

1 Opex Appendix: Detailed Assessment of the Opex Allowance and Requested Adjustments

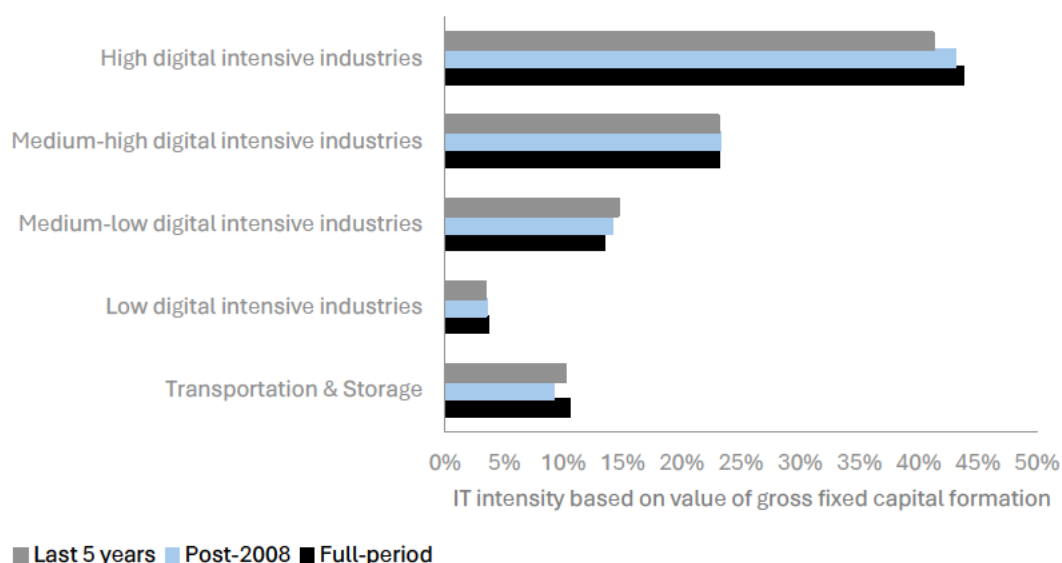
1.1 Top-down Opex elasticity

- 1.1.1 The IAA adopts top-down benchmarking based on a sample of 12 European airports over the period 2000–2024 to suggest a high-level OPEX elasticity range of 0.30–0.60. IAA’s implied elasticity in its draft determination of 0.62–0.68 is slightly higher than that estimated in its top-down benchmarking, but it considers the higher elasticity to be reasonable as it accounts for several upward cost pressures expected during the period. This implies that the IAA has been favourable to Dublin Airport by using the upper bound of its range with a slight uplift to account for upward cost pressures. However, there are a number of limitations with the IAA’s top-down benchmarking that would suggest the range is biased downwards and should be higher.
- 1.1.2 First, the sample of 12 European airports is too small to infer a robust OPEX elasticity range. The number of airports is materially lower than (i) the equivalent top-down econometric benchmarking undertaken by the UK Civil Aviation Authority (CAA) in its H8 initial proposals, where it used data on over 40 airports worldwide, and (ii) the IAA’s benchmarking of airport charges where it used 50 comparator airports. In addition, half of the airports in the sample are UK based and the majority of non-UK airports in the sample have shorter time-periods in the dataset such that the model may be biased towards UK characteristics, and therefore the model may be at risk of sample-selection bias. As a result, the range of 0.30–0.60 could be more representative of a typical UK airport, rather than an airport operating in Europe.
- 1.1.3 Second, the lower bound of the range (0.30) is based on the model where the coefficient is not statistically significant as the p-value (0.42) is far from any reasonable significance threshold. Specifically, the 95% confidence interval of this coefficient is -0.48 to 1.08 which means that the coefficient could suggest a range from negative elasticity to an elasticity of greater than one. In other words, there is no directionally consistent relationship between costs and traffic under this model.
- 1.1.4 Furthermore, while this model has a better fit based on R-squared relative to the other two models which produce a range of 0.50–0.60, this is naturally due to the inclusion of year dummies, which may be absorbing much of the variation in passengers over time and subsequently results in an unstable and downward biased passenger coefficient. Given the high level of uncertainty surrounding this estimate, this model should not be used to form the lower bound of the range in OPEX elasticities. Instead, the IAA’s top-down benchmarking could only suggest an OPEX elasticity range of 0.50–0.60.
- 1.1.5 Third, in relation to the small numbers of airports in the sample, the models are very sensitive to the inclusion of certain airports. In particular, the elasticity exceeds 0.60 when three airports (Birmingham, Copenhagen and Zurich) are individually excluded from the sample. Given the coefficient exceeds 0.60 when a quarter of the airports are individually excluded, this implies that 0.60 cannot be a robust upper bound, and instead should be higher.
- 1.1.6 Finally, in relation to the equivalent top-down benchmarking undertaken by the UK CAA, the coefficient on its workload units (which is majority based on passengers) has a statistically significant coefficient of 0.80.1 This suggests that the IAA’s OPEX elasticity range, which is based on a less stable model with a materially smaller sample size could be biased downwards.
- 1.1.7 Given the aforementioned limitations of the IAA’s top-down benchmarking, we consider the IAA’s implied OPEX elasticity range of 0.62–0.68 to be biased downwards, and not a robust or reasonable elasticity that reflects step-changes nor upward cost pressures facing Dublin Airport. As such, we consider the overall OPEX elasticity from a top-down basis should be greater than the IAA’s implied OPEX elasticity range.

1.2 Ongoing Efficiency

- 1.2.1 For the first time, the IAA has applied an ongoing efficiency (OE) challenge of 1.0% p.a. across all staff-related operating cost categories with the exception of security and select non-staff categories. While Dublin Airport considers productivity improvements can partially offset real labour cost growth, the IAA has failed to outline a reasonable rationale for the use of 1.0% specifically. We consider a revised challenge of 0.5% to be the most stretching target Dublin Airport can achieve.
- 1.2.2 It appears that the IAA has relied solely on the UK CAA's proposition of a 1.0% OE challenge on HAL in its H8 initial proposals. While it also mentioned the proposed range of 0.5%–1.0% for an electricity network operator in Ireland, the IAA admitted that such precedent is not directly relevant for airports. As such, it would seem that the sole reason behind the IAA's choice of 1.0% is due to regulatory precedent in the airport sector in the UK, rather than setting a challenge based on evidence or empirical analysis in relation to what is achievable by Dublin Airport or an Irish airport in general. It is also notable that the IAA has dismissed UK CAA precedent in other areas (e.g. asymmetric risk adjustment) but adopted it here despite circumstances actually being less comparable.
- 1.2.3 An OE challenge for an Irish airport should be based on evidence related to Irish productivity (alongside that of other airports). The Government of Ireland's Department of Finance has forecasted a baseline TFP growth of 0.8% p.a. between 2026–2030. Therefore, a 1.0% challenge would imply that Dublin Airport (and the Irish airport sector) can achieve higher productivity growth relative to the overall economy. We consider such a challenge to be unlikely given the transportation sector has historically achieved lower than average productivity growth.
- 1.2.4 Furthermore, the aforementioned baseline TFP growth is also influenced by high-growth foreign owned multinational enterprises that have higher productivity growth relative to domestic sectors. The Irish Fiscal Advisory Council forecasts a long-run TFP growth of 0.4% p.a. for the domestic economy, close to the historical average of 0.5% p.a. for sectors outside of those dominated by foreign-owned multinational enterprises. As such, a 1.0% OE challenge would assume that the airport sector can achieve TFP growth at 2.5 times the rate forecasted by the council for the domestic economy. We consider this to be overly stretching and materially risks Dublin Airport's ability to fund and meet its service requirements.
- 1.2.5 Specifically, in response to the Commission for Regulation of Utilities (CRU), one network used a subset of sectors in Ireland including 'Transportation and Storage', stating that a reasonable estimate of TFP growth historically for an electricity network has been negative at c. -0.9% to -0.3% p.a. CRU in its response stated that the choice of sectors (including 'Transportation and Storage') used has exhibited lower than average historical productivity growth. Therefore, it could be considered too stretching for an airport to be expected to achieve a productivity target close to the government's forecasted 0.8%, given many similarly regulated sectors have historically achieved materially lower growth (if not negative).
- 1.2.6 In addition, while we agree with the IAA's definition of OE reflecting productivity improvements through changes to working practices, technology, asset management etc., we consider the sector's ability to meet 1.0% is unachievable. While technology and the recent rise of artificial intelligence (AI) could improve productivity, the airport sector is one of the least IT intensive sectors in the economy, such that any productivity boost from technology would be very limited. The following figure shows the IT intensity of the transportation and storage sector in the UK relative to various sector averages depending on their digital intensity.

