electrical Ground Power, are concentrated in 2030 and 2031. The associated benefits are therefore likely to arise mainly from the start of the following determination period. The allocation of benefits between Dublin Airport, airlines and ground handlers is also unclear at this stage.

We therefore treat CIP27.06.03 as a potential upside risk to Dublin Airport relative to our forecast, rather than as a basis for reducing the Airside Operations allowance during 2027–2031.

Efficient cost forecast

The table below summarises our forecast for Airside Operations compared to Dublin Airport's forecast. We calculate this by multiplying our baseline efficient staffing forecast with our unit payroll cost assumptions, and overlaying our ongoing efficiency assumption.

Table 17.: Forecast of Airside Operations expenditure, 2025–2031 (€m, Mar 2026 prices)

Airside Operations	2025	2026	2027	2028	2029	2030	2031
CEPA forecast	8.0	8.1	8.2	8.4	8.5	8.6	8.7
Dublin Airport forecast	8.0	8.0	8.0	8.0	8.0	8.0	8.0

Source: CEPA analysis, Dublin Airport Regulatory Proposition

18. OTHER STAFF NON-PAY

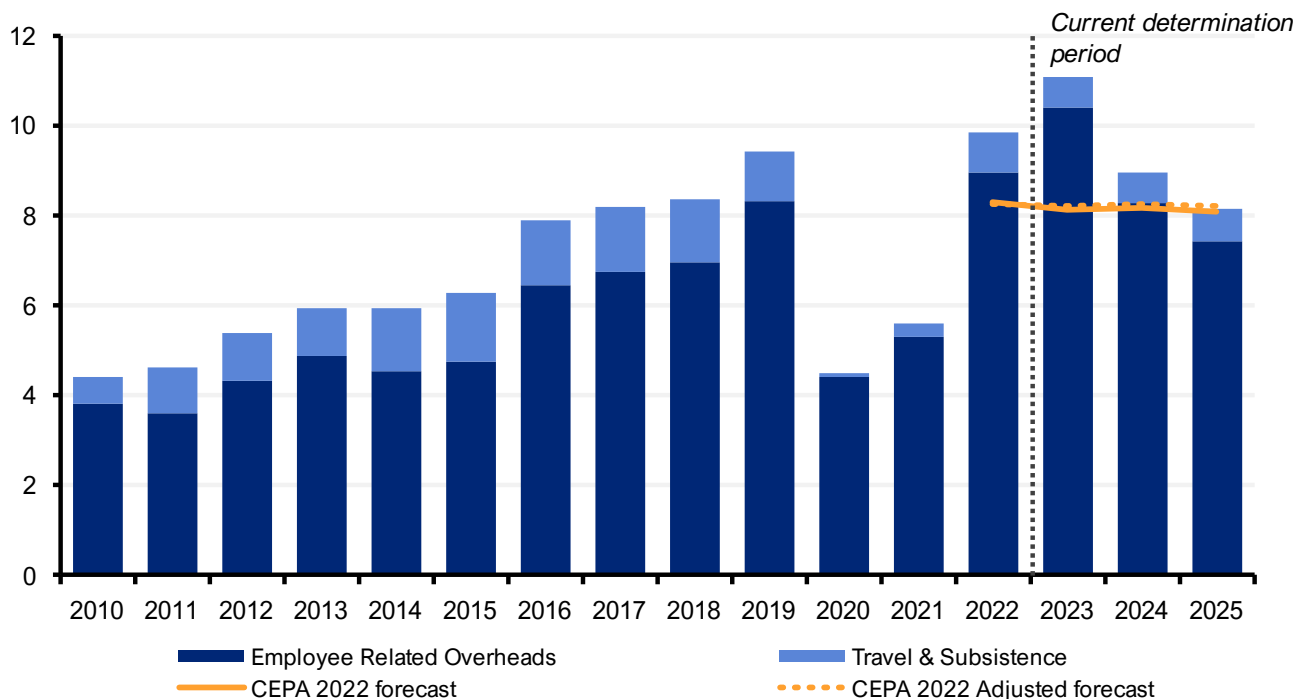
Other Staff Non-Pay expenditure covers staff-related costs that are not included in payroll. The category includes Employee Related Overheads and Travel & Subsistence. These costs support the operation and administration of Dublin Airport's workforce and are therefore more closely linked to FTEs than to passenger volumes.

Based on our analysis, we consider that 2025 provides a reasonable efficient baseline for setting an allowance (€8.1 million) and we roll this forward with FTE growth over the determination period.

18.1. TRENDS IN HISTORIC EXPENDITURE

Dublin Airport's Other Staff Non-Pay expenditure has varied significantly over the current determination period. Expenditure increased in 2022 and 2023, mainly because of higher Employee Related Overheads. It has since reduced, and the 2025 outturn is close to the CEPA 2022 forecast and the adjusted forecast, and in line with the average from the last four full years pre-Covid (2016–2019). This is shown in Figure 18.1.

Figure 18.1: Historic Other Staff Non-Pay expenditure, 2010–2025 (€m, Mar 2026 prices)



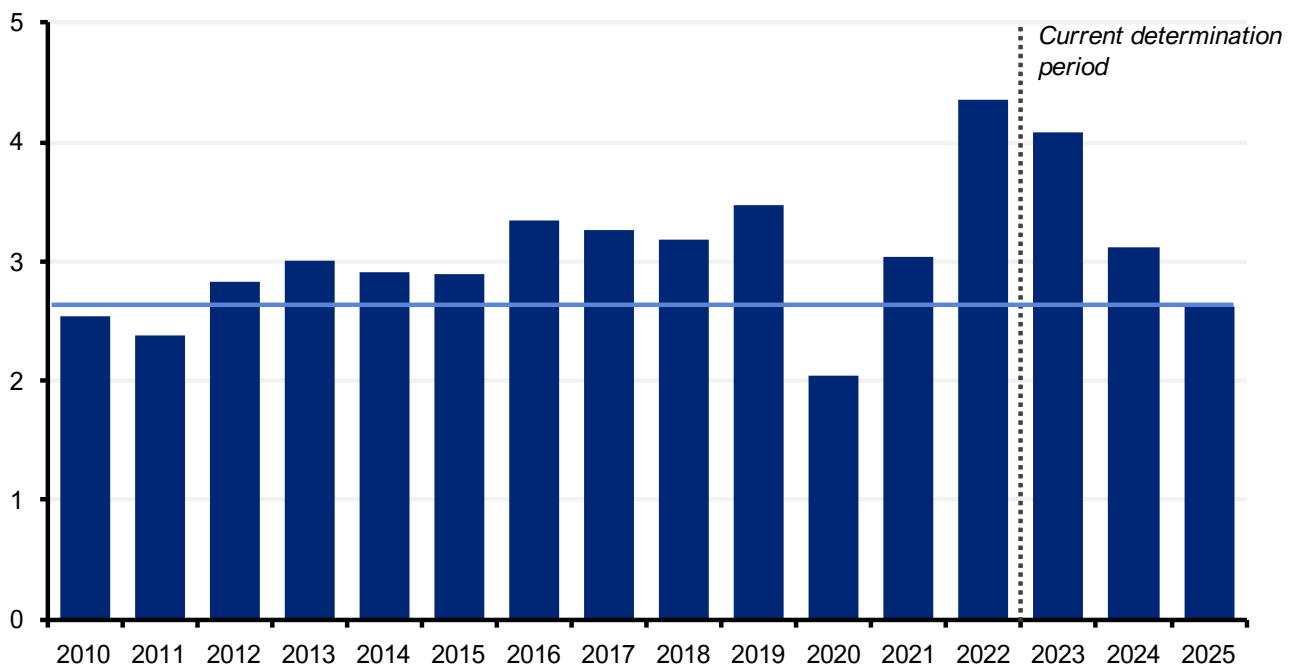
Source: CEPA analysis of Dublin Airport data and IAA 2022 Decision

18.2. BENCHMARKING EVIDENCE AND VIEW ON THE EFFICIENT BASELINE

We consider the 2025 base year to be efficient. In the absence of suitable external benchmark data, we have assessed efficiency by normalising Other Staff Non-Pay expenditure by Dublin Airport FTEs.

On this basis, Dublin Airport's 2025 performance appears efficient relative to its own historic performance. Figure 18.2 illustrates that Other Staff Non-Pay expenditure per FTE in 2025 was among the lowest levels achieved historically (comparison highlighted by the pale blue line). This indicates that the 2025 base year does not require a separate efficiency challenge.

Figure 18.2: Historic Other Staff Non-Pay expenditure, normalised per Dublin Airport FTE (€ thousands per FTE, Mar 2026 prices)



Source: CEPA analysis of Dublin Airport data

There is some uncertainty around the allocation of recruitment costs between Other Staff Non-Pay and Central Functions. We understand that recruitment was previously outsourced, with the related costs recorded in Employee Related Overheads, but that these activities are now undertaken in-house as part of HR expenditure. This provides a plausible explanation for the higher cost per FTE observed in 2022 and 2023, when Dublin Airport was rebuilding its workforce after Covid-19.

This uncertainty does not change our view of the 2025 baseline. If outsourced recruitment costs had still been recorded in Other Staff Non-Pay in 2025, the category may have appeared less efficient than it does now. However, we have separately considered efficiency within the Central Functions forecast, where the relevant in-house HR costs are now likely to be recorded.

We therefore use Dublin Airport's 2025 Other Staff Non-Pay outturn of €8.1 million as the efficient baseline.

18.3. EFFICIENT COST FORECAST

For the forecast period, we link Other Staff Non-Pay expenditure to FTE growth. This is consistent with the treatment applied in previous determinations and reflects the staff-related nature of the category.

We apply a 0.95 elasticity to Dublin Airport's underlying FTE forecast. This means that expenditure increases with FTEs, but at a slightly lower rate, recognising that some staff-related overheads should benefit from scale efficiencies. On this basis, the efficient allowance increases from €8.1 million in 2025 to €8.5 million in 2031.

Table 18.1: Forecast of Other Staff Non-Pay expenditure, 2025–2031 (€m, Mar 2026 prices)

Consultancy	2025	2026	2027	2028	2029	2030	2031
CEPA forecast	8.1	8.3	8.3	8.4	8.4	8.4	8.5
Dublin Airport forecast	8.1	8.1	8.1	8.1	8.1	8.1	8.1

Source: CEPA analysis, Dublin Airport Regulatory Proposition

19. CONSULTANCY

Consultancy expenditure covers external professional advice and support that Dublin Airport uses to supplement internal capability. The category includes consultancy services, legal advice, audit services and tax compliance advice.

We set the efficient Consultancy base-year expenditure at the lower quartile of Dublin Airport's recent historic cost, normalised on a per passenger basis. Excluding 2020 and 2021 as exceptional Covid-19-related years, this gives an estimate of approximately €0.27 per passenger.

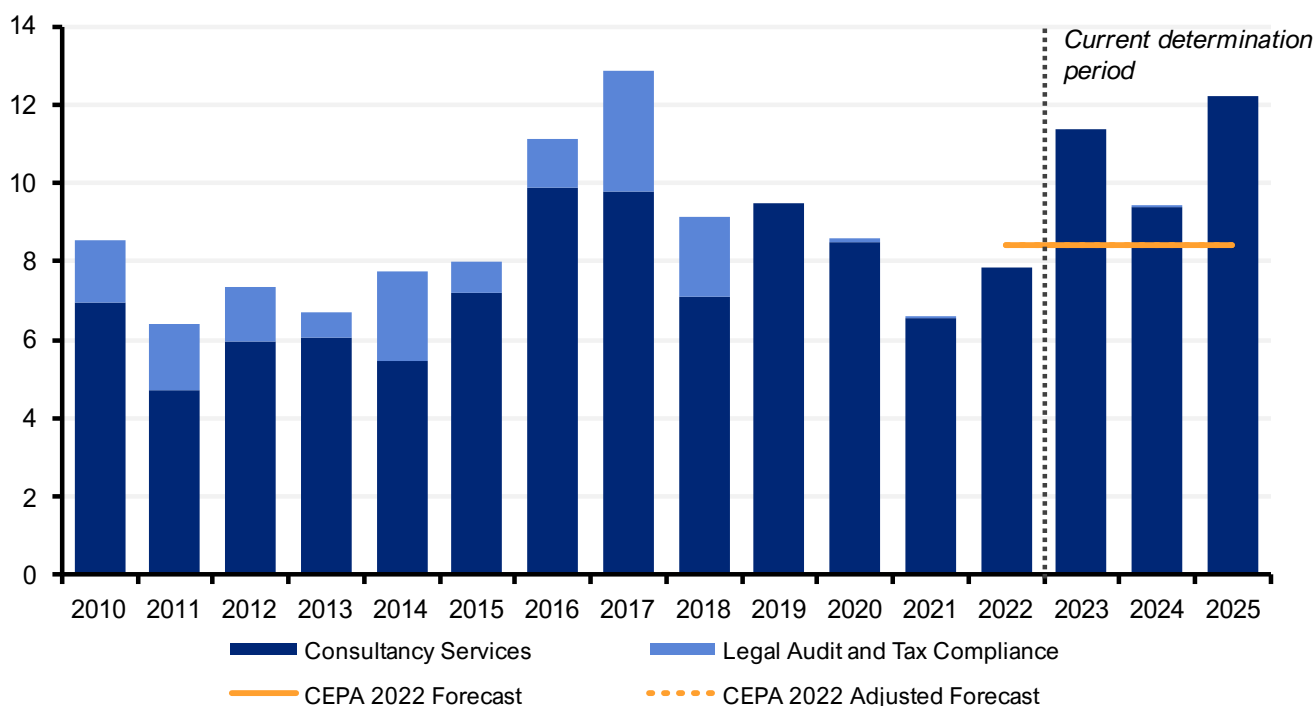
This is below the recent average of €0.30 per passenger and below the 2025 outturn of €0.34 per passenger and so represents a stretching but achievable efficiency challenge. This reduces the base year by approximately €2.2 million relative to outturn. The forecast then applies a 0.10 passenger elasticity.

As with the 2022 Decision, our forecast for these costs exceeds Dublin Airport's own forecast. We consider our approach to be a balanced position that incentivises strong and increasing cost efficiency over time while affording Dublin Airport a degree of flexibility.

19.1. TRENDS IN HISTORIC EXPENDITURE

Dublin Airport's Consultancy expenditure has exceeded the CEPA 2022 forecast in every year of the current determination period (Figure 19.1).

Figure 19.1: Historic Consultancy expenditure, 2010–2025 (€m, Mar 2026 prices)



Source: CEPA analysis of Dublin Airport data and IAA 2022 Decision

Total expenditure is now close to the historic peak observed in 2017. Consultancy expenditure has been volatile in recent years, so the 2025 level should not be treated as an unjustifiable level of spend solely because it is high in absolute terms. The more relevant test is whether the 2025 cost sits above the level implied by recent performance and external benchmarks.

On a unit cost (€ per passenger) basis, Dublin Airport's Consultancy expenditure has been more stable. Excluding 2020 and 2021 as exceptional years, expenditure has ranged between €0.27 and €0.34 per passenger since 2019

and averaged €0.30 per passenger (excluding 2020 and 2021 as Covid-19 exceptions). The 2025 unit cost is €0.34 per passenger, equal to the highest level in the period.

19.2. BENCHMARKING EVIDENCE AND VIEW ON THE EFFICIENT BASELINE

Benchmarking of Dublin Airport's consultancy spend supports a measured base-year adjustment for the purposes of developing a forecast for the next regulatory period. Few airports report consultancy expenditure separately, and the scope of reported costs may not be fully consistent across operators. We therefore use the available evidence as a cross-check on the scale of the adjustment, rather than as a precise efficiency benchmark. This is shown in Table 19.1 below.

Table 19.1: Historic consultancy expenditure benchmark comparison, normalised per passenger (Mar 2026 prices)

Airport	Description of costs included	Cost per passenger (€/pax)
Dublin 2025	Consultancy services, legal, audit and tax compliance	≈ ≈
Dublin 2024	Consultancy services, legal, audit and tax compliance	0.27
Fraport 2025*	Consulting, legal and auditing expenses	0.12
Fraport 2024*	Consulting, legal and auditing expenses	0.26
Airport 2024/25	Audit, consulting, legal and taxation advice fees	0.17
Royal Schiphol Group 2025*	Advisory and audit fees	0.58
Royal Schiphol Group 2024*	Advisory and audit fees	0.52

Source: CEPA analysis of Dublin Airport data and published and unpublished comparator airport data

Note: Fraport includes Frankfurt Airport only. Royal Schiphol Group is assumed to include majority ownership subsidiaries.

This analysis shows that Dublin Airport falls within the observed benchmark range, although it is above both Fraport and the anonymised airport. We place limited weight on Royal Schiphol Group as an upper benchmark, as its reported 'advisory and audit fees' category appears materially higher than the other comparator categories and may include a broader range of costs.

Based on the evidence above, we consider Dublin Airport's historic performance to provide an appropriate basis for determining efficient expenditure. We set the efficient baseline at €10.0 million, equivalent to just over €0.27 per passenger. This reflects the lower quartile of Consultancy expenditure on a per-passenger basis between 2019 and 2025, excluding 2020 and 2021.

The resulting baseline is below both the recent historic average of €0.30 per passenger and the 2025 outturn of €0.34 per passenger, reducing the base year by €2.2 million relative to Dublin Airport's reported 2025 expenditure of €12.2 million.

19.3. EFFICIENT COST FORECAST

For the trend forecast in consultancy spend, we make a modest adjustment for passenger-related growth. Our econometric analysis supports a passenger elasticity of 0.10, reflecting that while part of Consultancy expenditure may scale with passenger activity, most of the category is not directly volume driven.

On this basis, the allowance increases from €10.0 million in the base year (2025) to €10.2 million by 2031. This allows for a modest increase in real expenditure while continuing to incentivise cost efficiency as passenger volumes grow. Forecast expenditure per passenger falls from approximately €0.27 in 2025 to €0.24 in 2031, meaning the allowance begins from Dublin Airport's lower quartile unit cost performance and improves further over the determination period.

As in the 2022 Decision, our forecast for these costs exceeds Dublin Airport's own forecast. In that determination, Dublin Airport indicated that its lower forecast reflected an ambition to manage these costs more tightly. Since then, however, we have observed significant year-to-year variability in actual expenditure, which has generally exceeded both Dublin Airport's and our own forecasts while remaining within the observed benchmark range.

We therefore consider our approach to represent a balanced position that incentivises improving efficiency over time while still affording Dublin Airport an appropriate degree of flexibility.

Table 19.2: Forecast of Consultancy expenditure (€m, Mar 2026 prices)

Consultancy	2025	2026	2027	2028	2029	2030	2031
CEPA forecast	10.0	10.0	10.1	10.1	10.1	10.2	10.2
Dublin Airport forecast	12.2	∞	∞	∞	∞	∞	∞

Source: CEPA analysis, Dublin Airport Regulatory Proposition

20. CAPITAL PROJECTS

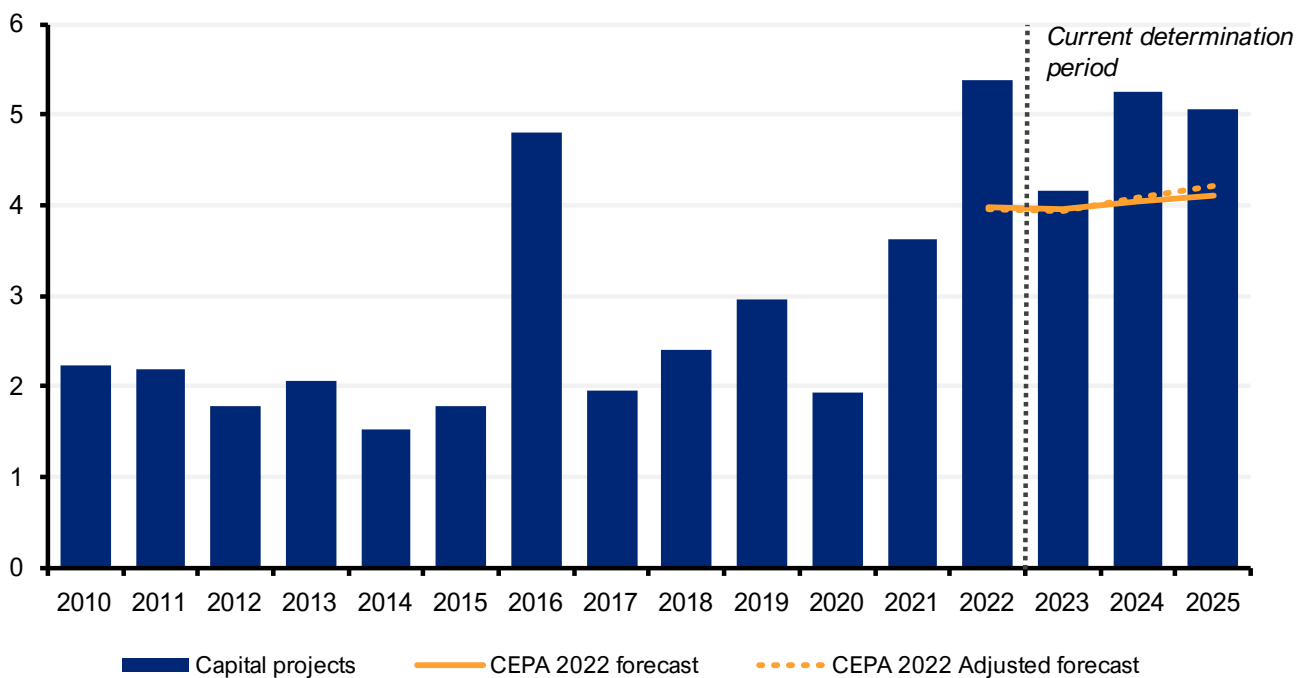
Capital Projects staff support the development, governance and delivery readiness of Dublin Airport's capital programme. This includes pre-capitalisation activity (work undertaken before projects reach the stage at which costs are capitalised) as well as client-side oversight, coordination and assurance through the project lifecycle. We assess efficiency primarily against the scale, complexity and governance requirements of the capital programme, rather than passenger volumes, which are not the principal workload driver for this function.

We conclude that a modest increase in Capital Projects staffing above the level assumed in the 2022 decision is likely to be justified by the scale and composition of the CIP. However, for the Final Determination, we would need to confirm that additional non-capitalised FTEs are not duplicated within capitalised project-management costs or external delivery support before treating the full 2025 outturn as the efficient baseline.

20.1. TRENDS IN HISTORIC EXPENDITURE

Capital Projects FTEs have consistently exceeded those implied by the CEPA 2022 forecast throughout the current regulatory period, reaching approximately five FTEs above that level by 2025. Figure 20.1 shows the FTE trajectory compared with the CEPA 2022 forecast. Staffing levels remained above the forecast throughout the period, with the exception of 2023, when staffing levels were broadly consistent with the forecast.

Figure 20.1: Historic Capital Projects staffing levels, 2010–2025 (FTEs)



Source: CEPA analysis of Dublin Airport data and IAA 2022 Decision

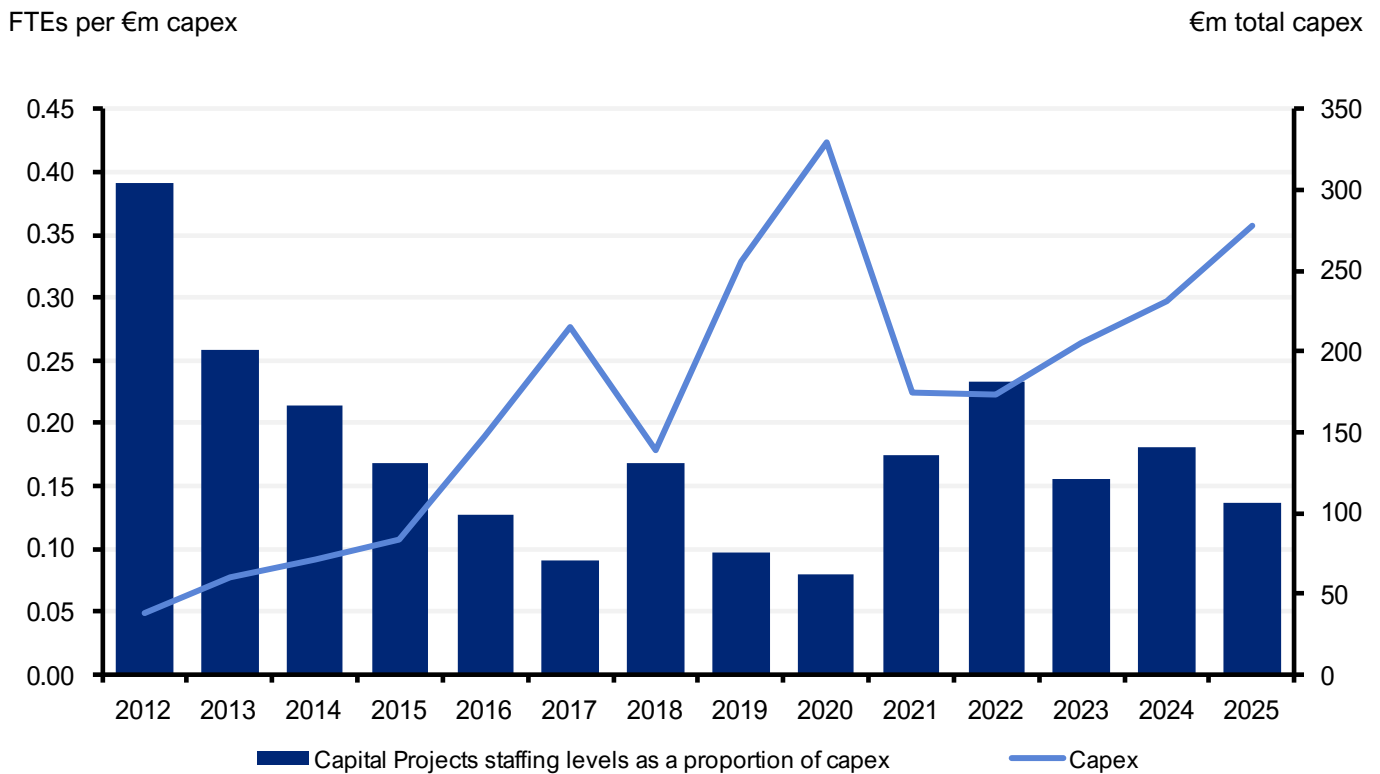
Dublin Airport attributes four of the additional FTEs to growth in the non-capitalised component of its Capital Projects team, linking this increase to higher capital expenditure since 2023. This is a plausible explanation in principle – a larger capital programme can generate additional client-side workload before projects reach the stage at which staff costs are capitalised. However, actual capital expenditure grew by less over this period than was anticipated at the time, and the available evidence does not establish that the FTE growth was proportionate to or necessitated by the growth in programme activity.

A further issue concerns the boundary between non-capitalised Capital Projects FTE, capitalised programme-management costs and external delivery support. Dublin Airport's submission does not set out a clear distinction between these three elements.

20.2. BENCHMARKING EVIDENCE AND VIEW ON THE EFFICIENT BASELINE

We assess Capital Projects efficiency primarily with reference to the volume and intensity of capital programme activity, rather than passenger volumes. As shown in Figure 20.2, FTE intensity relative to annual capital expenditure has declined marginally over time, from an average of 0.19 FTEs per €m of capex over 2012-19 to 0.16 FTEs per €m over 2023-25. This indicates that staffing has not grown disproportionately relative to actual capital expenditure and provides some support for the efficiency of the current level.

Figure 20.2: Capital Projects FTEs per €m of capex and total capex, 2010–2025



Source: CEPA analysis of Dublin Airport data

As a cross-check, we also consider Capital Projects staffing relative to passenger volumes. FTE per million passengers increased from 0.7 over 2012–19 to 1.1 over 2023–25. This growth above the rate of traffic expansion does not, in itself, imply inefficiency – passenger volumes are not the primary workload driver for Capital Projects staff, whose activities are determined principally by programme scale, governance requirements and project complexity. We place limited weight on this cross-check and do not use it as the basis for our baseline assessment.

Forward programme justification

The CIP programme provides the most material workload context for the 2025 staffing level. As shown in Table 20.1, Dublin Airport has identified a forward capital programme of €9.3 billion across 127 projects.

Table 20.1: Summary of Dublin Airport's proposed CIP (€m)

Programme grouping	Total cost (€m)	Projects	Roll-over projects
Airport Development	5,789	47	12
Asset Management	1,239	30	0
Sustainability	1,429	11	3
Commercial	352	10	3
Security	218	11	3

Programme grouping	Total cost (€m)	Projects	Roll-over projects
IT	146	14	0
Other	98	4	0
Total	9,270	127	21

Source: CEPA analysis of Dublin Airport CIP submission

The programme's scale and composition have direct implications for Capital Projects resource requirements.

Dublin Airport's proposed CIP includes 29 projects proposed for inclusion in StageGate, which carry enhanced governance requirements and generate pre-expenditure resourcing demands in the form of planning, approvals and assurance activity. The programme also includes 21 roll-over projects with a combined Dublin Airport proposed value of €3.4 billion; in some cases these may carry a lower incremental development burden than new projects but still require ongoing coordination and assurance. Dublin Airport propose to spend €5.8 billion across 47 Airport Development, the largest grouping by both value and count, and will require material planning, stakeholder engagement and operational coordination before construction expenditure peaks.

This workload is relevant to the 2025 baseline because a substantial portion of it arises before capital expenditure is incurred. Capital Projects staff support development, governance and delivery readiness at early lifecycle stages, which would make the size and complexity of the CIP a relevant consideration.

Need-Additionality-Efficiency assessment

To assess the efficiency of the growth in Capital Project staffing over and above the 2022 decision, we apply the Need-Additionality-Efficiency framework proportionately.

- On **need**, the available evidence supports the case for some increase in Capital Projects staffing. The capital programme has grown materially since the 2022 decision, and the CIP data indicates a large and broad forward programme.
- On **additionality**, the evidence is less complete. Dublin Airport describes the relevant increase as a non-capitalised Capital Projects FTE increase. However, the material reviewed does not provide a clear reconciliation between opex-funded Capital Projects FTEs, capitalised programme-management costs and external delivery support. This is important because the assessment should avoid double-counting delivery resource already funded through capital expenditure.
- On **efficiency**, the available internal benchmarks support a modest increase rather than a proportionate increase with capex. The fall in FTE per €m of annual capital expenditure suggests that the scale of the increase is not obviously excessive, though capital expenditure is an imperfect workload driver.

We consider 2025 outturn is an appropriate baseline for our forecast. We do not recommend reverting to the 2022 allowance, because the available capital programme evidence indicates a larger and more complex programme than the 2022 decision anticipated. However, Dublin Airport should demonstrate that the additional non-capitalised FTEs are separate from capitalised project management costs and external delivery support. If there is overlap, a targeted downward adjustment to the baseline is required before applying the forecast.

20.3. EFFICIENT COST FORECAST

Baseline and approach

We hold Capital Projects FTE flat at the 2025 baseline throughout the 2027–2031 determination period. Table 20.2 sets out the resulting FTE forecast.

Table 20.2: Forecast of Capital Projects staffing levels, 2025–2031 (FTEs)

Capital Projects	2025	2026	2027	2028	2029	2030	2031
CEPA forecast	38	38	38	38	38	38	38
Dublin Airport forecast	38	36	39	40	42	42	41

Source: CEPA analysis, Dublin Airport Regulatory Proposition

Dublin Airport projects Capital Projects staffing using a capital expenditure elasticity of 0.2, implying that each 1% increase in capital expenditure generates a 0.2% increase in Capital Projects FTE.

We do not adopt this approach for the following reasons:

- An elasticity approach mischaracterises the nature of the function. Capital Projects staff provide client-side programme oversight, governance, and delivery readiness. The workload facing this team is driven by programme complexity, project count, and governance requirements rather than the annual quantum of capital expenditure. An elasticity-based approach therefore implies a mechanistic relationship between expenditure volumes and staffing levels that does not reflect how programme management resources are actually deployed.
- The historical evidence does not support a positive capital expenditure elasticity. As set out earlier, FTE intensity relative to annual capital expenditure has fallen over time. In addition, our statistical analysis finds no significant relationship between annual capital expenditure and Capital Projects FTE levels. An elasticity of 0.2 is therefore not supported by Dublin Airport’s own historical data.
- Finally, the 2025 Capital Projects team is already sized to support the CIP2027+ pipeline. Much of the associated workload — including development activity, StageGate governance, stakeholder engagement, and assurance — arises before construction expenditure reaches its peak. As capital delivery accelerates during the determination period, incremental delivery resource is expected to be funded through capitalised project management costs and external delivery support rather than additional opex-funded FTEs. A flat staffing profile therefore better reflects the expected workload trajectory facing the Capital Projects team over the 2027–2031 period than an elasticity-based uplift.

Table 20.3: Forecast sets out our efficient expenditure forecast for Capital Projects payroll. The forecast combines the FTE profile in Table 20.3: Forecast with the conclusions of our unit payroll analysis in Section 2. We then apply our consistent top-down ongoing efficiency assumption.

Table 20.3: Forecast of Capital Projects expenditure, 2025–2031 (€m, Mar 2026 prices)

Capital Projects	2025	2026	2027	2028	2029	2030	2031
CEPA forecast	4.6	4.6	4.6	4.6	4.6	4.6	4.7
Dublin Airport forecast	5.1	5.1	5.1	5.1	5.1	5.1	5.1

Source: CEPA analysis, Dublin Airport Regulatory Proposition

The 2025 CEPA forecast expenditure is below the reported outturn for this category. This reflects the payroll forecasting approach used across the report, which applies an average administrative salary rather than category-specific actual pay. The difference should therefore be interpreted at the total payroll level rather than as a category-specific adjustment. Any understatement in Capital Projects is offset by corresponding differences in other categories, so the approach is neutral in aggregate.