IT intensity of transportation and storage relative to other industries



Source: Oxera analysis.

1.2.7 As shown by the figure above, the transportation and storage sector in the UK can be regarded as between 'low' and 'medium-low' digital intensity. Given there is no evidence to suggest that the IT intensity of the Irish transportation and storage sector would be any different to the UK, we consider the ability of airports to benefit materially from new technology is limited. If it is assumed that the 0.8% p.a. TFP growth forecast by the Irish department of finance represents an industry with average IT intensity, then such a challenge would already be too stretching for a sector with lower IT intensity.

1.2.8 Finally, minimum wages may be expected to increase by more than the wage inflation allowed by the IAA (which impacts what Dublin Airport is able to pay its own front line staff). Not only would this result in underfunding to maintain the existing staff level assumed in our business plan, but evidence suggests that productivity gains only have limited ability to offset increasing labour costs. As such, this could result in a material and stretching cost challenge cannot reasonably be met since any improvements in productivity are unlikely to offset any labour cost increases.

1.2.9 Overall, given the lack of empirical or direct evidence from the IAA regarding the potential productivity growth of an Irish airport, we consider the maximum OE challenge that could be reasonably set is 0.5%. While we agree with the notion of an OE challenge, we have shown that (i) Irish TFP growth is forecasted to be at 0.8% (0.4% for the domestic economy), lower than the challenge set on a UK airport which IAA relies on, and (ii) the airport sector is one of the least digitally intensive sectors, such that the ability of it to meet the economy-wide forecast is limited due to the lower potential uptake and productivity benefits from technology.

1.3 Operational resilience

1.3.1 Dublin Airport does not agree with the exclusion of any specific allowance for operational resilience from the CEPA/IAA assessment. Resilience is not discretionary headroom or general contingency. It is an operational capability required to ensure that essential airport services can continue before, during and after credible disruptions.

1.3.2 As set out in its Regulatory Proposition, Dublin Airport proposed a targeted and proportionate resilience overlay within its operating expenditure forecast. The proposition included an additional operational resilience cost of approximately €3.9 million by 2031, equivalent to approximately €0.09 per passenger. This was embedded through specific operational measures, principally n+1 security-lane resourcing and a 5% resilience allowance for Service Delivery Team Member staffing. These provisions address risks that are not

captured by ordinary absence, roster-coverage or demand assumptions. They provide limited capacity to maintain critical services where staff must be redeployed at short notice, an essential operational role becomes unavailable, or disruption requires an immediate response across passenger-processing and service-delivery functions.

1.3.3 [REDACTED]

[REDACTED]

[REDACTED]

1.3.6 Dublin Airport is not seeking an unrestricted contingency or protection from normal business risk. The requested allowance is transparent, limited and linked to identifiable operational measures. It should also be considered alongside the efficiencies embedded in the wider proposition. Even including the proposed security resilience provision, security FTEs per passenger demonstrate that the allowance is compatible with, rather than a substitute for, continued productivity improvement.

1.3.7 Accordingly, CEPA and the IAA should revise the assessment to include a specific, evidence-based operational resilience allowance. The allowance should recognise the efficient ongoing cost of maintaining preparedness, response and recovery capability across critical airport services, including the targeted security and service-delivery provisions identified by Dublin Airport. In light of the airport's operating environment and its [REDACTED] making no allowance is not a sustainable or internally consistent regulatory position. The correct approach is therefore to include a proportionate operational resilience allowance in the final Opex determination.

Resilience is delivered through a layered operating model

1.3.8 Operational resilience is achieved through a combination of complementary measures across Dublin Airport's operating model. No single allowance can provide resilience in isolation. Instead, the airport must have the underlying capability, sufficient rosterable capacity and targeted protection at the operational points where disruption would have the greatest impact. The principal components are:

- (1) Appropriately set wages and employment conditions. Pay must be sufficient to attract and retain the skilled workforce required to operate a complex, safety-critical and highly regulated airport. If Dublin Airport cannot recruit and retain appropriately trained staff, nominal headcount allowances will not translate into an effective operational capability. This is particularly important given the training, certification and competency requirements applying to security and other operational roles.

- (2) Realistic non-availability and roster-coverage assumptions. Staffing allowances must recognise statutory and contractual leave, sickness, training and other periods when employees are not available for deployment. They must also provide sufficient roster coverage to manage the airport's intraday peaks and troughs, staff breaks and variability in passenger presentation. These assumptions convert theoretical headcount into the rosterable capacity required to deliver the planned operation reliably. They do not constitute contingency or duplicate the separate resilience allowance.
- (3) Targeted allowances in higher-risk operational areas. Specific resilience provision is required where a relatively small loss of resource could cause a disproportionate reduction in airport capacity or material service disruption.
- (4) Reliable critical assets, systems and supporting services. Workforce resilience must be supported by appropriate maintenance, monitoring, specialist response arrangements and continuity capability for critical assets and systems. The resilience framework identifies airport infrastructure, operational support systems and IT systems as essential services, with material dependencies on electricity, fuel, ICT, communications, suppliers, emergency services and third-party contractors.
- (5) Preparedness, governance and response capability. Resilience also requires maintained plans, clear accountability, scenario testing, exercises, training, incident reporting and continuous improvement. These are recurring operational activities under the CER framework and therefore require ongoing Opex.

1.3.9 These measures address different risks and should not be treated as interchangeable. Appropriate wages ensure that the airport can secure the necessary capability; non-availability and roster allowances ensure that planned services can be staffed; asset and continuity measures support the infrastructure on which those services depend; and specific resilience allowances protect critical functions against credible disruption at the point of delivery. Removing the targeted resilience allowance on the basis that normal payroll, roster or maintenance costs already exist would therefore conflate distinct requirements and leave a material gap in the operating model.

1.3.10 Accordingly, the correct regulatory approach is to assess resilience across this layered framework and to allow the efficient costs of each component. In particular, CEPA and the IAA should recognise the specific and proportionate resilience allowance proposed for higher-risk operational areas, rather than assuming that Dublin Airport's ordinary operating resources can simultaneously deliver normal operations, absorb disruption and meet its enhanced obligations as a critical entity.

Security resilience review

Areas of alignment between Dublin Airport's Regulatory Proposition and CEPA/Think's security OPEX analysis

1.3.11 The 2027-31 Draft Determination has been informed by a thorough bottom-up analysis by CEPA and Think (on behalf of the IAA) to study and model the current security operation in place, and the associated level of efficient expenditure. The outcome of this work is that CEPA/Think are broadly aligned with Dublin Airport's forecast for baseline central search security costs. CEPA state that:

The evidence does not support a broad baseline efficiency reduction to Dublin Airport's 2025 Security operation. Dublin Airport's 2025 central search productivity was comparatively strong in the available benchmarking sample, with Terminal 2 showing the highest achieved productivity and Terminal 1 sitting around the middle of the comparator range.¹

1.3.12 However, despite this finding, CEPA propose a reduction in the security OPEX allowance requested by Dublin Airport in its Regulatory Proposition, which the IAA has provisionally implemented for its Draft Determination. This reduction primarily results from a reduction to the resilience adjustment—the incremental staff above the baseline required to provide a resilient operation. While CEPA/Think concede the

¹ CEPA (2026), “, p. 17.

principle underpinning a resilience adjustment (see below), they carry out alternative modelling that they claim justifies a considerably lower allowance.

*... [CEPA] 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.*²

1.3.13 This conclusion is consistent with the broader findings of CEPA/Think's security study that "in both terminals, periods of high queuing were most likely to occur when lanes were near capacity".³ Factors underpinning this include an inability to open all lanes as planned (due to staff limitations) in Terminal 1,⁴ and challenges accurately forecasting passenger throughput in Terminal 2.⁵

1.3.14 As well as finding that lane capacity is a critical driver of high queuing, CEPA/Think also identify that delivering a given lane capacity is affected by a number of workforce considerations that drive staffing levels and roster frictions, including:

- Training: All security staff are required to complete 6 weeks of annual training [...]
- NWOW: Staff are allocated core fixed rosters for a minimum of 12 months with stable shift patterns and 11-hour breaks between shifts. There are no longer seasonal staff, and all are now part-certified.
- Organisation of Working Time Act (1997) governs maximum working hours, rest breaks, annual leave, and related entitlements for most employees in Ireland. These rules affect how rosters are organised, overtime managed, and rest periods provided between shifts. Dublin Airport will need to ensure shift patterns comply with these legal maximums and rest requirements.
- Security staff roles at Dublin Airport are represented by Trade Unions. Negotiations with these unions shape employment terms such as roster patterns, hours, pay scales, overtime arrangements, and job security. Past disputes have centred on rostering practices (notably flexible rosters with variable hours), advance notice of shifts, and guaranteed minimum hours – highlighting the need for union engagement in rostering/contract changes.
- **Training, contingency, sickness rates and absence** provide another constraint on the operation which is required to be factored into rostering and operational planning. [emphasis added]⁶

1.3.15 As a result, CEPA align with two key assumptions from Dublin Airport's Regulatory Proposition relating to resilience:

- We [CEPA/Think] apply a 28% non-availability allowance to account for paid time when staff are not available for operational deployment.⁷
- We [CEPA/Think] also apply a 12% roster coverage allowance to roles where demand varies across the day or year. [...] This allowance reflects the practical inefficiency of matching fixed rosters to variable operational demand.⁸

1.3.16 Dublin Airport, the IAA and its advisors therefore align on the efficiency of the security operation in general, and the need for several adjustments to be made to reflect unpredictable passenger throughput and operational frictions. The only source of divergence between Dublin Airport's Regulatory Proposition and

² CEPA (2026), 'Dublin Airport efficiency study', p. 32.