21. MARKETING AND RELATED COSTS

This section assesses Dublin Airport's third-party expenditure on Marketing and Related Costs. We use 2025 outturn expenditure of €5.0 million as our efficient baseline. Our efficient forecast rolls forward the 2025 baseline using a 0.4 elasticity to passenger growth, increasing expenditure from €5.2 million in 2027 to €5.4 million in 2031.

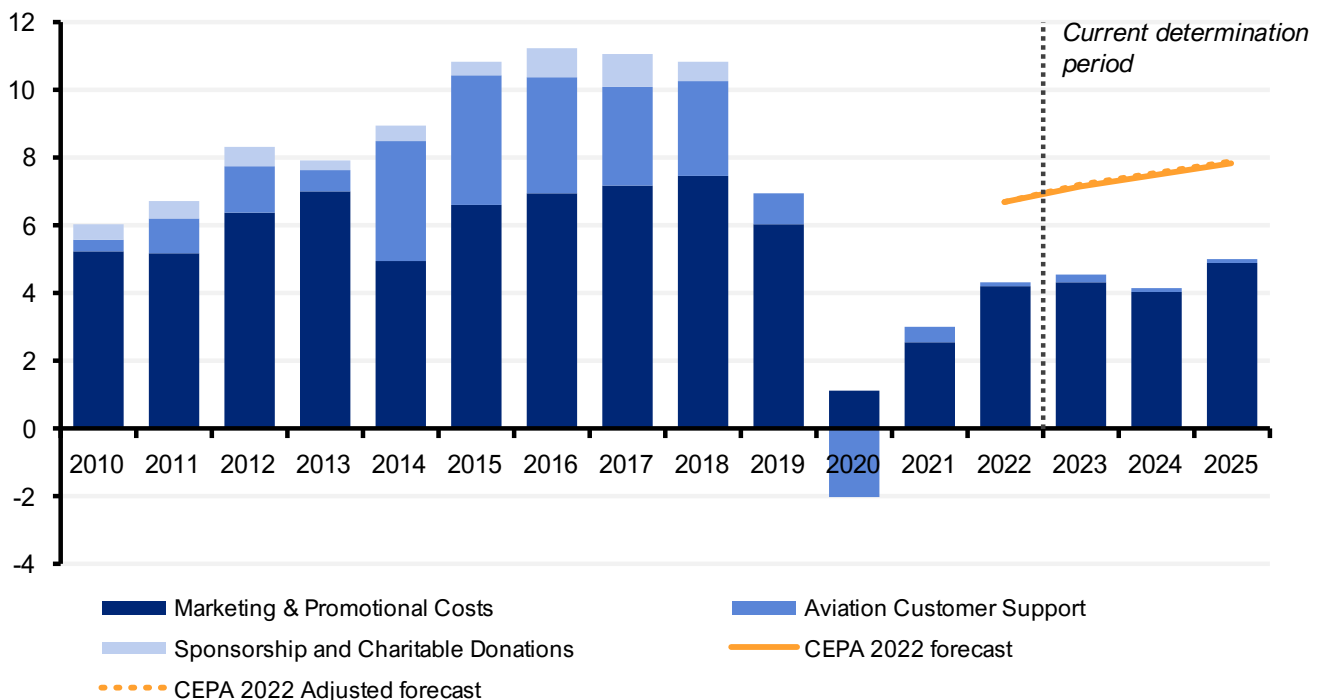
21.1. TRENDS IN HISTORIC EXPENDITURE

This section reviews Dublin Airport's expenditure on Marketing and Related Costs over the current determination period. We find that expenditure has been materially below the CEPA 2022 forecast throughout, continuing a pattern of underspend first observed in 2020. The Marketing and Related Costs category consists of three items:

- **Marketing & Promotional Costs** cover campaign and channel expenditure used to drive commercial sales, principally through digital channels. Products include car parking, lounges, Fast Track, Airport Club, Platinum Services and Drop & Go. This item covers campaign spend and digital costs only; payroll for Dublin Airport's digital and commercial teams is reported and assessed separately by Dublin Airport.
- **Aviation Customer Support** covers expenditure to support airlines opening new routes or adding capacity at the airport.
- **Sponsorship and Charitable Donations** has been zero since 2019 and Dublin Airport does not propose to reinstate it; we treat it as zero throughout.

Figure 21.1 presents Dublin Airport's historic reported Marketing and Related Costs expenditure from 2010 to 2025, together with the CEPA 2022 forecast and adjusted forecast for comparison.

Figure 21.1: Historic Marketing and Related Costs expenditure, 2010–2025 (€m, Mar 2026 prices)



Source: CEPA analysis of Dublin Airport data and IAA 2022 Decision

Historic expenditure increased from 2010 onwards, reaching a peak of approximately €11.2 million in 2016, driven by elevated Aviation Customer Support activity and active sponsorship spend. From 2018 onwards, expenditure declined. Expenditure turned negative in 2020, reflecting a credit accrued within the Aviation Customer Support

line. This was a temporary and exceptional outcome. Since 2020, expenditure within the aviation customer support line has remained at a negligible level.

Post-pandemic recovery in spending has been gradual. Expenditure recovered to €4.3 million in 2022 and reached €5.0 million in 2025. This is materially below the CEPA 2022 forecast across the period and below the adjusted forecast across the same years. The underspend relative to the forecast appears to reflect a genuine reduction in per-passenger marketing intensity relative to the 2022 Decision assumptions. The Aviation Customer Support item, at €0.1 million in 2025, has been structurally lower since 2019, appearing to reflect a shift away from airline support marketing.

21.2. BENCHMARKING EVIDENCE AND VIEW ON THE EFFICIENT BASELINE

We accept the 2025 outturn as the efficient baseline for this category. Dublin Airport has underspent the CEPA forecast in two successive determination periods. In neither case has it indicated or demonstrated that this reflects suppressed expenditure that would unwind in the following period. The 2025 outturn reflects a stable post-recovery level of spend, with the marketing and promotional sub-line at €4.9 million broadly consistent with the preceding two years. We therefore set the efficient 2025 baseline at €5.0 million.

21.3. EFFICIENT COST FORECAST

We adopt passenger volumes as the cost driver with an elasticity of 0.4, consistent with our approach in both the 2019 and 2022 studies. Dublin Airport proposes commercial revenue as the cost driver for this category, with an elasticity of 1.0. Its rationale is that both digital marketing and other marketing expenditure are fully variable with commercial revenue objectives and campaign intensity.

We do not use Dublin Airport's proposed cost driver or elasticity for two reasons:

- Dublin Airport has not provided adequate evidence that its marketing expenditure scales proportionally with commercial revenue. The proposed elasticity of 1.0 is derived from Dublin Airport's own classification of costs as fully variable, rather than from observed historical relationships.
- The outturn record does not support Dublin Airport's proposed cost trajectory. Dublin Airport spent materially below the path implied by a 1.0 commercial revenue elasticity over 2022 to 2025, even as commercial revenues recovered strongly.

We consider that passenger volumes remain the appropriate driver. Marketing activity, whether directed at stimulating demand, supporting new routes, or promoting B2C commercial products, is ultimately a function of passenger throughput and the scale of operations at Dublin Airport. Our econometrically derived estimate of the marketing cost elasticity is above 0.4. We nonetheless retain 0.4, which is consistent with the 2022 Decision, on the basis that Dublin Airport has underspent the corresponding forecast in two consecutive determination periods. Applying a higher elasticity in 2027 to 2031 would imply a step up in forecast expenditure that the outturn evidence does not support.

Table 21.1 presents the forecast and a comparison against Dublin Airport's own projection over the period.

Table 21.1: Forecast of Marketing and Related Costs expenditure, 2025–2031 (€m, Mar 2026 prices)

Marketing and Related Costs	2025	2026	2027	2028	2029	2030	2031
CEPA forecast	5.0	5.1	5.2	5.2	5.3	5.3	5.4
Dublin Airport forecast	5.0	⌘	⌘	⌘	⌘	⌘	⌘

Source: CEPA analysis, Dublin Airport Regulatory Proposition

22. INSURANCE

Insurance expenditure covers Dublin Airport's costs related to both external insurance cover and self-insurance arrangements. Dublin Airport is self-insured for both employers' liability and public liability. External policies include property, business interruption and vehicle insurance.

We find that Dublin Airport's 2025 Insurance cost baseline is an efficient baseline. Historic costs have generally remained below the CEPA 2022 forecast, and while comparator benchmarking suggests Dublin Airport may be above its closest peers, it remains within the full benchmarking range.

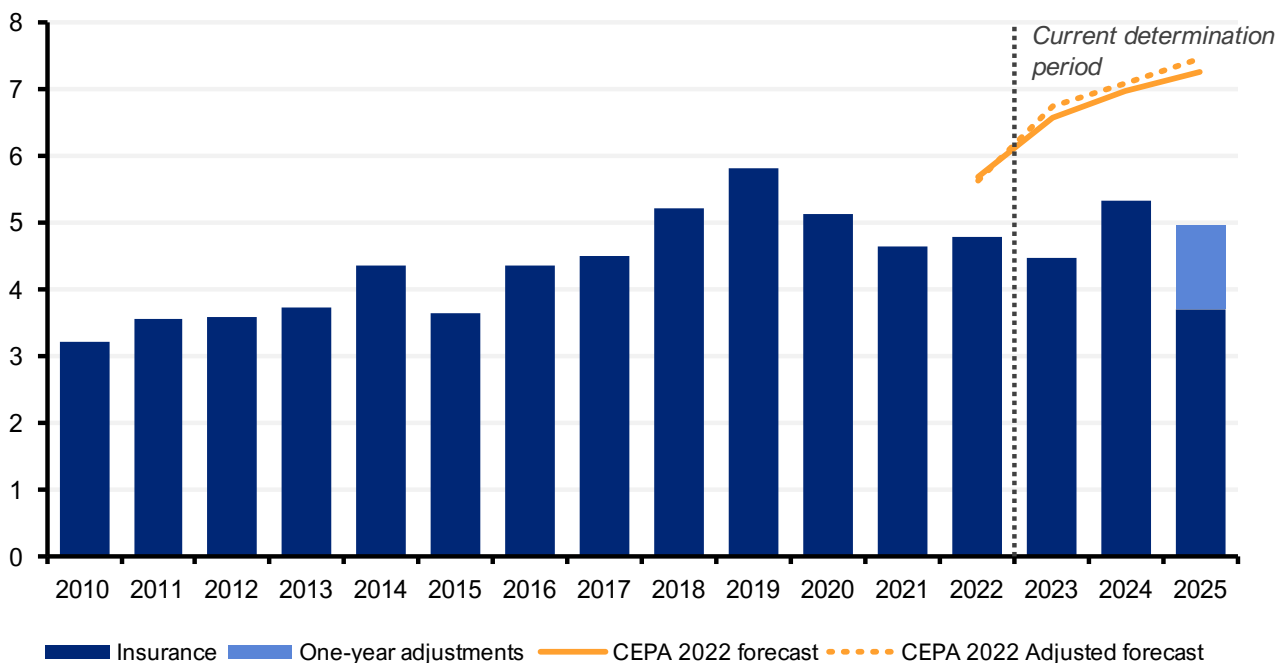
22.1. TRENDS IN HISTORIC EXPENDITURE

Historic Insurance costs have remained relatively stable over time, with movements that appear broadly consistent with the insurance market cycle rather than underlying efficiency gains or losses.

Figure 22.1 shows that Insurance costs have been materially below our 2022 forecast. Since 2010, costs have followed a multi-year pattern of growth and decline. This is broadly consistent with insurance markets, which typically operate in two-to-four-year cycles. Dublin Airport is likely to be exposed to these cycles given its limited bargaining power with insurers, like most other businesses.

In 2025, reported Insurance costs reached their lowest point since 2015. However, this reflects a one-off release of an accrual (light blue) rather than a significant reduction in the underlying cost of insurance. Without this one-off release, costs remain close to the recent historic average.

Figure 22.1: Historic Insurance expenditure, 2010–2025 (€m, Mar 2026 prices)



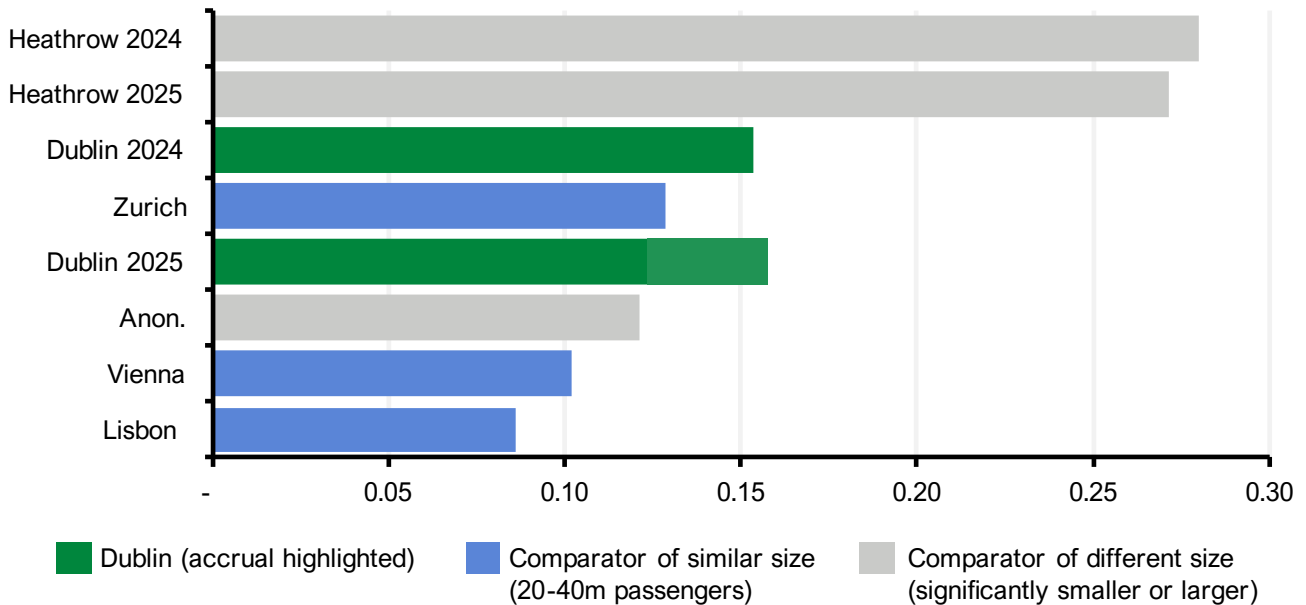
Source: CEPA analysis of Dublin Airport data

Note: The light blue bar indicates the one-off 2025 accrual release.

22.2. BENCHMARKING EVIDENCE AND VIEW ON THE EFFICIENT BASELINE

Figure 22.2 shows that Dublin Airport's Insurance costs compare favourably with Heathrow on a per passenger basis. Compared to airports in its broad size category, Dublin Airport represents the upper end of the range, when the one-off 2025 accrual release is reversed.

Figure 22.2: Insurance costs at Dublin and comparator airports (€ per passenger, Mar 2026 prices)



Source: CEPA analysis of Dublin Airport data, published airport reporting and unpublished comparator airport data.

Note: The hashed area reflects the accrual adjustment for 2025. Unless otherwise specified, comparator figures are for 2024, which was the latest full year of data available for most airports.

Drawing together the available evidence, Dublin Airport's normalised Insurance costs are above its closest comparator airports but remain well within the full benchmarking range. The 2025 position is also close to Dublin Airport's recent historic average and significantly below the CEPA 2022 forecast and the adjusted forecasts. We therefore do not have sufficient evidence to apply an efficiency challenge, and adopt the normalised 2025 cost as the efficient baseline, reversing the impact of the one-off accrual release.

22.3. EFFICIENT COST FORECAST

We forecast efficient Insurance expenditure for 2027–2031 by applying a passenger volume elasticity to the 2025 baseline, then adding small insurance uplifts from relevant CIP projects to produce our final forecast.

We use passenger volumes as a partial driver for Insurance expenditure. Some costs, such as aviation public liability, are likely to vary with passenger volumes. However, most costs are driven by market conditions, coverage and risk exposure rather than passengers alone. We therefore apply a 0.55 elasticity to passenger volumes. This captures passenger-related exposure while recognising that most costs are not directly volume driven.

CIP project uplifts

Table 22.1 sets out the CIP projects we have assessed and our conclusions on whether each gives rise to an incremental insurance cost increase above the passenger-driven baseline.