³ CEPA (2026), 'Annex A: Security efficiency assessment –technical evidence report', 17.

⁴ CEPA (2026), 'Annex A: Security efficiency assessment –technical evidence report', 35.

⁵ CEPA (2026), 'Annex A: Security efficiency assessment –technical evidence report', 38.

⁶ CEPA (2026), 'Annex A: Security efficiency assessment –technical evidence report', p. 65.

⁷ CEPA (2026), 'Dublin Airport Opex Efficiency Study: 2027–2031', p. 31

⁸ CEPA (2026), 'Dublin Airport Opex Efficiency Study: 2027–2031', p. 31

CEPA/Think's Draft Determination analysis is the quantification of the adjustment required to reflect outturn operational variation—the 'resilience adjustment'. We turn to this in the next section.

CEPA's approach to quantifying the Draft Determination resilience adjustment

1.3.17 CEPA rejects Dublin Airport's N+1 resilience proposal, and instead undertakes a Monte Carlo analysis to quantify the need for an additional funding allowance for security resilience. This motivated on the following grounds:

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. [...]

We consider [Monte Carlo analysis] 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.⁹

1.3.18 However, once the operational frictions that CEPA has identified in its broader study are factored-in, CEPA's analysis appears to instead provide empirical support for Dublin Airport's standing uplift requirement. We demonstrate this in the next section, before turning to demonstrate that CEPA's proposed resilience adjustment significantly understates the required funding level.

CEPA's Monte Carlo analysis

1.3.19 CEPA's Monte Carlo analysis segments the security operation into several dimensions in order to simulate throughput:

- Three day types: a weekday (Monday to Friday), a Saturday or a Sunday.
- The twelve months within the year: January to December.
- The two terminals: Terminal 1 and Terminal 2.
- The year: only 2026 and 2031 are simulated, with the resilience adjustment for other years based on interpolating between these values.

1.3.20 Based on 100 Monte Carlo simulations, the following outputs are produced to inform the level of CEPA's estimated resilience adjustment:

- The proportion of simulations in which a specific day-month-terminal-year combination would fail to meet the daily security queue service quality target on at least one day.¹⁰
- The average number of days in the month on which the daily queue target was breached, expressed as a count of 5-minute intervals (twelve per hour). This value is identical for every hour of the day: it functionally measures how many days are breached, not what happened in any particular hour.¹¹
- The required uplift in lanes¹² (and therefore staff)¹³ required to remediate a failure, which varies for each hour of the day (depending on expected throughput and the number of lanes already provided for in the baseline).

⁹CEPA (2026), 'Dublin Airport Opex Efficiency Study: 2027–2031', p. 32.

¹⁰'Share of runs failed', or column H, within sheet "ResilienceModelOutput" of the security Opex workbook.

¹¹'Average Interval Count per Failed Run', or column R, within sheet "ResilienceModelOutput" of the security OPEX workbook.

¹²'Additional Lanes Required', or column L, within sheet "ResilienceModelOutput" of the security OPEX workbook.

¹³'Incremental Staff Required', or column Q, within sheet "ResilienceModelOutput" of the security OPEX workbook.

1.3.21 The incremental staff requirement is multiplied by the average number of days in the month on which the daily queue target was breached (per failing simulation), then risk-weighted by the proportion of failing simulations, to produce a monthly risk-weighted staff-hour requirement. This is divided by the number of days in the month and converted into an FTE resilience adjustment.

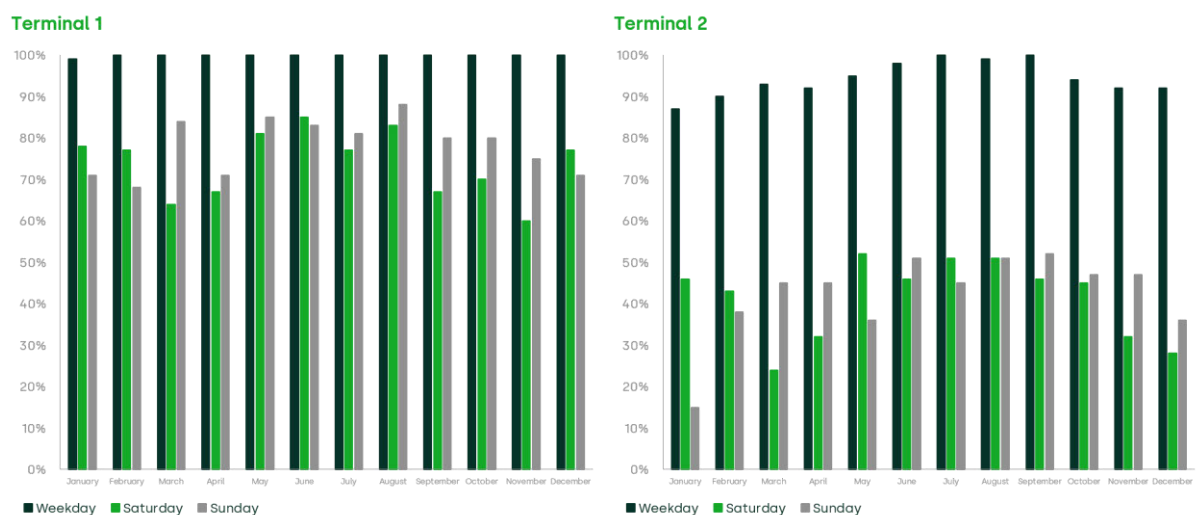
1.3.22 We turn to these three core results in turn, and the implications for Dublin’s proposal and the CEPA resilience adjustment.

Proportion of simulations in which the daily security queue service quality target is not met

1.3.23 A high proportion of the Monte Carlo simulations run by CEPA (used to risk-weight the resulting allowance) identify that the baseline security staffing levels provided for in its deterministic model are insufficient to meet the queue target.

1.3.24 As CEPA notes, Terminal 1 is more constrained—with (at least one) weekday failing in 99% to 100% of runs for each month of 2026 (see Figure 1.1, LHS). Terminal 2 is relatively less constrained, although the proportion of simulations with at least one failed weekday still ranges between 87% and 100% across months of the year (see Figure 1.1, RHS). The least constrained combinations are Sundays in Terminal 2, which record a failure in 15% to 52% of simulations, depending on the month.

Figure 1.1: Proportion of simulations in which the daily security queue service quality target is breached at least once for that day-type and month (2026)



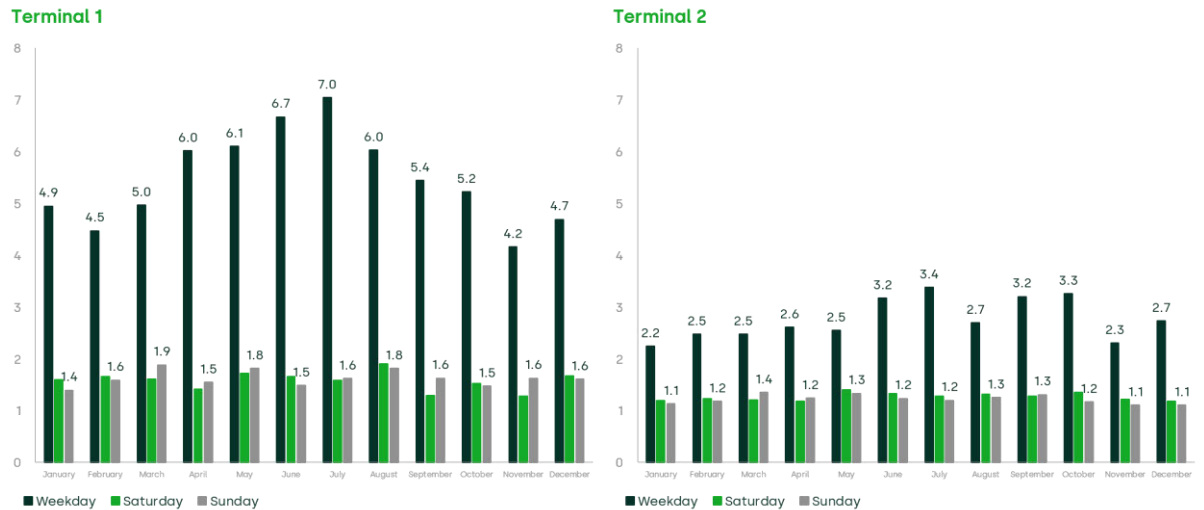
1.3.25 CEPA's analysis therefore finds that the deterministic staffing profile does not reliably deliver a compliant month in either terminal: in Terminal 1, virtually every simulation produces at least one weekday breach, in every month of the year.