Table 22.1: Assessment of CIP insurance project uplift (€m, Mar 2026 prices)

Projects	References	Assessment
T2 CBP and Transfer Extension	27.02.04	We allow Dublin Airport's proposed CIP-related insurance uplifts. The total uplift is small (<€0.1 million by 2031), so we have not made project-specific adjustments.
Pier 5	27.02.05A	
Cargo to Eastlands (Enables Pier 5)	27.02.06	
Pier 1 West (First Floor Extension)	27.02.18	
South Apron Handler Accommodation Relocation	27.02.49	

Source: CEPA analysis of Dublin Airport CIP submission

Forecast adjusted for step changes

Table 22.2 sets out our CIP-adjusted forecast alongside Dublin Airport's regulatory proposition. After allowing for the small CIP-related uplifts, our final Insurance forecast increases from €4.8 million in 2025 to €5.4 million in 2031.

Table 22.2: Forecast of Insurance expenditure excl. and incl. CIP-impacts, 2025–2031 (€m, Mar 2026 prices)

Insurance	2025	2026	2027	2028	2029	2030	2031
CEPA forecast excl. CIP	4.9	5.0	5.1	5.2	5.3	5.3	5.4
T2 CBP and Transfer Extension	-	-	-	-	-	0.0	0.0
Pier 5	-	-	-	-	-	-	0.0
Cargo to Eastlands (Enables Pier 5)	-	-	-	-	0.0	0.0	0.0
Pier 1 West (First Floor Extension)	-	-	-	0.0	0.0	0.0	0.0
South Apron Handler Accommodation Relocation	-	-	-	-	-	-	0.0
CEPA forecast incl. CIP	4.9	5.0	5.1	5.2	5.3	5.4	5.4
Dublin Airport forecast incl. CIP	4.9	⌘	⌘	⌘	⌘	⌘	⌘

Source: CEPA analysis, Dublin Airport Regulatory Proposition

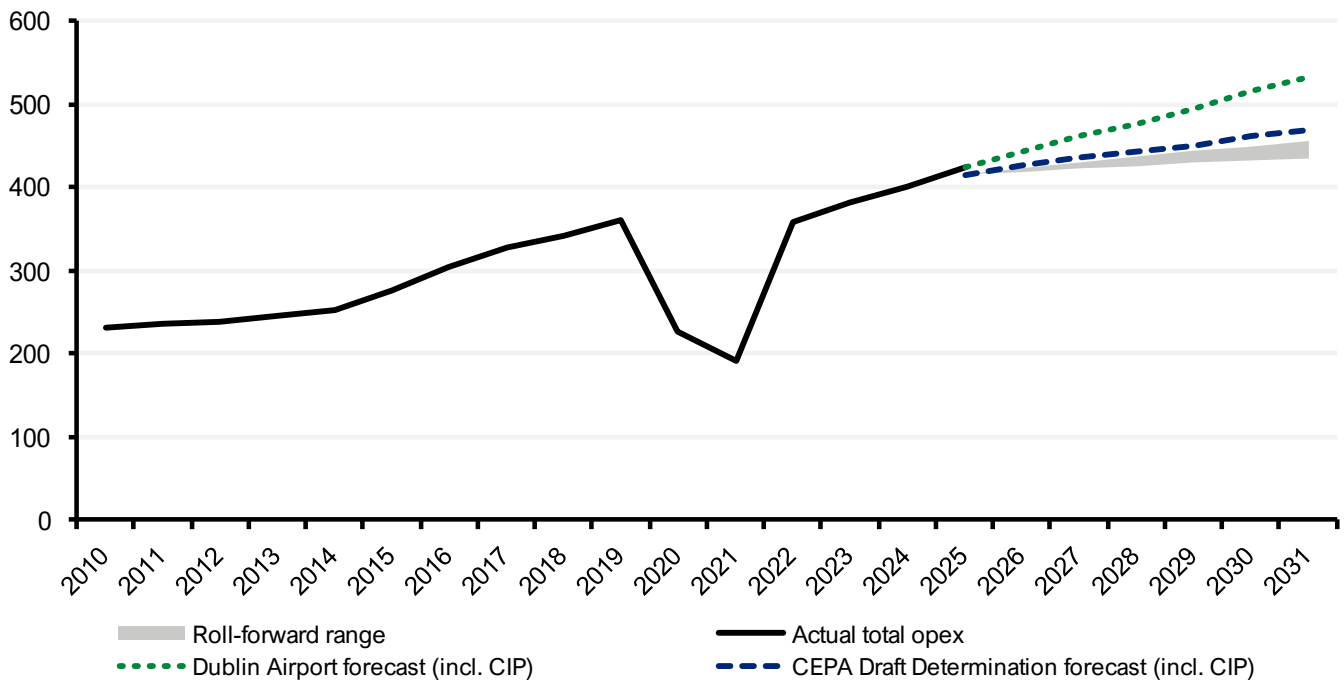
23. SUMMARY OF THE EFFICIENT OPEX FORECAST

Our efficient opex forecast for the 2027–2031 regulatory period is built up by cost category from an efficient baseline, cost-driver analysis and step-change assessment. Applying Dublin Airport’s underlying passenger forecast, and including accepted CIP-related opex impacts, we forecast efficient opex of €2,260.3 million over 2027–2031. This is below the forecast presented in Dublin Airport’s Regulatory Proposition, when it is adjusted to March 2026 prices for comparison.

Our aggregate forecast provides for real opex growth, but below Dublin Airport’s proposed trajectory

Figure 23.1 presents our efficient forecast alongside Dublin Airport’s proposition and a roll-forward range based on an aggregate elasticity of between 0.3 and 0.6. Appendix C summarises the evidence used to derive this elasticity range. The range provides a high-level cross-check, with the upper end allowing for some cost pressures identified by Dublin Airport.

Figure 23.1: Aggregate opex forecast comparison, including CIP (€m, Mar 2026 prices)



Source: CEPA analysis, Dublin Airport data and Dublin Airport Regulatory Proposition

Our forecast including CIP increases from a 2025 efficient baseline of €415.3 million to €469.1 million in 2031. This is a real increase of €53.8 million, or 13%, over the period. The increase reflects our view that some real growth in efficient opex is justified, given the cost pressures identified in the category-level assessments.

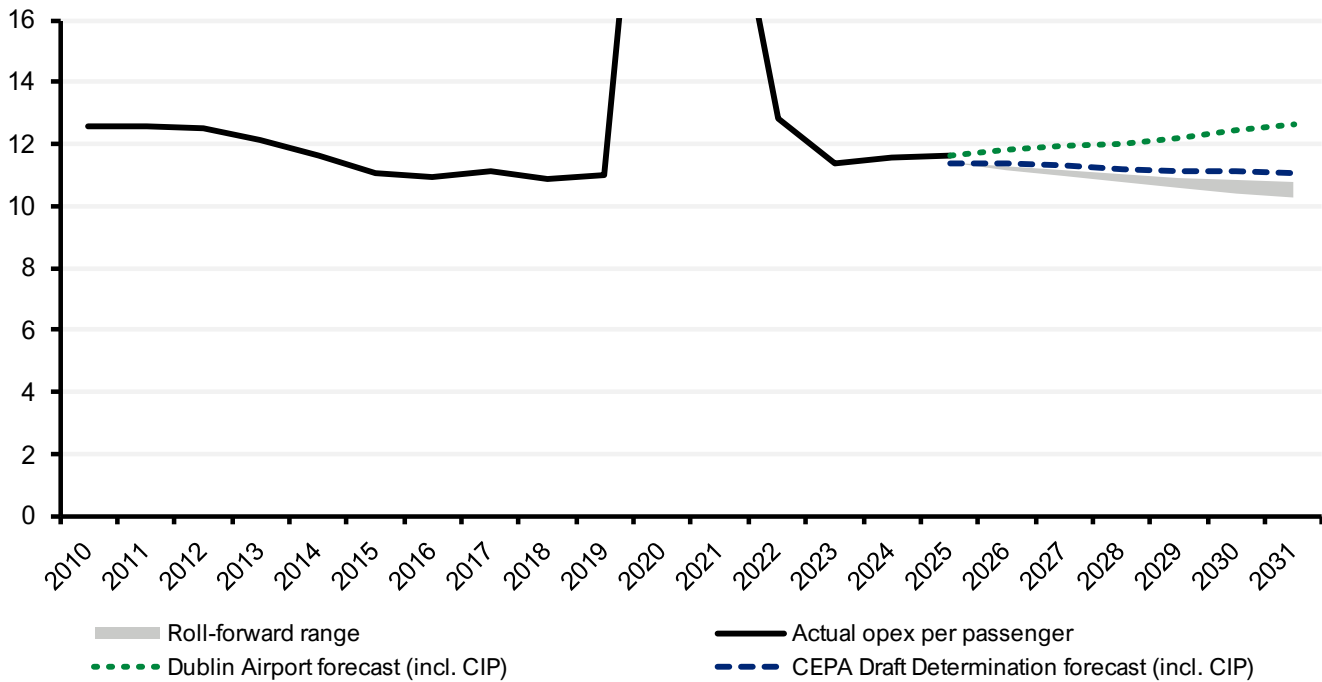
Our forecast remains below Dublin Airport’s proposition in every year of the next regulatory period. The gap widens over time, from in 2027 to in 2031. This reflects the cumulative effect of our efficiency adjustments, our selective treatment of proposed step changes and our view that some elements of Dublin Airport’s proposed cost growth are not sufficiently evidenced.

Our forecast sits marginally above the upper end of the roll-forward range, which provides a useful aggregate cross-check. We consider this position reasonable: it recognises that the 2027–2031 period requires some real cost growth beyond a mechanical roll-forward, while remaining below Dublin Airport’s proposition where we do not consider the proposed uplift to be fully evidenced.

We forecast opex per passenger to fall over the next regulatory period

Figure 23.2 presents our opex per passenger forecast alongside Dublin Airport's proposition and the roll-forward range based on the same elasticities of 0.3–0.6. It translates the aggregate forecast in Figure 23.1 into per passenger unit costs, using Dublin Airport's passenger forecast and including accepted CIP-related opex impacts.

Figure 23.2: Opex per passenger forecast, including CIP (€ per passenger, Mar 2026 prices)



Source: CEPA analysis, Dublin Airport data and Dublin Airport Regulatory Proposition

Our efficient opex per passenger forecast including CIP falls from €11.4 in 2025 to €11.1 in 2031. This reflects the scale effects expected from a growing airport. The forecast therefore allows total efficient opex to increase in real terms, while suggesting that Dublin Airport can reduce unit costs over the period due to increased volume.

Dublin Airport's proposition implies a higher unit-cost trajectory. This is consistent with the aggregate comparison in Figure 23.1: Dublin Airport's proposed total opex grows more quickly than our efficient forecast, and the difference is not fully offset by passenger growth.

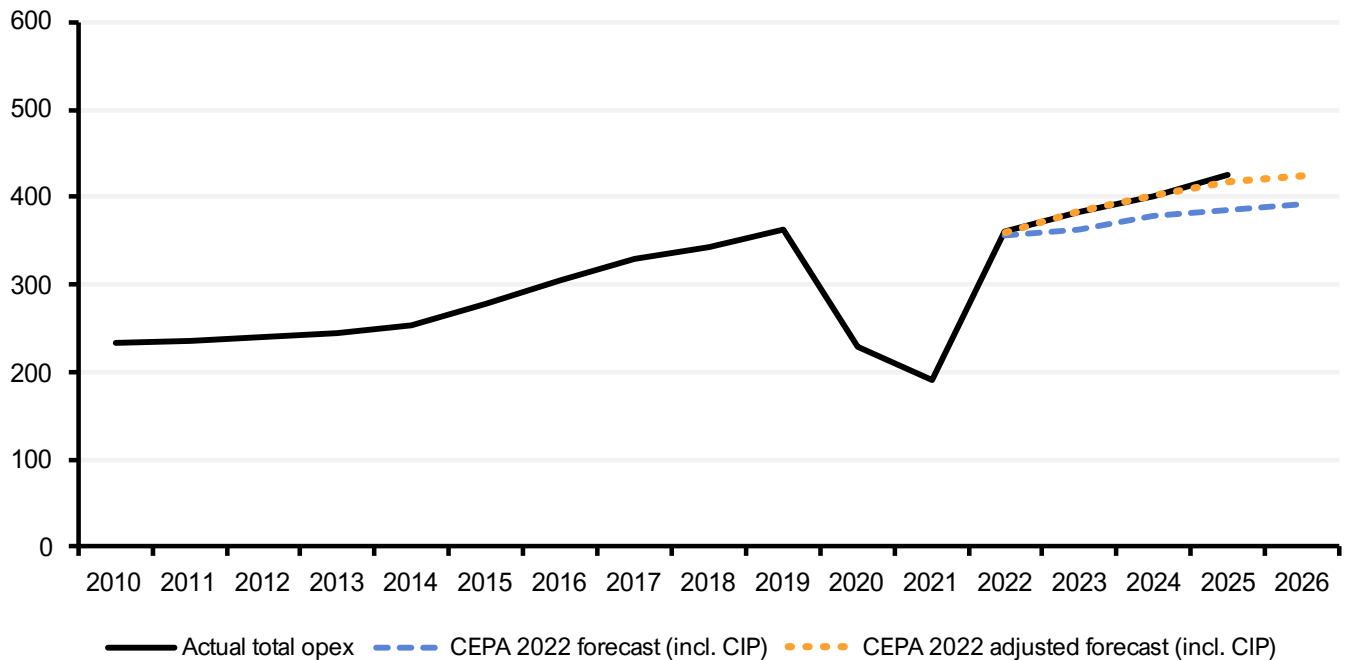
Our forecast remains broadly consistent with recent outturn performance on a per-passenger basis, while avoiding the step-upward trajectory implied by Dublin Airport's proposition. We consider this a balanced aggregate position: it recognises evidenced cost pressures, but continues to challenge Dublin Airport to deliver scale efficiencies as passenger volumes increase.

23.1. KEY UNCERTAINTIES AND SENSITIVITIES

The main uncertainties relate to passenger volumes, labour costs, service demand and CIP delivery. These affect both the level and timing of efficient expenditure, particularly where costs are linked to passenger activity, staffing requirements or the delivery of new assets.

The CEPA 2022 forecast provides a useful cross-check on how forecast uncertainty should be interpreted. As shown in Figure 23.3, the original CEPA 2022 forecast differs from outturn expenditure. However, once the forecast is adjusted for outturn passenger volumes, wage growth and CPI inflation, it is broadly aligned with actual expenditure by the end of the current determination period. This suggests that the underlying forecasting approach remains a reasonable basis for assessment, but that key input assumptions need to be monitored.

Figure 23.3: Cross-check of historic expenditure relative to the CEPA 2022 forecast (€m, Mar 2026 prices)



Source: CEPA analysis of Dublin Airport data and IAA 2022 Decision

The main sensitivities for the 2027–2031 forecast are:

- **Passenger volumes.** If outturn passengers differ from the IAA forecast, the efficient level of opex would also change. This is most relevant for categories where costs vary with activity, such as Security, PRM, Retail, Car Parks and parts of Maintenance.
- **Security.** Our forecast reflects the output of a bottom-up security staffing model and a targeted resilience allowance. Changes in service quality requirements, passenger presentation profiles, lane productivity, technology performance or regulatory requirements could affect the efficient staffing requirement.
- **CIP delivery.** CIP-related opex depends on project scope, delivery timing and operational integration. We have included CIP impacts where the additional opex is sufficiently evidenced. If project timings change, the associated opex impact should be updated to align with the actual delivery profile.
- **Real wage growth and labour market conditions.** Staff-intensive categories remain sensitive to real wage pressure and labour availability. Our forecast allows for real wage growth where supported by the evidence, while also applying efficiency assumptions where productivity improvements should offset part of that pressure.
- **Externally driven non-pay costs.** Utilities, Insurance, Rent and Rates, and some regulatory costs are less directly controllable by Dublin Airport than operational labour costs. These categories should be assessed by distinguishing between efficient management action and changes in market or statutory cost levels.

These sensitivities do not change our central view that Dublin Airport requires real opex growth over 2027–2031, but not at the scale proposed in its Regulatory Proposition. They indicate the areas where outturn data and any further evidence should be monitored most closely during the determination period.

Appendix A. CATEGORY-LEVEL FORECAST SUMMARY

Table A.1 presents a summary of opex forecast, disaggregated by cost category based on Dublin Airport's underlying passenger projections.