Average number of days in the month in which the daily queue target is breached

1.3.26 The second component of CEPA’s analysis is the average number of days the service quality target is breached, per simulation that fails. Figure 1.2 below shows how these results vary across terminals and months in the 2026 simulations computed by CEPA.

1.3.27 For instance, CEPA finds that (on average) a failed simulation leads to 4.9 days breaching the target in January in terminal 1 relative to 22 total weekdays (c. 22%). By contrast, a failed simulation in terminal 2 has 2.2 days in which the target is breached (c. 10%). There are fewer Saturdays and Sundays in a given month, so for example 1.4 Sundays failing in January 2026 is equivalent to 35% of the 4 Sundays that month.

Figure 1.2: Average number of day-type per month on which the daily security queue target is breached, by day type, averaged across simulations in which a breach occurred. Terminal 1 (left) and Terminal 2 (right), 2026



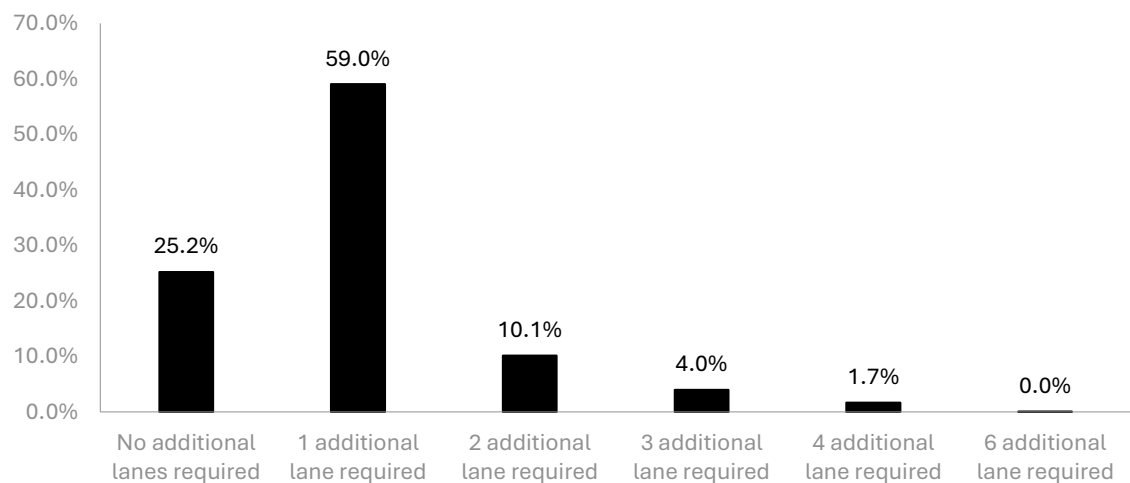
1.3.28 Taken alongside the results from the previous section, this analysis demonstrates that breaches are not rare events confined to peak periods. In Terminal 1, between four and seven weekdays in every month of the year are affected, alongside one to two Saturdays and Sundays. The pattern is present in every month, in both terminals.

The required uplift in lanes and staff to remedy a breach

1.3.29 The final step in CEPA's analysis is to compute the number of lanes (and therefore staff-hours) required to remediate the service quality breach. CEPA estimates a profile across the day, reflecting variation in demand and existing lane capacity under the deterministic plan. CEPA's analysis therefore reflects that, even on days in which the service quality target is not met, there are a number of periods in the day which would not require additional lanes to be opened.

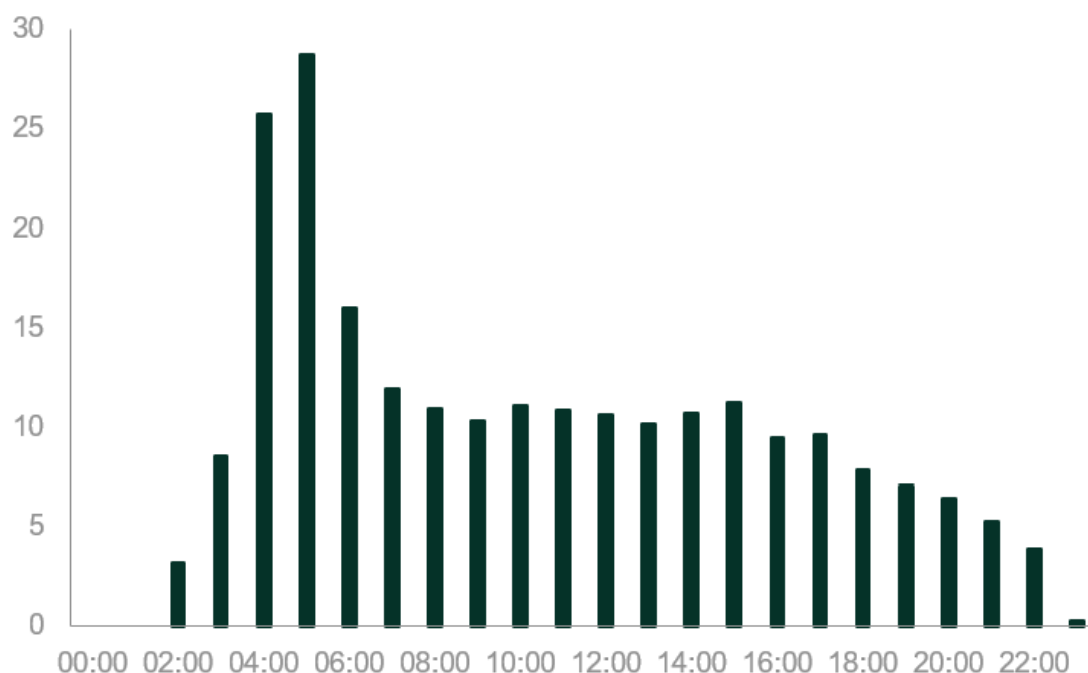
1.3.30 Figure 1.3 presents aggregate data across both terminals and years, showing that on average no additional lanes are required for around 25% of a day which breaches the service quality target—if hours when no baseline lanes are open are removed this figure drops to c. 11%. One additional lane is required for the majority of an 'average' day, with a step up to between 2 to 6 lanes increasingly less common.

Figure 1.3: Number of additional lanes required as a proportion of hours for days that breach the daily security queue service quality target



1.3.31 Figure 1.4 sets out how this translates into a corresponding staff requirement. It can be seen that staff numbers (and the underpinning incremental lane capacity) peak in the early hours of the morning, settling to around one-lane's worth of staff-hours from around 08:00, before tailing off in the late evening.

Figure 1.4: Average additional staff required to staff lanes for days that breach the daily security queue service quality target, by hour



1.3.32 A significant finding from the CEPA analysis is the average breadth of staffing required on days that breach service quality targets—persisting throughout the majority of the day. This persistent uplift in capacity is unlikely to be attainable by some of the shorter term flexibility measures that CEPA highlight as mitigants, instead requiring a full additional lane to be rostered for that day. The requirement is present in every month: between 86% and 92% of operating hours on breaching days require at least one additional lane, with no material seasonal variation.

1.3.33 A secondary finding is that in the early morning the requirement rises to two or more additional lanes — in Terminal 1, to three or four lanes at 04:00 and 05:00. An N+1 provision (as proposed by Dublin) would therefore remain short of the requirement CEPA identifies at the morning peak.

Implications for an appropriate resilience adjustment

Dublin Airport's Regulatory Proposition

1.3.34 In its Regulatory Proposition, Dublin Airport put forward a resilience adjustment based on an 'N+1 resourcing assumption'. Under this assumption, Dublin Airport supplements the planned level of lanes with one additional lane. This is designed to ensure that the planned number of lanes can continue to operate during normal, credible disruption without reliance on emergency overtime, reactive redeployment, or service failure.

1.3.35 As noted above, CEPA does not reject the need for such an adjustment in principle. CEPA set out the following rationale for why it did not consider Dublin Airport's N+1 adjustment to be an appropriate centreline assumption:

*[...] 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.*¹⁴

1.3.36 The results from CEPA's own Monte Carlo analysis interrogate each of these assumptions. CEPA sets out that its analysis accounts for operational variation and modelled queue risk, and recognises the resilience

¹⁴ CEPA (2026), 'OPEX efficiency report', pp. 31-32.

provided by the 12% roster coverage allowance. As we have set out above, CEPA's analysis identifies a significant resilience risk that would require increasing capacity by (at least) one lane that is largely persistent across seasons. While there is variation between weekdays and weekends, and between Terminal 1 and Terminal 2, CEPA's modelling suggests that an additional lane is needed to address resilience concerns across all the dimensions it cites above.

- 1.3.37 In other words, CEPA's analysis implicitly tests each of the criteria it states to be necessary to approve an N+1 adjustment. Our assessment is that CEPA's analysis demonstrates each of them to be met—justifying Dublin's Regulatory Proposition.

CEPA's alternative adjustment

- 1.3.38 CEPA instead uses their analysis to quantify a lower, 'targeted risk adjustment.' As summarised by CEPA¹⁵:

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. [...]

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.

- 1.3.39 CEPA's interpretation of its Monte Carlo analysis does not align with its more detailed review of security operations—in particular it does not account for the practical limitations it identifies in annex A. As summarised above, CEPA identifies both that high queuing is driven by deficiencies in lane capacity, and that rostering of security staff faces a number of considerations that render it impractical to operate flexible rosters (which have, as CEPA note, been completely phased out since 2025).¹⁶

- 1.3.40 It is therefore unclear how a 'risk weighted' allowance enables Dublin Airport to mitigate the risks identified by CEPA. For instance, if (as CEPA's modelling shows) there is a 20% probability that an extra lane will be required on a January weekday in Terminal 1 in 2031, Dublin Airport cannot use the resulting allowance (equivalent to 0.9 FTEs) to open a lane for precisely the period when risks materialise. By definition, such risks are not predictable ahead of time, or they could be factored into the deterministic lane staffing plan.

- 1.3.41 Finally, the reliance on Dublin Airport's assumptions in other areas of resilience—for instance the use of a stretching 12% assumption instead of the 'typical' 15% roster coverage assumption—cannot be taken in isolation. Rejecting a key pillar of Dublin Airport's resilience package—the N+1 resourcing allowance—invalidates the use by CEPA of stretching assumptions made by Dublin Airport in other areas.

Interaction with service quality

- 1.3.42 Not only does the draft determination approach underfund resilience in a critical component of Dublin Airport's operation, it also cuts across the service quality regime. By under-resourcing Dublin Airport's security operation, the draft determination is effectively underpinned by a default or centreline expectation that Dublin Airport will breach its security queuing time service quality targets. This undermines the basis of the 'fair bet' that the IAA seeks to set for the determination, as it means that Dublin Airport either has to overspend its OPEX allowance on security or accept ongoing rebates on its service quality targets.

1.4 Vehicle control posts

- 1.4.1 CEPA has made no allowance for the additional Vehicle Control Post resources required to implement the progressively increasing screening requirements for airport supplies under point 9.1.1.1 of the Annex to

¹⁵ CEPA (2026), 'Dublin Airport OPEX efficiency report', p. 134.

¹⁶

Commission Implementing Regulation (EU) 2015/1998. These requirements represent a material change from the existing approach, moving from the screening of a sample of supplies carried by selected vehicles towards progressively higher proportions of all airport supplies being screened. Dublin Airport's operational assessment is that this will create a significant and unavoidable increase in screening activity at the VCPs during the regulatory period. CEPA has nevertheless maintained VCP staffing at the 2026 level, on the basis that Dublin Airport has not sufficiently demonstrated that a material proportion of the incremental screening must take place at the existing VCPs.

1.4.2 CEPA's decision rests on three principal assumptions. First, CEPA considers that upstream screening by appropriately authorised suppliers would represent a more efficient operating model, leaving the VCPs primarily responsible for verification, oversight and exception handling. Second, CEPA considers that increased staffing at existing VCPs would be an inefficient response to the screening of construction-related supplies, particularly where such materials are bulky, difficult to screen or capable of creating congestion at perimeter posts. Third, CEPA relies on Dublin Airport's proposed Consolidated Security and Screening Centre as the more appropriate long-term solution for screening airport supplies, construction materials, delivery vehicles and drivers.

1.4.3 Dublin Airport does not consider that these assumptions provide a reasonable basis for making no allowance for the incremental requirement. In relation to upstream screening, CEPA has provided no evidence that the suppliers responsible for the affected deliveries can or will become authorised to undertake compliant screening upstream. Approximately 40% of vehicles currently accessing the VCPs are already associated with known suppliers. The remaining vehicle population cannot simply be assumed to transition into a secure upstream supply chain, particularly where suppliers are occasional, project-specific or do not have the operational scale, facilities or commercial incentive required to undertake regulated screening. The relevant requirements also require an unpredictable selection methodology that cannot be influenced by the screener or anticipated by the person delivering the supplies. Where that methodology cannot be applied because of the nature of the supplies, 100% of the delivered supplies must be screened. Accordingly, CEPA's proposed upstream model is not an evidenced efficiency measure and cannot reasonably be treated as a substitute for the resources required to comply with the regulation.

1.4.4 Similarly, the construction deliveries will continue to be made through the gate-posts as there is no alternative. Dublin Airport's major capital projects already employ logistics managers who coordinate delivery times with the VCP operation. This arrangement is currently in place for the Underpass project and represents an existing operational efficiency. Delivery scheduling can reduce congestion and smooth demand across the operating day, but it does not reduce the number of vehicles, drivers or supplies that must be searched. Nor does it eliminate the requirement for qualified VCP personnel to undertake screening, maintain supervision and manage vehicles during the screening process. The regulatory framework expressly provides that supplies screened at the point of unloading must remain under constant supervision by appropriately trained security personnel until screening has been completed.

1.4.5 Finally, CEPA's reliance on the proposed Consolidated Security and Screening Centre is inconsistent with the timing and operational scope of that project. The facility is not scheduled to be delivered until 2032 and therefore cannot mitigate the additional resource requirement arising during the 2027–2031 regulatory period. In any event, the centre would change the location and organisation of screening rather than eliminate the activity. The proposed facility is specifically intended to screen airport supplies, construction materials, delivery vehicles and drivers and will therefore itself require appropriately trained staff to search vehicles, screen supplies and personnel, verify compliance and manage exceptions. A future capital project cannot therefore provide a valid basis for excluding the efficient operating expenditure required to meet a binding security obligation before that project becomes operational.

1.4.6 For these reasons, CEPA's treatment does not provide a credible operational pathway through which Dublin Airport can meet the increased screening requirement without additional resources. Each of the measures identified by CEPA may contribute to the longer-term management of delivery flows, but none removes the incremental screening, supervision and processing workload arising at the VCPs during 2027–2031. The efficient opex allowance must therefore include the additional staffing demonstrably required as the mandated screening percentages increase over the regulatory period.

Current and future screening requirement

1.4.7 [REDACTED]
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[REDACTED]

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[REDACTED]

Dublin Airport updated forecast

1.4.12 Following CEPA's Draft Report, Dublin Airport has undertaken a further detailed review of the activities performed at the VCPs and has refined its staffing forecast. The updated forecast replaces the broader assumptions in the original Regulatory Proposition with an activity-based assessment of the two principal VCP functions: the screening of staff and other persons and the screening of vehicles. This produces a materially lower and more targeted resource requirement than Dublin Airport's original forecast, while

continuing to recognise the unavoidable workload arising from growth in airport activity and the progressive increase in mandatory screening.

- 1.4.13 In 2025, the VCPs screened approximately 2 million staff, drivers and other persons, together with approximately 349,000 vehicles. Based on the current deployment of resources across the gateposts, approximately 60% of VCP staffing relates to staff and person screening, with the remaining 40% relating to vehicle screening. Dublin Airport has applied separate activity drivers to these two resource categories rather than assuming that all VCP resources increase at a common rate.

Staff and person screening

- 1.4.14 The staff-search forecast includes airport-based third-party and airline personnel, as well as drivers entering through the VCPs. Airport-based third-party and airline staff are assumed to increase in line with passenger growth, reflecting the additional airline, ground-handling, retail, catering, maintenance and other operational activity required to serve a larger airport operation. This is a proportionate assumption and does not provide for any increase in staffing intensity relative to passenger volumes.

- 1.4.15 Drivers are forecast separately by reference to vehicle volumes. Dublin Airport has assumed an average of 1.5 persons per vehicle, with the resulting driver volumes increasing in line with the projected growth in vehicle movements. The overall staff-search requirement therefore reflects growth in both the airport-based employee population and the number of drivers requiring access to the airside campus. Except for the separately identified impact of the new screening technology described below, the volume-related forecast does not assume any increase in the underlying level of effort required to screen each person.