Table A.1: Draft opex forecast including CIP, Dublin Airport passenger projections (€m, Mar 2026 prices)

	2025	2026	2027	2028	2029	2030	2031
Pay							
Security	69.0	72.8	74.9	77.6	79.8	81.9	84.2
Central Functions	39.9	39.9	39.7	39.8	39.8	39.8	39.8
Facilities and Cleaning	27.5	28.2	28.7	29.3	29.7	30.1	30.4
Campus Services	23.2	23.3	23.4	23.6	23.8	24.0	24.1
Retail	22.4	22.7	23.1	24.3	24.7	25.7	26.0
Maintenance	21.2	22.6	22.8	23.0	23.2	23.4	23.6
IT	11.4	11.5	11.5	11.7	11.8	11.9	12.0
Airside Operations	8.0	8.1	8.2	8.4	8.5	8.6	8.7
Capital Projects	4.6	4.6	4.6	4.6	4.6	4.6	4.7
Car Parks	3.9	4.0	4.1	4.2	4.2	4.3	4.4
Non-pay							
Other Non-Staff	42.2	43.7	47.1	48.0	48.5	48.9	49.3
Rent-Rates	28.7	29.0	28.3	27.8	27.6	27.3	27.1
Maintenance	24.2	25.8	25.9	26.3	27.3	29.2	29.8
PRM	16.2	18.3	19.9	21.5	23.3	25.0	26.9
IT	14.1	14.3	14.8	15.4	16.1	17.1	17.9
Car Parks	8.9	9.0	9.1	9.2	9.3	9.4	9.5
Utilities	11.7	10.5	10.3	8.5	9.4	9.7	9.8
Facilities and Cleaning	10.2	10.3	10.5	10.6	10.7	11.2	11.4
Consulting	10.0	10.1	10.1	10.1	10.2	10.2	10.2
Other Staff	8.1	8.3	8.3	8.4	8.4	8.4	8.5
Marketing	5.0	5.1	5.2	5.2	5.3	5.3	5.4
Insurance	4.9	5.0	5.1	5.2	5.3	5.4	5.4
Totals							
Total pay	231.0	237.6	241.1	246.3	250.2	254.3	257.9
Total non-pay	184.3	189.4	194.4	196.4	201.2	207.2	211.2
Total opex	415.3	427.0	435.6	442.7	451.4	461.5	469.1
Opex per passenger (€)	11.40	11.38	11.29	11.17	11.13	11.13	11.10

Source: Dublin Airport data, CEPA analysis

Appendix B. FORECAST USING IAA PASSENGER PROJECTIONS

Table B.1 compares Dublin Airport's forecast to two sets of CEPA forecasts – one using Dublin Airport's passenger projections and one using IAA's draft passenger projections. The latter forecast is higher, reflecting the fact that the IAA is projecting higher passenger growth than Dublin Airport.

Table B.1: Comparison of draft forecasts, 2025–2031 (€m, Mar 2026 prices)

	2025	2026	2027	2028	2029	2030	2031
Excluding CIP							
Dublin Airport	424.8	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘
CEPA, Dublin Airport pax	415.3	426.9	435.6	443.4	451.0	457.3	463.7
(Variance)	⌘ ⌘	⌘ ⌘ ⌘	⌘ ⌘ ⌘	⌘ ⌘ ⌘	⌘ ⌘ ⌘	⌘ ⌘ ⌘	⌘ ⌘ ⌘
CEPA, IAA pax	415.3	428.4	438.9	447.9	456.6	464.2	472.2
(Variance)	(-9.5)	(-15.1)	(-22.2)	(-28.7)	(-36.1)	(-44.2)	(-50.5)
Including CIP							
Dublin Airport	424.8	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘
CEPA, Dublin Airport pax	415.3	427.0	435.6	442.7	451.4	461.5	469.1
(Variance)	(-9.5)	⌘ ⌘ ⌘	⌘ ⌘ ⌘	⌘ ⌘ ⌘	⌘ ⌘ ⌘	⌘ ⌘ ⌘	⌘ ⌘ ⌘
CEPA, IAA pax	415.3	428.5	438.9	447.3	457.1	468.5	477.8
(Variance)	(-9.5)	⌘ ⌘ ⌘	⌘ ⌘ ⌘	⌘ ⌘ ⌘	⌘ ⌘ ⌘	⌘ ⌘ ⌘	⌘ ⌘ ⌘

Source: Dublin Airport Regulatory Proposition, CEPA analysis

B.1. BREAKDOWN OF CEPA FORECAST

Table B.2 below shows our draft forecast of efficient staffing levels using IAA's draft passenger projections.

Table B.2: CEPA draft forecast of efficient staffing levels incl. CIP, IAA passenger projections, 2025–2031 (FTEs)

	2025	2026	2027	2028	2029	2030	2031
Security	1,181	1,213	1,216	1,224	1,232	1,239	1,258
Central Functions	382	383	382	381	380	379	378
Facilities and Cleaning	413	418	423	427	431	435	439
Campus Services	237	238	239	240	240	241	242
Retail	360	366	372	388	392	408	413
Maintenance	231	247	248	250	251	252	254
IT	93	94	95	96	96	97	98
Airside Operations	83	84	85	87	88	89	90
Capital Projects	38	38	38	38	38	38	38
Car Parks	58	59	60	61	62	63	63
Total	3,076	3,140	3,157	3,190	3,211	3,240	3,271

Source: Dublin Airport data, CEPA analysis

Table B.3 presents a summary of opex forecast, disaggregated by cost category based on IAA's underlying passenger projections.

Table B.3: Draft opex forecast including CIP, IAA passenger projections (€m, Mar 2026 prices)

	2025	2026	2027	2028	2029	2030	2031
Pay							
Security	69.0	73.3	75.8	78.7	81.2	83.5	86.3
Central Functions	39.9	39.9	39.9	40.0	40.0	40.1	40.1
Facilities and Cleaning	27.5	28.3	28.9	29.5	30.0	30.5	30.9
Campus Services	23.2	23.3	23.5	23.7	23.9	24.1	24.3
Retail	22.4	22.8	23.4	24.6	25.1	26.2	26.6
Maintenance	21.2	22.7	22.8	23.1	23.3	23.5	23.8
IT	11.4	11.5	11.6	11.7	11.9	12.0	12.2
Airside Operations	8.0	8.2	8.3	8.5	8.6	8.8	8.9
Capital Projects	4.6	4.6	4.6	4.6	4.6	4.6	4.7
Car Parks	3.9	4.0	4.1	4.2	4.3	4.4	4.5
Non-pay							
Other Non-Staff	42.2	44.1	47.9	49.1	49.7	50.3	50.9
Rent-Rates	28.7	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘
Maintenance	24.2	25.8	26.0	26.4	27.5	29.4	30.0
PRM	16.2	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘
IT	14.1	14.3	14.9	15.6	16.3	17.4	18.2
Car Parks	8.9	9.0	9.2	9.3	9.5	9.6	9.7
Utilities	11.7	10.5	10.4	8.7	9.7	10.0	10.3
Facilities and Cleaning	10.2	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘	⌘ ⌘
Consulting	10.0	10.1	10.1	10.1	10.2	10.2	10.2
Other Staff	8.1	8.3	8.4	8.4	8.5	8.6	8.6
Marketing	5.0	5.1	5.2	5.3	5.4	5.4	5.5
Insurance	4.9	5.1	5.2	5.3	5.4	5.5	5.6
Totals							
Total pay	231.0	238.5	242.7	248.5	252.9	257.7	262.1
Total non-pay	184.3	190.0	196.2	198.8	204.2	210.8	215.7
Total opex	415.3	428.5	438.9	447.3	457.1	468.5	477.8
Opex per passenger (€)	11.40	11.30	11.13	10.97	10.88	10.83	10.74

Source: Dublin Airport data, CEPA analysis

Appendix C. **ELASTICITY EVIDENCE**

This appendix sets out the evidence base for the cost drivers and elasticities used to project efficient operating expenditure over the 2027–2031 price control period. In the appendix, we:

- explain how we used the different sources of evidence;
- summarise the external and regulatory evidence on airport opex elasticities; and
- document the technical approach and interpretation of econometric analyses we have undertaken to estimate the relationship between cost drivers and opex.

The evidence base comprises six sources which, in the table below, we document the strengths and weaknesses of:

- The elasticities used in CEPA's 2019 and 2022 opex efficiency studies.
- Elasticities proposed by Dublin Airport in its Regulatory Proposition for 2027–2031.
- A multi-airport panel regression undertaken as part of this study, looking at the aggregate relationship between opex and passenger volumes.
- Regressions at an individual cost category level undertaken as part of this study, using historical Dublin Airport data, looking at the relationship between expenditure and specific cost drivers.
- Bottom-up modelling, which we use in place of an elasticity-based approach for some cost categories.

Table C.1: How we use each evidence source

Evidence source	Role in the assessment	Strengths	Limitations	Implication for the elasticity framework
CEPA 2022 opex study	Provides regulatory continuity and a starting point for several assumptions.	Previously developed for Dublin Airport and aligned to the IAA cost categories.	Developed for the previous review and partly reflected the post-Covid recovery context.	Retain where no stronger current evidence supports a change.
Dublin Airport's Regulatory Proposition	Identifies Dublin Airport's view of the relationship between expenditure and cost drivers.	Granular and linked to Dublin Airport's business plan.	Not independently derived.	Treat as contextual evidence.
Heathrow H8 evidence	Provides an external regulatory benchmark for airport opex responsiveness.	Recent aviation evidence prepared for a regulated airport price control.	Heathrow differs from Dublin Airport in scale, asset configuration, outsourcing mix and regulatory context.	Treat as contextual evidence, particularly when triangulating between evidence.
CEPA multi-airport panel regression	Provides the main top-down cross-check on the aggregate elasticity implied by our forecast.	Uses a cross-airport dataset and estimates total opex elasticity directly.	Aggregate analysis does not identify the right driver for each cost category.	Use as top-down sense check.
CEPA Dublin Airport category regressions	Provides directional evidence on relative cost responsiveness by category.	Uses Dublin Airport's own historical cost data.	Shorter time series and more sensitive to category changes, Covid-19 and operational changes.	Use to inform decision on whether to update our 2022 elasticities.

Evidence source	Role in the assessment	Strengths	Limitations	Implication for the elasticity framework
Bottom-up modelling	Provides direct evidence where costs are driven by operational requirements.	Links expenditure to operational requirements such as lanes, rosters, task allocation and service standards.	Depends heavily on input assumptions and operational modelling choices.	Use instead of or as a cross-check against a passenger elasticity, where appropriate.

Source: CEPA analysis

C.1. EXTERNAL AND REGULATORY EVIDENCE

The external and regulatory evidence supports the use of elasticities of less than 1 for most passenger-driven airport opex. Airport operations contain fixed and semi-fixed costs. Many activities require minimum levels of staffing, supervision, compliance coverage, asset availability, or operational management regardless of incremental passenger growth.

For this reason, we generally expect the aggregate elasticity of opex to passenger volumes to sit materially below 1.0. A 1.0 elasticity is only appropriate where costs are directly transactional, contractually variable, statutory, or directly linked to headcount.

CEPA 2022 opex study

The CEPA 2022 study provides the starting point for several of the elasticities we use in the report. The study used the principle that most airport opex is sub-proportional to passenger volumes, and set point elasticities using a mixture of judgement, bottom-up operational modelling, and external evidence. Where we used judgement, we used the aggregate passenger elasticity estimate from other studies, 0.3 to 0.4, as an anchor for our estimates - for cost categories expected to not be materially driven by passenger volumes, we used an elasticity lower than this range, and vice versa.

We retain the elasticity assumptions from our 2022 study where the current evidence does not support a material change. We depart from it where: a different driver is more appropriate, where bottom-up modelling provides a stronger basis for the forecast, or where more recent evidence supports a different elasticity.

Dublin Airport's Regulatory Proposition

Dublin Airport's proposition provides evidence on the cost drivers and elasticities it considers relevant for the 2027–2031 period. It includes both elasticity-based assumptions and bottom-up cost projections.

We use the elasticities in the Regulatory Proposition to contextualise Dublin Airport's opex forecasts and accompanying narrative. However, we do not treat the proposed elasticities or bottom-up forecasts as self-validating.

Heathrow H8 evidence

We consider the evidence prepared by Europe Economics and York Aviation for the CAA's H8 price control review of Heathrow.³¹ Their total opex regressions, based on HAL business plan data for 2014 to 2024, estimated passenger coefficients of around 0.19 to 0.23 across specifications.

We use this as an external benchmark, not as a direct read-across. Heathrow differs from Dublin Airport in scale, capacity utilisation, asset configuration, outsourcing mix and regulatory context. The H8 evidence is nevertheless

³¹ Europe Economics and York Aviation (2026), [Opex and Commercial Revenues for H8 – Recommendations](#).

useful because it independently supports the conclusion that aggregate airport opex increases less than proportionately with passenger volumes.

The H8 evidence also supports the general approach of combining econometric analysis with regulatory judgement. The category-level assumptions used in that review did not treat all opex as passenger-driven, and generally allowed for fixed and semi-fixed elements in the cost base.

C.2. CEPA ECONOMETRIC EVIDENCE

We prepared two econometric analyses to inform the elasticity assumptions.

The first estimates the relationship between total airport opex and passenger volumes using a multi-airport panel dataset. We use this as a top-down cross-check on the aggregate elasticity implied by our category-level assumptions.

The second estimates relationships between Dublin Airport cost categories and passenger volumes using Dublin Airport's historical cost data. We use this as directional evidence on relative cost responsiveness across categories.

We do not use either econometric exercise mechanically. Elasticities are regulatory forecasting assumptions, not purely statistical outputs. We therefore interpret the econometric evidence alongside regulatory precedent, Dublin Airport's proposition, H8 evidence and operational judgement.

Multi-airport panel regression of total opex

The panel regression estimates the aggregate relationship between airport opex and passenger volumes. Its main role is to test whether the weighted-average elasticity implied by our category-level assumptions is plausible in aggregate.

The model is estimated in log-log form, so the coefficient on passenger volumes can be interpreted as an elasticity. For example, a coefficient of 0.35 implies that a 10% increase in passenger volumes is associated with a 3.5% increase in total opex, all else equal.

The dataset covers twelve European airports over the period 2000 to 2024. The dependent variable is total operating expenditure, expressed in HICP-real terms. The main explanatory variable is passenger volumes. We also test specifications that include freight volumes separately and workload units, which combine passenger and freight activity into a single traffic measure.

The preferred specifications are summarised in the table below.

Table C.2: Preferred multi-airport panel regression specifications

Variable	Model 1: Pax excl. Covid	Model 2: Pax + Covid dummies	Model 3: Pax + year FE
Log passenger numbers	0.573*** (0.138)	0.500*** (0.136)	0.298 (0.353)
Airport fixed effects	Yes	Yes	Yes
Year fixed effects	No	No	Yes
Observations	214	234	214
R-squared	0.281	0.239	0.506

Source: CEPA analysis

*Note: Standard errors in parentheses. *** denotes statistical significance at the 1% level. Model 1 excludes 2020 and 2021. Model 2 includes dummy variables for the Covid-19 years (2020 and 2021) and the post-Covid recovery period (2022 to 2024). Model 3 excludes 2020 and 2021 and includes year fixed effects.*

The passenger specifications estimate elasticities between around 0.3 and 0.6. The range is driven mainly by how the model treats Covid-19, the post-Covid recovery period and common year effects across airports. Most

statistically significant passenger specifications are clustered towards the upper end of this range, while the lower estimate comes from the year fixed effects specification.

We also tested specifications using passenger volumes with freight, workload units and restricted airport samples. These sensitivities are generally within the same broad 0.3 to 0.6 range and support the conclusion that airport opex is materially sub-proportional to passenger growth.

We use this range as the main aggregate cross-check. We do not apply it directly to every cost category because the relevant driver differs by category. Some categories are better linked to FTEs, PRM passenger volumes, terminal area, the capital programme, statutory valuation, or bottom-up operational requirements.

Dublin Airport disaggregated regressions

The Dublin Airport category regressions estimate the relationship between individual cost categories and passenger volumes, using Dublin Airport's historical cost data. We use the estimated coefficients, where the results are robust across multiple specifications, to validate or revise our elasticity assumptions. The regressions help us identify which cost categories have historically been more responsive to passenger volumes and which have shown a weak, unstable, or non-passenger-driven relationship.

We estimate three specifications for each category, as described in the table below.

Table C.3: Dublin Airport disaggregated regression specifications

Specification	Purpose	Interpretation
Base log-log specification	Estimates the association between the cost category and passenger volumes.	Provides the starting point for the estimated elasticity.
Covid-adjusted specification	Tests whether the estimated relationship is sensitive to Covid-19 and recovery-period distortions.	Helps avoid treating exceptional pandemic effects as normal cost-volume responsiveness.
First-difference specification	Estimates the relationship between changes in costs and changes in passenger volumes.	Robustness check to see whether short-run elasticities vary from long-run elasticities.

Source: CEPA analysis

The results vary materially by category, with many of the elasticity estimates being unstable across specifications, showing wide ranges, or being unintuitive (e.g. negative). The table below summarises the category regression evidence.