- 1.4.16 Dublin Airport's forecast also includes a 15% uplift to the productive screening resources directly affected by the introduction of C1 and C3 screening equipment and Security Scanners at the Vehicle Control Posts. The new equipment materially changes the screening process and the activities that must be performed at each affected post, including equipment operation, image analysis, person screening, alarm resolution and secondary search. The uplift is not applied to the full VCP establishment or to activities unaffected by the new technology. It is applied only to the staff and person-screening resource operating or directly supporting the affected screening processes and is phased in line with equipment deployment. It is also modelled separately from growth in staff and vehicle volumes and from the progressively increasing requirement to screen airport supplies, thereby avoiding double counting.

- 1.4.17 Dublin Airport's experience from the introduction of C3 technology in Central Search demonstrates that improved screening capability does not automatically translate into lower staffing requirements. The Central Search rollout increased the operating complement from 14 officers under the previous Terminal 1 configuration to 18 officers for a short C3 lane and 23 officers for a long C3 lane. The additional requirement arose principally from the staffing necessary to operate the associated body-scanning and search process. This occurred notwithstanding the higher planned throughput associated with C3 equipment, demonstrating that equipment capability cannot be treated as equivalent to achievable end-to-end labour productivity. The efficient staffing requirement is determined by the complete screening process and the number of mandatory roles that must be filled simultaneously for the screening point to operate safely and compliantly.

- 1.4.18 Dublin Airport has not transferred the Central Search staffing increase directly to the VCPs, recognising the differences in operating environment, demand profile and screening configuration. Instead, it has applied a materially lower 15% assumption only to the technology-affected productive screening resource. This compares with a minimum observed increase of approximately 29% in Central Search staffing per lane and therefore represents a conservative allowance for the additional activities arising from the new equipment, while recognising the potential for role sharing and the lower-intensity operating environment at the VCPs. In the absence of any alternative task-based assessment by CEPA of the staffing required to operate the new configuration, excluding the uplift would effectively assume that C1, C3 and Security Scanner technology can be introduced, operated and supported without any change in productive staffing requirements. Dublin Airport's actual experience from Central Search demonstrates that this is not a reasonable assumption.

Vehicle volumes

1.4.19 Vehicle movements through the VCPs are expected to increase by 5% per annum. This reflects the combined effect of:

- passenger growth and the associated increase in operational and service deliveries;
- growth in cargo and related vehicle movements; and
- the significant level of capital works expected across the airport campus during the regulatory period.

1.4.20 The 5% assumption is intended to capture the growth in the number of vehicles presented for screening. The staffing impact of the increased regulatory screening requirement is modelled separately through the time required to process each vehicle. This avoids double counting between traffic growth and the more intensive screening process.

Vehicle-search time

1.4.21 Dublin Airport has also reviewed observed vehicle-processing times to develop an evidence-based estimate of the impact of the revised screening requirements. In 2025, the average vehicle search time at Gatepost 4 was 3 minutes and 30 seconds, compared with an average of 3 minutes and 41 seconds across all VCPs.

1.4.22 Given the nature of the traffic using Gatepost 4, Dublin Airport considers its observed average of 3 minutes and 30 seconds to be an appropriate proxy for the processing time associated with vehicles operated by known suppliers (i.e. with 3 of 6 areas of the vehicle being searched). This is a conservative starting point because it is based on actual operational performance and does not assume any deterioration in the efficiency with which these vehicles are processed.

1.4.23 For other vehicles, Dublin Airport has applied the requirement that 25% are subject to a full search. Combining the Gatepost 4 proxy for the 108,000 known-supplier vehicles with the additional processing requirement for 75% of other vehicles produces an average forecast vehicle-search time of 4 minutes and 41 seconds, or 4.68 minutes expressed in decimal form, for the 25% of vehicles fully searched in 2025. The forecast grows the staffing based on these average search times and the increase in search requirements from 2028 to 2031.

1.4.24 Applying the revised average search time to forecast vehicle volumes results in a 54% increase in the vehicle-search staffing requirement by 2031. This increase is confined to the 40% of the existing resource base engaged in vehicle-search activity. Dublin Airport has not applied the 54% increase across the staff-search resource base.

Resulting staffing forecast

1.4.25 When the separately calculated staff-search and vehicle-search requirements are combined, Dublin Airport's updated forecast results in VCP staffing increasing from 131 FTEs in 2026 to ■■■ FTEs in 2031. This represents an increase of ■■■ FTEs, or approximately ■■■, compared with the 2026 baseline.

1.4.26 The updated requirement is below Dublin Airport's original forecast and demonstrates that Dublin Airport has refined its methodology and applied more granular operational evidence. The updated forecast:

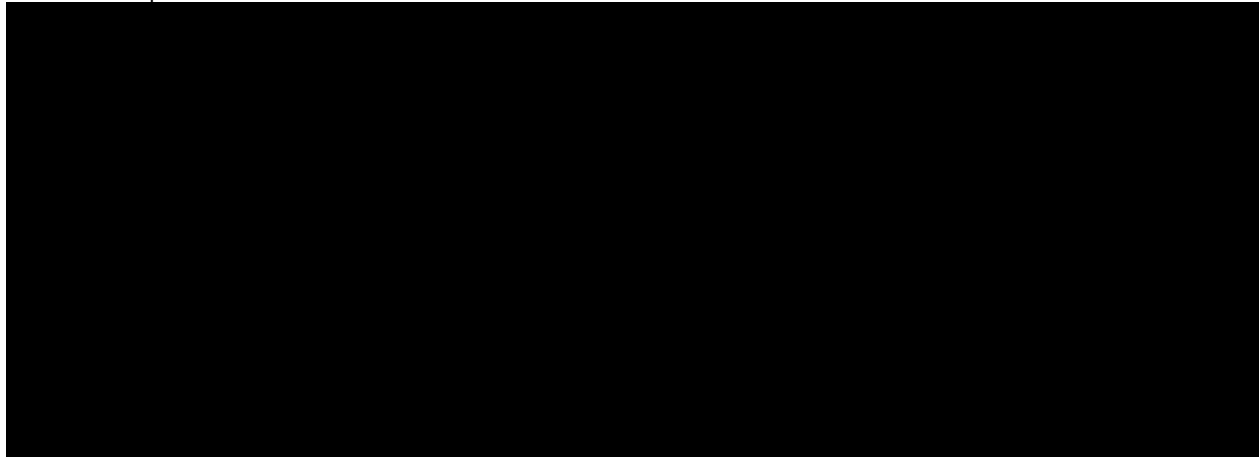
- (1) separates staff-search and vehicle-search activities;
- (2) applies passenger and vehicle growth only to the activities they drive;
- (3) uses observed 2025 processing times;
- (4) uses Gatepost 4 as a conservative proxy for known-supplier vehicles;
- (5) applies the increased screening requirement only to the relevant vehicle population; and

- (6) does not assume any general increase in staffing intensity for person screening, other than the targeted 15% uplift applied to productive screening resources directly affected by the introduction of C1 and C3 equipment and Security Scanners.

1.4.27 The resulting increase to 190 FTEs is therefore not a simple extrapolation of the regulatory screening percentages. It is the output of a bottom-up forecast based on actual 2025 volumes, the current allocation of VCP resources, forecast growth in the activities being screened and observed vehicle-processing times. On this basis, maintaining the allowance at 131 FTEs, as CEPA proposes, would make no provision for either the growth in staff and vehicle volumes or the additional processing time arising from the increased screening requirement. It would therefore leave Dublin Airport without the resources required to process the forecast workload and comply with the applicable security requirements.

1.5 Cleaning

1.5.1 The difference between Dublin Airport's forecast cleaning costs and CEPA's allowance increases materially over the regulatory period, rising from approximately [REDACTED] in 2026 to [REDACTED] by 2031. The variance reflects both payroll and non-pay costs. Dublin Airport's forecast incorporates the cost required to maintain cleaning standards across a growing passenger operation, including increased terminal usage, higher cleaning frequencies and the challenges of operating an increasingly constrained and intensively utilised airport.