Table C.4: Interpretation of Dublin Airport category regression evidence

Category	Pay evidence	Non-pay evidence	Notes
Airside Operations	0.39–1.21	N/A	Two of the three specifications point to an elasticity of around 0.40
Campus Services	0.13–0.63	N/A	
Capital Projects	No reliable relationship	N/A	Coefficients are negative and insignificant
Central Functions	0.14–0.84	N/A	
Facilities and Cleaning	Pax: 0.04–0.40 Term. area: unstable	Negative coefficients	Place limited reliance on results
IT	-0.17–0.38	-0.50–0.58	Some specifications give negative coefficients

Category	Pay evidence	Non-pay evidence	Notes
Maintenance	-0.12–0.28	0.15–1.02	Non-pay results give large range, though two of the specifications give an elasticity of greater than 1
Security	0.07–1.30	N/A	Unstable; very large range
Car Parks	-5.01–1.24	0.00–1.26	Unstable with negative coefficients
Consultancy	N/A	0.36–2.52	Wide range
Insurance	N/A	-1.08–0.51	Levels regression gives coefficient of 0.51
Marketing	N/A	0.59–2.54	
Other Non-Staff Non-Pay	N/A	-1.09–1.93	Unstable with negative coefficients
Other Staff Non-Pay	N/A	0.76–1.03	Two of the specifications estimate elasticities around 0.76
PRM	N/A	0.49–1.50	Very wide range
Retail	0.34–0.64	N/A	
Utilities	N/A	-1.41–0.31	Unstable with negative coefficients

Source: CEPA analysis of Dublin Airport data

C.3. LIMITATIONS AND INTERPRETATION

The elasticity assumptions are regulatory forecasting assumptions. They should not be interpreted as precise statistical estimates of the true short-run or long-run cost function for each category.

The evidence is strongest at aggregate level. The multi-airport panel analysis provides a useful top-down estimate of the relationship between total airport opex and passenger volumes. However, it does not identify the appropriate driver or point elasticity for each individual cost category.

The Dublin Airport category regressions are more granular, but less stable. They rely on shorter time series and are affected by changes in cost categorisation, outsourcing, Covid-19 and recovery-period operational changes. For this reason, we use the category results as directional evidence rather than as mechanical determinants of our final elasticity assumptions.

Some costs are not well explained by passenger volumes. These include costs linked to FTEs, PRM demand, terminal area, statutory valuations, lease terms, the capital investment programme, technology requirements and service standards. Where these drivers are more appropriate, we use them instead of (or in addition to) total passenger volumes.

These limitations support the triangulated approach used in this report. We use elasticities where they provide a reasonable basis for forecasting recurring scale effects. We use alternative drivers or bottom-up modelling where passenger volumes are not the right driver.

Appendix D. SECURITY MODEL METHODOLOGY

This appendix explains the methodology used to estimate efficient staffing requirements for **central search** at Dublin Airport over the 2027–2031 regulatory period. It also provides further details on the rationale underpinning our forecast of **vehicle control post** (VCP) staff.

D.1. PURPOSE AND SCOPE OF CENTRAL SEARCH MODEL

Our central search model covers passenger and cabin-bag screening in **Terminal 1** and **Terminal 2**. It estimates the number of lanes required to process forecast passenger demand, converts those lane requirements into productive staff hours and then converts productive staff hours into full-time equivalent staff (FTEs).

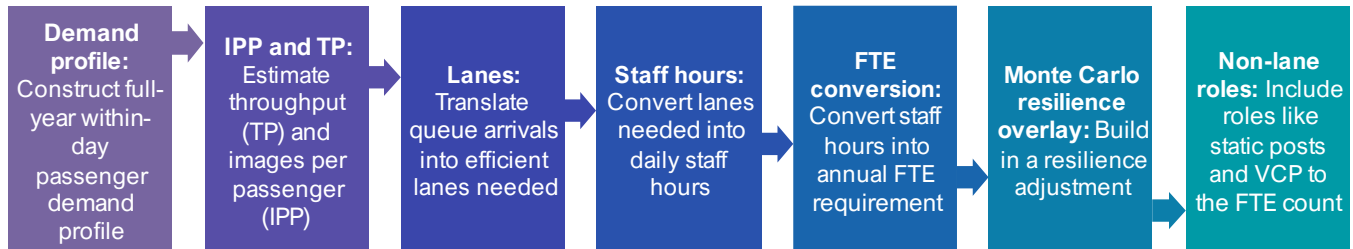
The model (and this appendix) focuses on central search because this is the part of the security operation where staffing requirements are most directly linked to passenger demand, images per passenger (IPP), lane throughput and staffing per open lane. Other security roles, including static posts, vehicle control posts and ancillary management or support roles, are assessed separately in Section 4. Those roles are not modelled through the central search model because their staffing requirements are driven mainly by fixed coverage, regulatory requirements or operational support needs.

The model has two components:

- a **deterministic model**, which estimates the efficient staffing requirement under central assumptions for passenger presentation, IPP and throughput; and
- a **stochastic model**, which tests whether that deterministic staffing profile remains sufficient when plausible short-term variation in passenger presentation, IPP and throughput is introduced.

Figure D.1 summarises the structure of the central search model.

Figure D.1: Overview of the central search modelling approach



Source: CEPA analysis

D.2. DATA SOURCES AND LIMITATIONS

The model draws on Dublin Airport operational data for 2025, supplemented by discussions with Dublin Airport and benchmarking evidence from comparator airports.

The main data sources are:

- passenger presentation data, based on observed boarding-card scans at central search;
- IPP data, used to convert passenger demand into tray demand;
- CT scanner throughput data, used to estimate lane capacity;
- body scanner throughput data, used as a cross-check on whether passenger screening is likely to constrain overall lane capacity;
- staffing and lane-opening data, used to assess planned and achieved staffing per lane; and
- queue-time data, available for validation and calibration, but not used as a direct input to the central lane requirement calculation.

We originally considered undertaking a lane-level quantile regression of tray and body scanner throughput against staffing. In principle, that approach could have estimated the relationship between staffing and efficient frontier throughput directly from observed operational data. In practice, the available data was not sufficiently granular to provide a reliable basis for that modelling. We therefore use Dublin Airport's throughput and staffing-per-lane assumptions, tested against operational evidence and comparator benchmarking.

Table D.1 summarises the main data inputs, their purpose and the main limitations.

Table D.1: Data sources and main limitations

Data area	Use in model	Main limitation	Implication for modelling
Boarding-card scans	Passenger presentation profile	Forecast profile is based on observed 2025 presentation	Construct forecast demand by scaling the observed 2025 profile
IPP data	Converts passengers to tray demand	Terminal 1 required adjustment to reflect fully C3 operation	Adjust Terminal 1 IPP to reflect a full C3 operating model
CT throughput data	Lane capacity assumption	2025 was a transition year and does not by itself define efficient future throughput	Use Dublin Airport's assumptions and check against benchmarking
Body scanner throughput data	Cross-check on binding constraint	Data is not sufficiently linked to CT throughput and staffing to support a fully integrated model	Assume CT throughput is the binding constraint
Staffing and lane-opening data	Staffing-per-lane and lane operation evidence	Data does not support robust quantile regression of throughput against staffing at lane-pair level	Use Dublin Airport's staffing templates and test against benchmarking

Source: CEPA analysis

The model tests the deterministic lane plan against the current daily security queue target.

D.3. CONSTRUCTING THE FULL YEAR DEMAND PROFILE

The first step in the model is to construct the passenger demand profile at central search. This profile determines how many passengers are expected to present at security in each part of the day, by terminal and forecast year.

We use observed boarding-card scan data as the basis for the demand profile. Boarding-card scan records provide a direct measure of when passengers enter central search. They therefore provide a better basis for the lane requirement model than a stylised profile based only on scheduled departures and assumptions on when passengers arrive before their flights.

The 2025 profile is available at 15-minute intervals for Terminal 1 and Terminal 2. We use the full year of 2025 data rather than a single busy day or representative week. This allows the model to capture variation across the day, week and year. It also avoids basing the staffing forecast only on peak-period conditions.

The model uses both planned and actual boarding-card scan profiles. The planned profile reflects the passenger presentation profile used by Dublin Airport to plan its central search operation. The actual profile reflects observed passenger presentation. The difference between the two profiles provides evidence on variation around plan, as well as larger deviations associated with operational disruption or unusual passenger behaviour.

For each forecast year from 2026 to 2031, we scale the 2025 profile to the relevant annual passenger forecast. The model can be run using either the IAA passenger forecast or the Dublin Airport passenger forecast, depending on the scenario being tested in the report.

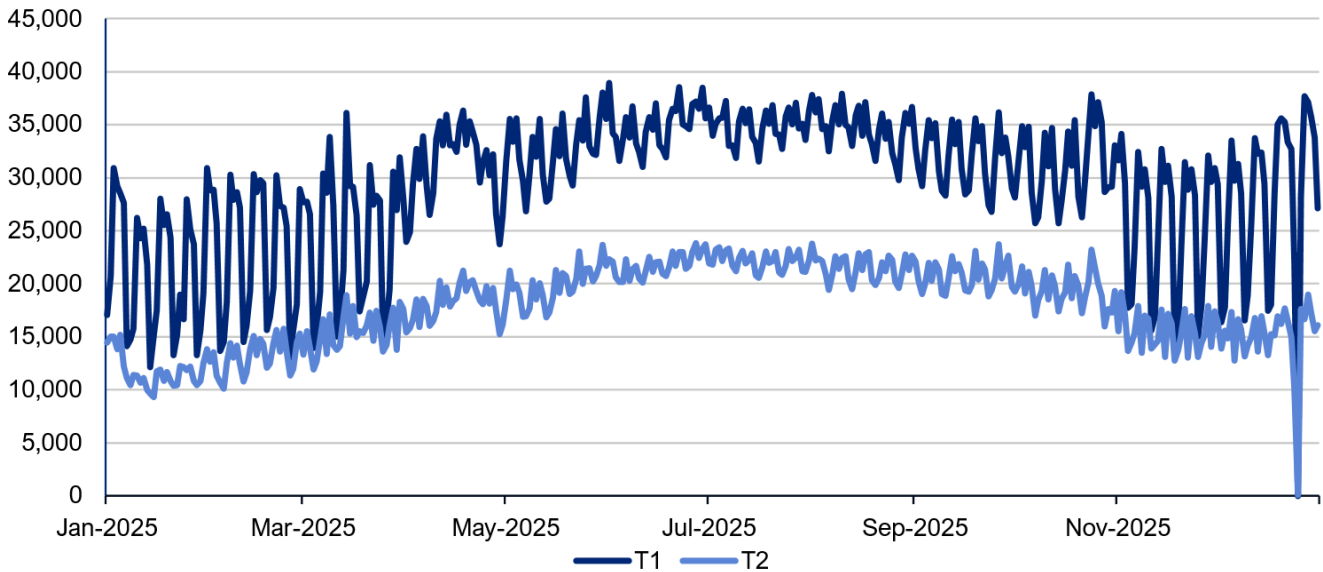
We apply the passenger growth factor proportionately across the day. This means that each 15-minute interval is scaled by the same annual growth factor, rather than assuming that growth is concentrated in shoulder or off-peak

periods. This treatment was agreed with the IAA for the draft analysis. We note that this differs from Dublin Airport’s assumption of passenger growth being focussed on the shoulder and off-peak periods.

The model also maps 2025 days to future years in a way that preserves day-of-week effects. For example, a Thursday in a forecast year is scaled from an equivalent Thursday in the 2025 profile rather than mechanically from the same calendar date. This matters because passenger presentation profiles vary by day of week.

The output from this step is a terminal-specific 15-minute passenger presentation profile for each year from 2026 to 2031. This profile is then converted into tray demand using IPP assumptions.

Figure D.2: Average 2025 passenger presentation profile by terminal (daily passenger volumes)



Source: CEPA analysis of Dublin Airport data

D.4. THROUGHPUT AND IMAGES-PER-PASSENGER ASSUMPTIONS

The model converts passenger demand into tray demand and then estimates the number of lanes required to process that tray demand. This requires two central assumptions:

- the number of images per passenger; and
- the tray throughput that each CT scanner can process.

D.4.1. Images per passenger

IPP measures the average number of tray images generated by each passenger. It captures the number of trays required for cabin baggage, personal items and divested items. A higher IPP means that the same number of passengers generate more tray demand and therefore requires more CT scanner capacity.

We estimate IPP using observed 2025 data for Terminal 1 and Terminal 2, smoothing the profile to reduce noise, and adjusting it to produce a forward-looking IPP profile that reflects a fully post-C3 operating environment. We make this adjustment because Terminal 1 was not operating as a fully C3 search area for the whole of 2025. At the start of the year, we assume T1 had half of its lanes transitioned to C3. We then assume the C3 share increases linearly to 100% by 15 September 2025. Using the raw full-year T1 IPP average would therefore blend hybrid and fully C3 operating regimes.

The adjustment uses Terminal 2 as a control series for seasonal and airport-wide movements in IPP. The preferred estimate models the difference between T1 IPP and T2 IPP as a function of the assumed T1 C3 share and period-of-day fixed effects. The regression is:

$$T1\text{ IPP} - T2\text{ IPP} = \alpha + \beta \times T1\text{ C3 share} + \text{period fixed effects} + \varepsilon$$

The estimated coefficient implies that moving T1 from 50% C3 to 100% C3 reduces IPP by around 0.41 images per passenger. The full 0% to 100% C3 coefficient is estimated at -0.822, but this is an extrapolation because the observed T1 transition starts from an assumed 50% C3 position.

The estimated coefficient is used to convert observed T1 IPP into an estimated 100% C3 equivalent:

$$T1 \text{ post} - C3 \text{ adjusted IPP} = T1 \text{ observed IPP} + \beta \times (1 - T1 \text{ C3 share})$$

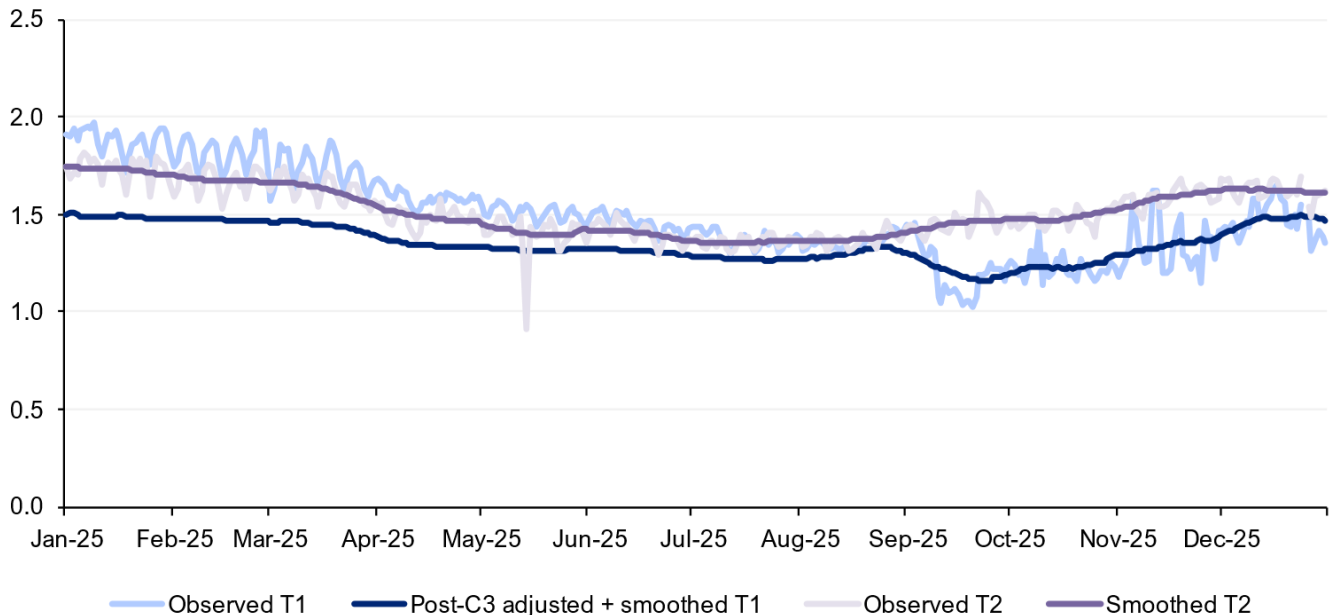
Because the coefficient is negative, this adjustment lowers T1 IPP before the transition is complete. The adjustment is largest at the start of 2025, when the assumed C3 share is 50%, and falls to zero once T1 reaches 100% C3.

The adjusted T1 series and observed T2 series are then smoothed separately by period of the day. The smoothing uses a centred 28-day rolling average, while IPP for each day is simplified into an earliest IPP, middle of the day IPP, and latest IPP. This dampens short-run operational volatility while preserving broad seasonal and within-day patterns.

The resulting profile, shown as daily averages in the figure below, is used as the central post-C3 IPP input to the deterministic lane model. It should be interpreted as a constructed post-C3 equivalent profile, not as an observed 2025 series. The main limitation is that the C3 effect is inferred from terminal-level time series data rather than lane-level C3 flags. The result therefore depends on the assumed T1 rollout path and on T2 being a suitable control for seasonal and airport-wide IPP movements.

Another potential limitation is the impact of the liquids and gels rule change, implemented at Dublin Airport in Autumn 2025, which allowed passengers to keep their liquids in bags rather than removing them. We would expect this rule to have reduced the average IPP, though we do not observe this cleanly in the data. We will consider updating this IPP profile at Final Determination if more recent data shows a clear effect on IPP.