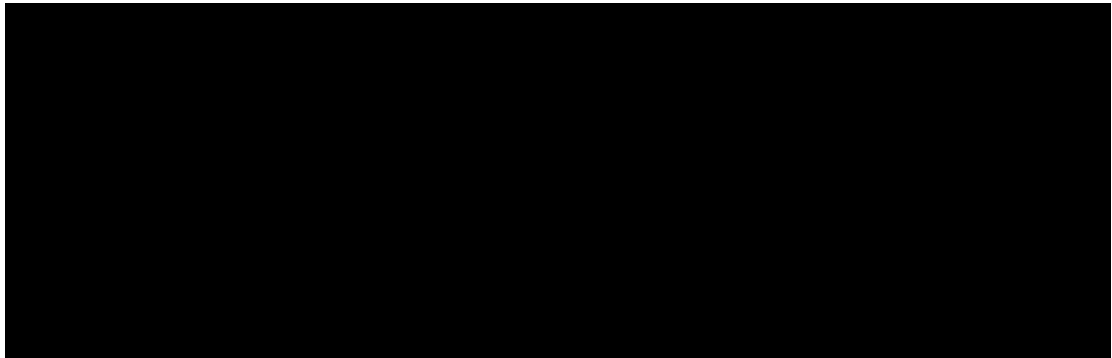
1.5.2 CEPA's approach combines a high-level elasticity model with top-down airport benchmarking. One-third of the allowance is derived from an elasticity methodology, under which cleaning costs increase broadly with passenger growth and operational activity. The remaining two-thirds is based on benchmarking against other airports, which imposes a stretching and potentially difficult-to-achieve efficiency target without fully reflecting Dublin Airport's constrained and increasingly intensive operating environment. CEPA makes a specific adjustment for service quality in Terminal 1, recognising the additional expenditure required to improve cleaning standards there. A compounding efficiency of 1% per annum is layered over the forecast.

1.5.3 CEPA's high-level benchmarking methodology is not sufficiently granular to establish an efficient cleaning cost for Dublin Airport, as it assumes broad comparability between airports without adequately controlling for the operational and physical characteristics that drive cleaning requirements. These include terminal age, layout and shape, floor area and materials, passenger dwell time and density, peak-day and peak-hour congestion, the number, size and distribution of toilet blocks, gate turnaround frequency, bussing operations, walking distances, security and arrivals configurations, operating hours, cleaning standards, waste volumes, accessibility requirements, landside versus airside areas, the extent of retail and food-and-beverage activity, and the disruption and additional cleaning associated with construction in a constrained live airport. Without normalising for these factors, the benchmarking cannot demonstrate that CEPA's lower payroll and non-pay allowances are achievable while maintaining the required standards of cleanliness, safety and passenger service.

1.5.4 At a Dublin Airport level, cleaning requirements are not directly comparable between Terminal 1 and Terminal 2: T1 handles higher passenger volumes and operates for longer hours, while its older building

fabric, greater incidence of plumbing and reactive maintenance issues, ongoing construction, larger seating areas, wider takeaway food and beverage footprint and additional staff facilities all generate higher and more intensive cleaning demands, with shorter overnight windows in which to complete restorative cleaning. T2 benefits from newer infrastructure and longer cleaning windows in some areas, but has its own cost drivers, heavy use of high-footfall washrooms and the additional South Gates and Pre-Boarding Zone footprint associated with bussing approximately 31% of T2 departing passengers. These material operational differences mean that cleaning costs cannot be reliably compared by terminal area or passenger numbers alone.

- 1.5.5 CEPA have assumed that all non-pay costs related to T1 and all payroll costs relate to T2. While this is broadly correct, there are c [REDACTED] of non-pay costs related to T2 assets. Furthermore there are both payroll (c [REDACTED]) and non-pay (c [REDACTED]) of costs that are either campus or cross terminal (e.g. outdoor windows).



- (1) In-house costs include a) staff that clean T2 back of house and b) specialised cleaners that work across the airport campus.
- (2) Cleaning contracts & materials includes a) [REDACTED] for waste disposal across the campus, b) [REDACTED] relating to T2 BOH areas (such as Level 15 Sortation Hall, BOH Level 10 Baggage Hall, Level 20 Old Transfer Corridor and others), IDL (Food Court and Retail Units), South Gates (PBZ), Bussing Gates (332-337), Staff screening area and Level 30 Central Search c) [REDACTED] relating to campus cleaning and d) a further [REDACTED] (estimated to be [REDACTED] this year) relates to pest control, hygiene bin services and mat provision for both terminals

Errors in CEPA benchmarking and methodology

- 1.5.6 Dublin Airport has identified two errors in CEPA's cleaning model which affect the benchmarking analysis and the resulting operating expenditure allowance. These errors should be corrected before the cleaning allowance is finalised.
- 1.5.7 First, CEPA has incorrectly adjusted the cleaning and maintenance costs of Rome Fiumicino Airport using Lisbon Airport's passenger share within the ANA group, rather than Fiumicino's passenger share within Aeroporti di Roma.
- 1.5.8 Second, the Skybridge floor area, which is recorded within the 'Other' category, has not been apportioned to Terminal 1. Although CEPA's total Dublin Airport benchmark includes the full floor area, the Skybridge is not allocated to either terminal in the terminal-level analysis. The omission affects the Terminal 1 and Terminal 2 calculations and affects the total cleaning allowance.
- 1.5.9 Dublin Airport requests that the CEPA correct both errors, rerun the relevant benchmarking and forecasting calculations, and reflect the resulting change in the final operating expenditure allowance.

Dublin Airport cost forecast

- 1.5.10 Dublin Airport's non-pay cleaning cost forecast is based on the existing cleaning contract and rolls forward the contractual cost in line with forecast passenger growth. The contract expressly recognises that additional passenger volumes and longer dwell times create additional cleaning requirements and provides for

corresponding increases in cleaning hours and cost. This provides a more reliable basis for forecasting expenditure than the IAA's high-level methodology, as it reflects the actual commercial terms secured through a competitive procurement process and the operational relationship between passenger activity and the resources required to maintain cleaning standards.

1.5.11 In addition, Dublin Airport's non-pay forecast includes two cost uplifts, in 2027 and 2030, equivalent to the expenditure required to move from a cleaning service-quality measure of 8.0 to 8.5. These uplifts are necessary to maintain required cleanliness standards as increasing passenger volumes place greater pressure on a constrained terminal footprint. In Terminal 1, higher passenger density results in more intensive use of floors, seating areas, washrooms and circulation spaces, generating additional waste, spillages and cleaning interventions within the same physical area. Congestion also reduces cleaning productivity, as cleaning teams must work around passengers, queues, baggage and commercial activity, with fewer opportunities to access or temporarily close areas for cleaning. These challenges are compounded by Terminal 1's age, layout, floor materials, passenger concentration and peak operating patterns.

1.5.12 CEPA's analysis supports the conclusion that Dublin Airport's existing in-house cleaning operation is efficient. The current team delivers a broad range of front-of-house, back-of-house and specialised cleaning activities across a complex, live operating environment, while achieving high standards under the applicable service quality measures. Dublin Airport therefore welcomes CEPA's acceptance of the current in-house cost base as efficient. The issue is not whether the existing operation can be delivered at lower cost, but whether the current level of resource will remain sufficient to deliver the same standards as passenger volumes, passenger density and terminal utilisation increase over the 2027–2031 period.

1.5.13 A significant increase in in-house cleaning expenditure is required over the determination period to maintain existing cleanliness, hygiene and safety outcomes. This requirement is principally driven by passenger growth being accommodated within constrained terminal infrastructure. Higher passenger volumes increase the use of washrooms, seating areas, baggage halls and circulation spaces, while congestion reduces the periods during which areas can be accessed or taken out of use for focused cleaning. Dublin Airport's operating evidence also shows that increased dwell time compounds passenger growth by increasing the duration and intensity with which terminal facilities are used.

1.5.14 The forecast increase is therefore required to sustain the standards currently achieved, rather than to introduce a discretionary enhancement. Dublin Airport's bottom-up model identifies the specific cleaning tasks required by area and hour, distinguishing between maintenance cleaning while passenger areas are in use and deeper cleaning when operational conditions permit. The model reflects the number and size of areas and washrooms, the operational hours of those areas and the resources required to maintain coverage. The additional requirement comprises three principal areas.

Front-of-house terminal cleaning

1.5.15 Additional front-of-house cleaning is required to maintain existing cleanliness and safety standards across passenger-facing areas as passenger numbers and terminal congestion increase. Higher utilisation creates more intensive washroom use, litter, spillages and demand for reactive interventions. At the same time, crowding makes it more difficult to close washrooms, machine-clean floors or undertake focused cleaning without disrupting passenger flows. Dublin Airport must therefore provide greater routine coverage during operating hours and establish a scheduled task team to undertake deeper cleaning on a rotating, zone-by-zone basis. This allows intensive work that cannot be completed reliably through routine, on-the-run cleaning to be undertaken in a planned manner, protecting cleanliness standards and the condition of terminal assets. Dublin Airport's bottom-up assessment identifies an additional [REDACTED] FTE requirement for front-of-house terminal cleaning by 2031.