Figure D.3: Observed and adjusted IPP profile, 2025 (images per passenger)



Source: CEPA analysis of Dublin Airport data

D.4.2. Tray throughput

The model uses Dublin Airport's CT throughput assumptions as the central case. In its forecasts for central search opex, Dublin Airport has made several throughput assumptions:

- **For T1**, an initial throughput of 360 images per C3 machine rising to 420 images per C3 machine per hour at the end of the determination period. Correspondingly with a ratio of 1.4 images per passenger, this requires 257 passengers to be screened per lane per hour initially, rising 300 passengers per lane per hour

at the end of the period. Note that passenger screening does not reflect throughput of an individual body scanner and can be accommodated by allocating multiple body scanners to a lane.

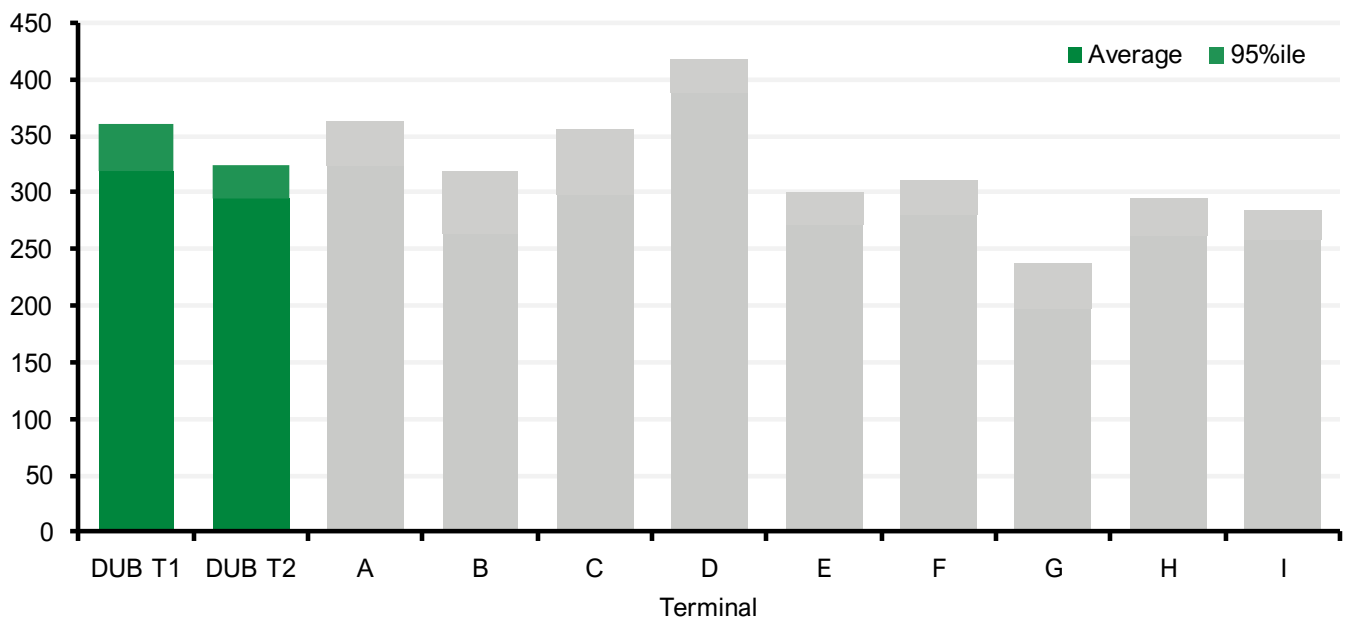
- **For T2**, an initial throughput of 350 images per C3 machine rising to 380 images per C3 machine per hour at the end of the determination period. These are lower estimates than for T1 because of the shorter lanes in place in T2. Again, with a ratio of 1.4 images per passenger, this requires 250 passengers to be screened per lane per hour initially, rising to 271 passengers per lane per hour at the end of the period. Note that passenger screening does not reflect throughput of an individual body scanner and can be accommodated by allocating multiple body scanners to a lane.

We have adopted these assumptions because we consider them challenging but achievable. They are above the levels achieved in 2025 and require further operational improvement over the forecast period. However, 2025 was still a transition year for C3 operation, particularly in Terminal 1 but also at Terminal 2 given the liquids rule change. It is therefore reasonable to expect some improvement as staff experience and passenger familiarity increases, lane processes mature, and operational management improves. Evidence from some, although not all, comparator airports suggests that throughput improvements in excess of 10% per year can be achieved during the initial bedding-in period following implementation.

We tested the reasonableness of Dublin Airport's CT throughput assumptions using benchmarking evidence, shown in Figure D.4 below. The benchmarking compares Dublin Airport's actual peak hour throughput in 2025 with observed C3 throughput at comparator terminals at UK airports. This comparison is high level because lane length, operating procedures and search area configuration vary across airports. However, it provides a useful cross-check on whether the assumed throughput trajectory is within a plausible range.

Figure D.4 shows that 2025 C3 throughput performance at both Dublin Airport T1 and T2 is comparatively strong, ranking third and fifth respectively within the sample. Dublin Airport's throughput assumptions by 2031 would mean that its T1 2031 throughput would be in line with the best performing airport terminal within our benchmark, while T2 2031 throughput would rank second in the sample despite having relatively short lanes. As such, we consider Dublin Airport's throughput assumptions challenging but achievable.

Figure D.4: Benchmark peak hour CT scanner throughput (images per hour per CT scanner)



Source: CEPA analysis

Comparator throughput evidence should be interpreted in light of differences in national regulation and local implementation. Liquids rules are not fully uniform across UK airports: UK Government guidance states that most airports continue to apply the 100ml container limit, while some airports allow containers up to 2 litres. Dublin

Airport’s current public guidance states that liquids and gels can remain in cabin baggage, that there is no limit on the number of liquids and gels, and that containers up to 2 litres can be brought through security. These differences may affect passenger preparation, divestment and tray presentation at the margin, although the direction and scale of any throughput effect cannot be robustly estimated from the available benchmark data. We have therefore treated the benchmark evidence as indicative rather than as a direct throughput target for Dublin Airport.

D.4.3. Body scanner throughput

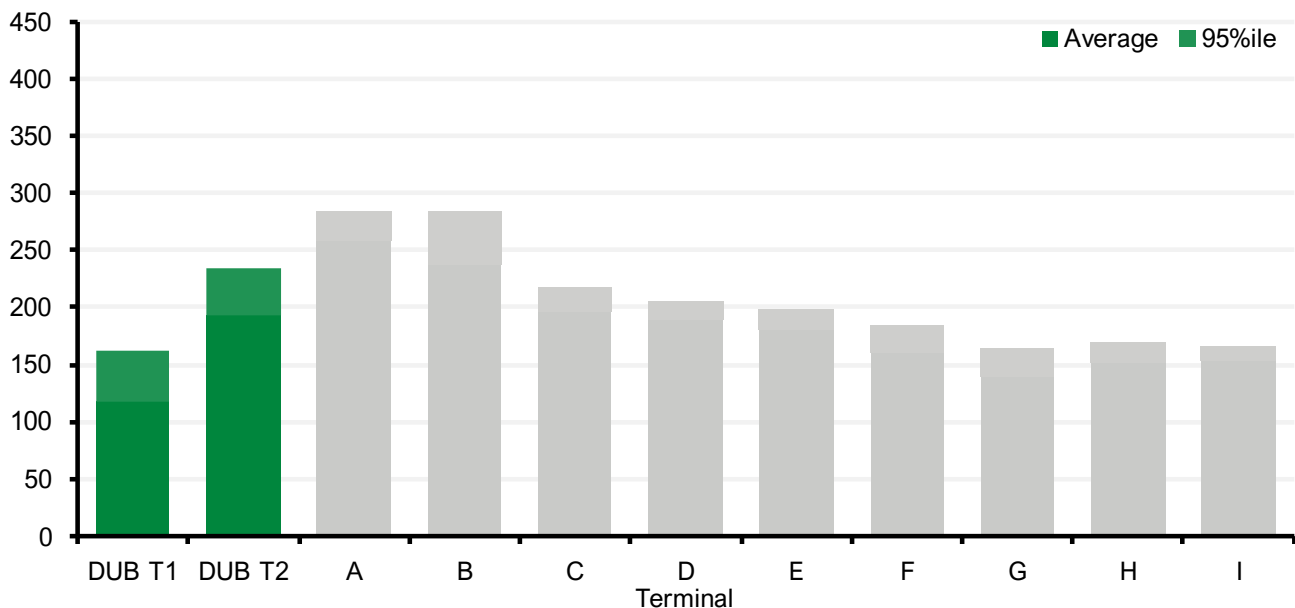
We have not modelled body scanner throughput as a separate binding constraint in the lane requirement calculation.

Body scanner capacity is nevertheless relevant to the overall operation. A lane can process passengers efficiently only if passenger screening capacity is sufficient to match tray processing capacity. However, the available evidence does not support a robust separate model of how marginal changes in body scanner staffing or body scanner allocation affect overall lane throughput.

We therefore treat CT scanner throughput as the binding constraint in our model. This is a pragmatic modelling assumption rather than a conclusion that body scanner capacity can never constrain the operation. Further linked data on CT scanner throughput, body scanner throughput and lane-level staffing would allow this assumption to be tested more directly for the Final Determination.

Figure D.5 below compares peak hour body scanner throughput across the same 2025 comparator sample. This is throughput per body scanner, not throughput per lane where there may be multiple body scanners.

Figure D.5: Benchmark peak hour body scanner throughput (passengers per hour per body scanner)



Source: CEPA analysis

Dublin Airport T2 ranks comparatively highly in terms of body scanner throughput at fourth in the small sample. However, T1 has the lowest throughput in the sample at nearly 40% less than achieved at T2.

D.5. LANE REQUIREMENT

The lane requirement model estimates how many central search lanes need to be open in each period of the day. It does this by comparing forecast tray demand with the tray processing capacity available from different lane-opening combinations.

The model runs at 5-minute intervals. This is more granular than the 15-minute passenger presentation profile and allows the model to represent queue build-up and recovery within the day. Passenger demand is allocated into the 5-minute model intervals and then converted into tray demand using the relevant IPP assumption.

Tray demand is calculated as passenger demand multiplied by IPP. This means that a change in passenger volumes and a change in IPP both affect the number of trays that need to be processed by the CT scanners.

The model then compares tray demand with available CT processing capacity. Capacity is calculated from the number of open lanes, the assumed CT throughput per lane and the length of the model interval. The model uses the cumulative capacity available from each possible lane-opening level in each terminal.

The model carries forward unprocessed trays from one interval to the next. If tray demand exceeds available capacity in one 5-minute interval, the unprocessed trays are added to the tray demand in the following interval. This allows the model to capture the build-up and dissipation of queues, rather than treating each interval as independent.

For each terminal and interval, the model identifies the minimum lane-opening level required to process the tray demand and any carried-forward trays. This produces an initial lane requirement profile across the day.

The initial lane requirement profile is then smoothed to make it operationally realistic. Without smoothing, the model could open and close lanes for very short periods in response to small movements in demand. This would not be practical for staffing or rostering.

We apply two smoothing rules:

- once a lane is opened, it must remain open for at least 30 minutes; and
- if a lane would otherwise close but is needed again within the next 15 minutes, the model keeps the lane open through the short dip in demand.

The output from this step is a smoothed lane-opening profile for each terminal, day and 5-minute interval. This profile is then converted into productive staff hours using the staffing-per-lane assumptions described above.

D.6. STAFFING-PER-LANE ASSUMPTIONS

Once the model has estimated the **smoothed lane-opening profile**, it converts those lanes into productive staff hours. This requires an assumption on the number of security officers required to operate each lane or lane pair.

We use Dublin Airport's planned staffing-per-lane assumptions. These assumptions vary by terminal and lane configuration, reflecting differences in lane length, CT scanner configuration, body scanner allocation and the operating model.

The staffing templates used in the model are set out in Table D.2.

Table D.2: Staffing-per-lane assumptions used in model

Terminal	Lane type	Lane length	Staffing assumption
T1	Short lane pair	17m	19 officers per pair
T1	Medium lane pair	19m	21 officers per pair
T1	Long lane pair	23m	23 officers per pair
T2	Medium lane pair	19m	19 officers per pair

Source: CEPA analysis

These templates imply an average planned staffing level of approximately 11 officers per lane in Terminal 1 and 10 officers per lane in Terminal 2.

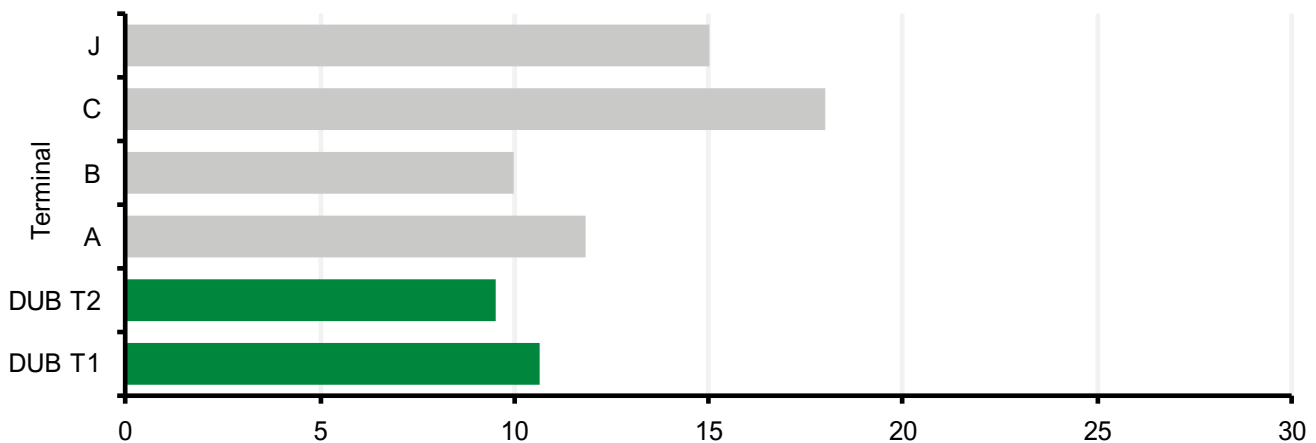
We considered whether staffing per lane could be estimated directly from observed operational data. In principle, a lane-pair-level model could estimate the relationship between staff deployed, tray throughput and passenger

throughput. This would allow the model to identify the efficient staffing level associated with frontier throughput. However, the available data did not support robust quantile regression of throughput against staffing at lane-pair level. We therefore do not estimate a separate empirical staffing frontier in this draft analysis.

Instead, we tested Dublin Airport's staffing assumptions against available benchmarking evidence. The benchmarking compares planned staffing levels per lane and achieved security productivity against comparator terminals. It also considers differences in lane configuration and body scanner-to-CT scanner ratios, because these factors affect the number of staff required to operate a lane efficiently.

This evidence supports using Dublin Airport's staffing templates. Compared against other airports, Dublin Airport's staffing per lane assumptions look broadly reasonable as shown in the figure below.

Figure D.6: Benchmark staffing per lane, planned (planned staff per lane)



Source: CEPA analysis

Staffing levels per lane are driven by both the ratio of body scanners to C3 machines and the physical lane configuration. For example, in some configurations it is possible to operate more body scanners than C3 scanners, even where the installed scanner ratio is one-to-one. Averaged across all lanes:

- Dublin Airport T1 has a ratio of body scanners to C3 machine of 1.3:1.
- Dublin Airport T2 has a ratio of body scanners to C3 machine of 1:1.
- Terminal A has a physical ratio of body scanners to C3 machine of 1:1 but in the July 2025 data sample operated at a ratio of 1.4 body scanners to each C3 machine.
- Terminal B has a ratio of body scanners to C3 machine of 1.4:1 but in the July 2025 data sample operated at a ratio of one-to-one.
- Terminal C has a ratio of body scanners to C3 machine of 1.8:1 and operated at that ratio in the July 2025 data sample.
- The ratio of body scanners to C3 machines in terminal J is not known.

We therefore conclude that, given the lane configuration and operating model, the planned staffing levels at both of Dublin Airport's terminals are broadly consistent with what would be expected and are aligned with the limited set of available comparator airports.

D.6.1. Link between staffing levels and throughput

Dublin Airport's assumed C3 throughputs may more closely reflect peak-period (95th percentile) performance than whole-year average throughput. Treating those rates as average throughputs would, in isolation, risk understating lane and staffing requirements. However, Dublin Airport's staffing-per-lane assumptions also appear to be the complement required to sustain peak-period throughput, rather than average actual staffing levels per lane. These two assumptions therefore partly offset each other, and in our view collectively generate a reasonable forecast.

D.7. CONVERTING STAFF HOURS TO FTEs

The lane requirement model estimates the number of productive staff hours required to operate central search. These productive hours then need to be converted into contracted full-time equivalent staff.

The model starts from a 40-hour working week per FTE. This provides the base contracted hours before allowing for non-productive time and roster coverage requirements.

Not every contracted hour can be deployed directly to live central search activity. Security officers require annual leave, public holidays, sickness absence, training and other paid non-operational time. The model therefore applies a **28% non-availability allowance**, aligned with the assumption used by Dublin Airport. This converts productive staff hours into the higher number of contracted hours required to provide those productive hours. The allowance, which is higher than the 25% allowance we use for other staff roles, reflects the specific requirements of the security officer role, including formal regulatory training, certification and recurrent competency requirements.

We use a separate **roster coverage allowance of 12%** for variable security roles, again aligned with the assumption used by Dublin Airport. This reflects the practical inefficiency of matching fixed staff rosters to a demand profile that varies within the day, across the week and across the year. Even with effective rostering, some surplus coverage is needed to ensure that staff are available at the times when demand requires them. Typically, a 15% roster coverage assumption is used, though we use the lower assumption targeted by Dublin Airport.

The roster coverage allowance is conceptually separate from non-availability:

- **non-availability** reflects paid time when staff are not available for deployment; and
- **roster coverage** reflects the additional contracted resource required because demand does not arrive in a flat pattern and because shifts cannot be matched perfectly to every short-term movement in lane requirement.

For the central search model, the conversion from productive lane staff hours to FTEs follows four steps:

- estimate productive staff hours from the smoothed lane-opening profile;
- convert productive hours into annualised staff hours;
- gross up for the 28% non-availability allowance; and
- apply the 12% roster coverage allowance to reflect the need to match staff deployment to variable demand.

The same 12% roster coverage allowance is applied to all variable security roles in the wider Security forecast. Fixed roles, such as static posts, vehicle control posts and some management or support roles, are assessed separately in Section 4.

The output from this step is the contracted FTE requirement for central search before any Monte Carlo resilience allowance. The resilience allowance is assessed separately because it is designed to test short-term operational variation around the deterministic lane plan, rather than routine non-availability or roster matching.

D.8. RESILIENCE ADJUSTMENT

The deterministic lane model describe above estimates the central lane plan under expected passenger demand, expected IPP and expected CT throughput. This provides the baseline staffing requirement. However, it does not capture all operational variation that can affect queue performance within the day.

In practice, passengers may arrive earlier or later than expected, passengers may generate more or fewer tray images than expected, and CT throughput may differ from the central assumption. These factors can create short periods where the deterministic lane plan is insufficient, even if it is appropriate on average.

We therefore test the deterministic lane plan using a stochastic (Monte Carlo) analysis. The purpose of this analysis is not to re-optimize the lane plan in each simulation. Instead, it tests whether the fixed deterministic lane plan is sufficiently robust to plausible operational variation.

The stochastic analysis applies three sources of uncertainty:

- passenger presentation uncertainty, reflecting variation between forecast and actual passenger show-up;
- IPP uncertainty, reflecting variation in the number of tray images generated per passenger; and
- throughput uncertainty, reflecting variation in effective CT tray processing capacity.

Each uncertainty distribution is calibrated using 2025 operational data. However, we adjust the distributions so that they are broadly symmetric in log terms and so that the mean multiplier is 1.0.

Table D.3: Monte Carlo uncertainty distributions

Shock	Model input affected	Calibration basis	Multipliers		
			P10	P50	P90
Passenger presentation	Passenger demand by terminal and interval	2025 difference between planned and actual boarding-card scan profiles	0.636	0.985	1.220
IPP	Images per passenger	2025 observed IPP, adjusted for post-C3 operation	0.941	1.001	1.055
Throughput	CT tray processing capacity	2025 residual variation around expected CT throughput	0.815	0.989	1.199

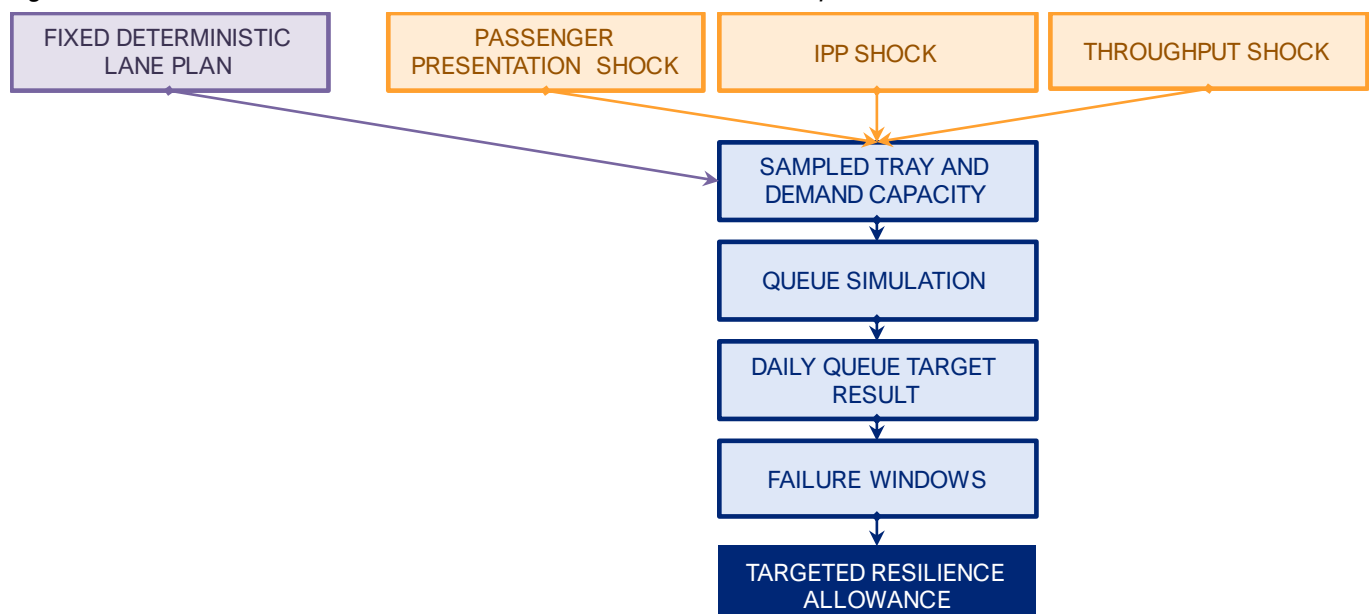
Source: CEPA analysis

For each simulation, the model calculates sampled passenger demand, sampled IPP and sampled tray demand. It also calculates sampled CT capacity for the fixed lane plan. The sampled demand and capacity profile is then passed through a queue model. This queue model assumes that passengers are processed in the order in which they arrive at security and if, passengers are unable to be processed within a 5-minute interval given the available capacity, queues form. The resulting queue is carried forward and affects passengers arriving in later intervals.

Queue performance is then assessed against the existing daily security queue service-quality target.

The final resilience analysis used 100 Monte Carlo simulations. For each simulation, the model records whether the fixed deterministic lane plan meets the queue target, and identifies the terminal, season and time windows where failures are concentrated.

Figure D.7: Monte Carlo resilience test of the fixed deterministic lane plan



Source: CEPA analysis

The modelled queue outcomes should be interpreted as a structured stress test of the deterministic lane plan, not as a precise prediction of observed missed queue time targets. The model tests whether the fixed lane plan is robust to plausible variation in passenger presentation, IPP and CT throughput.

The queue simulation is applied before the 12% roster coverage allowance is converted into deployable staff. In practice, this allowance means Dublin Airport may have more staff available than the deterministic lane plan itself implies at some points in the day. This provides additional operational resilience that is not fully reflected in the queue simulation.

The model also does not capture all tactical same-day management actions. In practice, Dublin Airport may redeploy staff between terminals, adjust break timing, use supervisors or troubleshooters to support constrained parts of the operation, or take other short-term actions to increase effective throughput. These actions could reduce the likelihood of missing the queue target relative to the modelled outcome.

Equally, some sources of queueing may not be fully captured by the three sampled drivers. These could include equipment downtime, dieback, search-area congestion, staff deployment delays, queue-management issues or measurement differences. This is why observed queue data is most useful as a validation check, rather than as a mechanical input to the allowance.

Where the stochastic analysis identifies the terminal, month, day type and hour windows where the fixed deterministic lane plan creates material queue-target risk, we apply a targeted risk adjustment. For each risk window, the model estimates the additional staff implied by moving from the current fixed lane plan to the recommended number of lanes open to mitigate the capacity deficit. This is converted into staff-hours using the average number of affected 5-minute intervals in failed runs. Our analysis indicates that the main resilience risk is concentrated in Terminal 1 during the summer months, as shown in the table below.

The staff-hour requirement is then risk-weighted by the share of Monte Carlo runs in which the relevant window fails. This means that windows failing in a high share of runs receive more weight than windows that fail only occasionally. The monthly risk-weighted staff-hours are divided by the number of days in the month to produce an average daily staff-hour requirement, then converted to FTE using a 40-hour working week.

Table D.4: Resilience adjustment by month for 2031 (FTEs)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
T1 FTE adjustment	11.7	11.7	13.3	13.5	14.4	14.2	16.5	15.4	12.7	12.5	11.0	13.1	13.3
T2 FTE adjustment	2.5	3.6	3.3	3.9	3.8	4.9	5.2	4.6	5.2	4.7	3.4	3.4	4.0
Total FTE adjustment	14.2	15.3	16.6	17.4	18.2	19.1	21.6	20.0	17.9	17.2	14.4	16.4	17.4
Non-availability													28%
Total after non-availability													24.1

Source: CEPA analysis

The allowance should be interpreted as targeted resilience headroom for the time windows that drive modelled queue risk. We consider this approach to be more proportionate than a standing N+1 lane assumption because it links additional staffing to observed operational variation and modelled queue risk.

This methodology and estimate remain subject to consultation. This is the first time this form of stochastic resilience testing has been applied in the Dublin Airport opex assessment. The results depend on the granularity and consistency of the 2025 operational data, the sampling approach and the queue-target definition. Further evidence from Dublin Airport and stakeholders may support refinement ahead of the Final Determination.

D.9. SENSITIVITIES AND FUTURE EVIDENCE

The central search model provides a structured basis for estimating efficient security staffing requirements. However, several areas of evidence would allow the analysis to be refined for the Final Determination.

- **More granular lane-pair data** would improve the assessment of throughput and staffing. The current analysis does not support robust lane-pair-level quantile regression of throughput against staffing. More consistent data on lanes open, lane configuration, staff deployed, CT throughput and passenger throughput would allow the relationship between staffing and efficient frontier throughput to be tested more directly.
- **Linked CT scanner and body scanner throughput data** would allow the model to test whether CT tray processing is always the binding constraint. Our model currently treats CT throughput as binding, based on the available evidence and Dublin Airport's lane configurations. However, linked data would allow an assessment of whether body scanner capacity constrains throughput in some terminals, periods or lane configurations.
- **More granular, lane-level staff deployment data** would improve the assessment of staffing-per-lane assumptions. The current model uses Dublin Airport's staffing templates, tested against benchmarking evidence. Lane-pair-level deployment data would enable testing of whether each role is required in all periods, whether staffing differs between peak and off-peak operation and whether some marginal staffing increments could improve throughput without opening a full additional lane.
- **Calibration against observed 2025 queue outcomes** would improve confidence in the queue model. The model currently estimates queues from demand, IPP and throughput rather than using actual queue data as an input. A 2025 calibration exercise would allow testing on whether the queue model reproduces observed queue patterns, identify residual queue drivers and determine whether any residual risk reflects efficient exogenous variation, controllable operational inefficiency or measurement error.
- **Evidence on marginal staffing increments** would improve the resilience assessment. The current model tests whether additional resource is required to manage stochastic variation around the deterministic lane plan. It would be useful to understand whether Dublin Airport can deploy resource in increments smaller than a full lane crew, for example to relieve a body scanner bottleneck, support divestment, support image review or reduce dieback. This evidence would help determine whether the efficient resilience allowance should be based on full additional lane-hours or more targeted staffing increments.

Ahead of the Final Determination, we will consider further evidence from Dublin Airport, airlines and other stakeholders on these issues. The areas most likely to affect the modelled staffing requirement are the throughput assumptions, IPP assumptions, the staffing-per-lane assumptions and the treatment of resilience around the deterministic lane plan.

D.10. VEHICLE CONTROL POSTS

VCPs are the entry and exit points on the airfield perimeter, outside of the terminals, where access for vehicles and staff is controlled. The traffic through the VCP comprises vehicles making routine deliveries to the airside area, including food and beverage, retail, airport and airline supplies, as well as stores for maintenance and materials and tools for construction works. Currently, there are four levels in the airport secure supply chain – known consignor, regulated agent, known supplier and certified haulier – that meet security standards and are authorised to deliver sealed supplies to the secure parts of the airport.

Typically, the VCP comprises a set of barrier-controlled vehicle lanes for entry and exit. Vehicles are inspected in these lanes by vehicle screeners, who typically check the vehicle's documentation, seals on supplies that have been pre-screened and supplies that are being delivered through the trusted supply chain. Each VCP also has body scanners and C3 machines for screening personnel and their possessions for entry to the security restricted area. The C3 machines can also be used to screen supplies contained in vehicles if needed. IDs are also checked at the VCP.

In its Regulatory Proposition, Dublin Airport highlights changes in security regulations that could potentially affect the requirements, functions, and staffing levels associated with VCPs. Dublin Airport highlights two relevant changes:

- **The transition to C3 screening at VCPs.** Dublin Airport states that the same C3 screening requirement that applies to passenger and cabin-bag screening also applies at the VCPs. Under this transition, walk-through metal detectors used to scan personnel are replaced with body scanners, while X-ray machines used to screen supplies and possessions are replaced with C3 scanners. However, given body scanners are slower to process individuals than the walk-through metal detectors they replaced, the C3 operating model requires more body scanner capacity to ensure that personnel and supplies / possessions are processed at similar rates. This can increase the number of staff required to operate each screening lane, as security officers are required to operate the additional body scanners.

Dublin Airport has reflected the transition to C3 technology by increasing the VCP FTE requirement from the 128 FTEs assumed in the previous determination to 131 FTEs in 2026. We consider it reasonable to reflect this limited increase for the C3 transition.

- **Dublin Airport has stated that screening requirements for airport supplies are changing in response to changing EU regulations.** Currently, at least 25% of vehicles/people delivering airport supplies must be screened on a random, ongoing basis and at least 25% of the supplies carried by those vehicles must be screened.

Dublin Airport states that these requirements will increase over the next control period:

- Between 1 Jan 2028 and 30 Jun 2029, at least 25% of airport supplies must be screened.
- Between 1 Jul 2029 and 31 Dec 2030, at least 50% of airport supplies must be screened.
- Between 1 Jan 2031 and 31 Dec 2031, at least 75% of airport supplies must be screened.
- After 1 Jan 2032, 100% of airport supplies must be screened.

There is no reference in these statements to a specific EU regulation. The most recent implementing regulation,³² does not appear to contain the screening requirements or implementation timescales referred to by Dublin Airport. We therefore assume that these requirements are either still under development or are contained within documentation that is not publicly available.

There are also different ways to interpret the likely impact of these requirements on VCP staffing. Dublin Airport has interpreted the requirement as creating a substantial additional screening workload at the VCPs, leading to a proposed doubling of VCP FTEs by the end of 2031. This assumes that a material share of the additional screening activity will be performed at the existing VCPs.

We do not consider that assumption to be sufficiently evidenced. An alternative interpretation is that most screening will take place upstream in the secure supply chain by suitably authorised entities, with the VCPs continuing to perform an oversight, verification and exception-handling role. This appears more consistent with the logic of the secure supply chain, because security risks are usually managed more effectively before supplies arrive at the airport perimeter. It also avoids placing a potentially large and volatile screening burden on space-constrained VCP facilities.

Dublin Airport's own capital programme supports this interpretation. CIP27.02.15 proposes a Consolidated Security and Screening Centre, designed to centralise the delivery and screening of airport supplies, construction materials, vehicles and drivers. This indicates that Dublin Airport recognises that extensive screening at dispersed VCPs is unlikely to be the most efficient long-term operating model. The proposed centre would provide dedicated truck screening bays, goods screening areas, pre- and post-screening storage, and holding space for scheduled deliveries, rather than relying only on reactive screening at the existing VCPs.

On this basis, we propose to hold VCP staffing constant at 131 FTEs over the determination period. This reflects the transition to C3 technology but does not include Dublin Airport's proposed step-change for

³² COMMISSION IMPLEMENTING REGULATION (EU) 2026/449 of 27 February 2026 amending Implementing Regulation (EU) 2015/1998 as regards certain detailed measures for the implementation of the common basic standards on aviation security.

future supply screening. We would consider revising this position only if Dublin Airport provides clear evidence on the applicable regulatory requirement, the proportion of screening that must be undertaken at the airport perimeter rather than upstream, the expected volume and timing of screening demand, and the efficient operating model for meeting that requirement before the Consolidated Security and Screening Centre becomes operational.



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