1.5.16 This activity is not funded within the existing efficient baseline. The current team is configured to meet present task requirements, with deep-cleaning activity largely absorbed within routine coverage. That approach cannot be sustained as passenger flows increase and the available cleaning windows reduce. The proposed task team is a new, ring-fenced capability and does not duplicate the existing specialised cleaning team: the task team delivers scheduled, area-based deep cleans, whereas specialised cleaning covers work requiring particular training or equipment. The additional routine coverage is similarly incremental, as it

relates to the greater frequency of interventions and reduced cleaning productivity caused by future passenger growth and congestion, rather than to activities already provided for in the baseline.

Back-of-house cleaning

1.5.17 Back-of-house cleaning must increase to support the safe and effective operation of staff corridors, welfare areas, break rooms and other operational spaces. These areas form part of the airport's live operating environment and experience movement of staff, goods and equipment throughout the day. As passenger activity and the wider airport operation grow, internal operational activity also increases, raising the frequency with which these areas must be serviced to prevent the accumulation of waste, spillages and obstructions and to ensure that staff welfare facilities remain clean and fit for purpose. Dublin Airport's task-based assessment identifies a marginal net increase of approximately 1.7 FTE in back-of-house cleaning.

1.5.18 The requirement is additional because it arises from higher future operational activity and is not included in the current efficient baseline. Dublin Airport has not assumed that all back-of-house activity increases uniformly. The forecast reflects additional requirements where cleaning demand is expected to grow, while also recognising reductions in other areas, including reduced office-cleaning requirements. The resulting net increase is therefore a targeted response to identified task requirements rather than a general or undifferentiated uplift.

Specialised cleaning

1.5.19 Additional specialised cleaning capability is required for tasks that cannot be undertaken through normal front-of-house or back-of-house coverage. These activities require specific skills, training or equipment and include glass cleaning, high-level cleaning and the cleaning of assets such as escalators, together with associated stores and materials activities. The requirement will increase as the airport estate and the number of heavily utilised or technically complex assets grow. The introduction of C3 security screening equipment also requires a more specialised cleaning regime because the equipment is more susceptible to dust than the equipment it replaced; operational evidence indicates that this has increased, rather than reduced, cleaning hours. Dublin Airport's bottom-up assessment identifies an additional specialised cleaning requirement of approximately 4.7 FTE by 2031.

1.5.20 These costs are not included elsewhere in the forecast. Specialised cleaning is separate from routine passenger-area cleaning and from the proposed scheduled task team. It relates to activities that require capabilities not held by all cleaning staff and which cannot safely or effectively be absorbed into normal shift coverage. The additional requirement is linked to identified specialist tasks and assets, rather than being calculated as a general percentage increase in the cleaning workforce.

Efficiency of the proposed response

1.5.21 Dublin Airport considers that the proposed additions represent the most efficient response to the identified need. The forecast does not apply a uniform increase to the current workforce or assume that cleaning resources should rise directly in line with passenger numbers. Instead, it uses a bottom-up task allocation model to identify the resources required by location, activity and hour, taking account of fixed area-based requirements, seasonal demand and the ability to reallocate staff between tasks where operational conditions permit. The task model is informed by seasonal reviews of flight schedules and passenger volumes and is used to determine the number of team members required in each operational area.

1.5.22 The proposed structure also directs resources to the activities for which the need is strongest. Front-of-house coverage is increased to protect passenger-facing standards and manage congestion; the back-of-house increase is limited to the net task requirement after recognising available offsets; and specialised work is assigned to a dedicated capability rather than carried out inefficiently by general cleaning teams. The planned task team provides a controlled, zone-by-zone approach to deep cleaning, enabling intensive interventions to be scheduled and reducing reliance on reactive activity. This differentiation avoids duplication and ensures that appropriately skilled resources are deployed to each activity.

1.5.23 The forecast should also be assessed against the cost and operational consequences of not providing the additional resources. Deferring routine or deep cleaning would not remove the underlying requirement. It

would result in a growing backlog, deterioration in asset condition, more reactive interventions and increased risk to cleanliness and safety outcomes. The proposed increase is therefore the minimum efficient resource required to preserve the standards currently delivered by an in-house operation that CEPA has assessed as efficient, as passenger growth and congestion increase materially over the determination period.

Dublin Airport request

- 1.5.24 CEPA's methodology does not adequately reflect congestion. Terminal floor area, which accounts for 67% of the weighting, measures the physical area to be cleaned but does not capture the increasing intensity with which that area is used. The current methodology places excessive reliance on terminal floor area as a predictor of cleaning costs. Square metres measure the physical area to be cleaned, but not the intensity with which that area is used. As passenger numbers increase within Dublin Airport's constrained terminal footprint, each square metre accommodates greater footfall, more waste, increased washroom usage and more frequent cleaning interventions. A methodology that assigns 67% of the forecast to floor area therefore understates the cleaning resources required to maintain appropriate standards as passenger volumes grow. It effectively assumes that cleaning demand remains largely unchanged where the terminal footprint is unchanged, regardless of the increasing intensity of passenger activity.
- 1.5.25 Congestion also reduces cleaning productivity. In a busy, operational terminal, cleaning teams must work around passengers, queues, baggage and other airport activities. Access to high-use areas becomes more restricted, cleaning tasks are more frequently interrupted and fewer activities can be completed during each shift. Maintaining cleaning standards therefore requires additional labour rather than simply cleaning the same floor area at an unchanged unit cost. CEPA's high-level weighting does not recognise this operational reality and cannot adequately capture the additional costs of cleaning an increasingly congested airport. A more appropriate forecast should reflect passenger volumes, dwell time, peak passenger concentrations and the resulting impact of congestion on cleaning frequency and productivity. Dublin Airport's cleaning contract itself recognises passenger volumes and dwell time as drivers of additional cleaning hours, demonstrating that these factors translate directly into resource requirements and cost.
- 1.5.26 Dublin Airport continues to recommend that the cleaning allowance be determined through a bottom-up assessment of the cleaning contract, activities and resources required to maintain the applicable cleanliness standards. Dublin Airport has provided further evidence on these future requirements, including the impact of passenger growth, dwell time, peak passenger concentrations and increasing congestion within a constrained terminal footprint. If CEPA nevertheless retains its existing top-down methodology, Dublin Airport considers that the following adjustments are required to produce a reasonable forecast:
- (1) **Remove the ongoing efficiency target from both Facilities and Cleaning.** The application of a generic efficiency target assumes that productivity can continue to improve irrespective of the operating environment. This is not appropriate where increasing passenger volumes are accommodated within a largely fixed and already constrained footprint. Congestion restricts access to operational areas, interrupts cleaning and facilities activities, reduces the amount of work that can be completed during each shift and increases the frequency of interventions required. The assumed efficiency improvement therefore runs counter to the expected movement in operational productivity. It also compounds the under-allowance created by a forecasting methodology that does not adequately recognise congestion in the first instance. The efficiency target should therefore be removed unless CEPA can identify specific, deliverable and evidenced productivity measures that offset these congestion impacts without adversely affecting safety, service quality or asset condition.
 - (2) **Increase the passenger weighting as terminal capacity is approached.** CEPA's current weighting gives disproportionate importance to terminal floorspace, which remains relatively fixed as passenger numbers increase. While floorspace may reasonably represent a fixed-area component of cost, it becomes a progressively weaker indicator of cleaning and facilities requirements as utilisation intensifies. CEPA should therefore apply a higher passenger weighting once passengers per square metre exceed the accepted 2025 baseline, with the weighting increasing as the terminals move closer to or beyond their designed operating capacity. This would recognise that the marginal cost of accommodating additional passengers is not constant: as congestion increases, each additional passenger generates a greater requirement for cleaning interventions, washroom servicing, waste removal and facilities support.
 - (3) CEPA should **add a congestion adjustment based on passengers per square metre.** This is an objective and transparent indicator of terminal utilisation because it captures the interaction

between passenger growth and the footprint available to accommodate it. The adjustment should be anchored to 2026 passengers per square metre for each terminal and applied as forecast utilisation exceeds that baseline. This would recognise that increasing passenger density creates more frequent cleaning and facilities interventions while simultaneously restricting access and reducing productivity. It would also distinguish passenger growth accommodated through additional capacity from passenger growth accommodated within an unchanged and increasingly constrained terminal. The adjustment should be calibrated alongside the revised passenger weighting to ensure that only the residual, evidenced impact of congestion is allowed and that no cost is counted twice.

1.6 Facilities

1.6.1 The difference between Dublin Airport's forecast facilities costs and CEPA's allowance increases materially over the regulatory period, rising from €3.7 million in 2026 to €7.3 million by 2031. The variance reflects both FTEs and payroll costs. Dublin Airport's Facilities forecast provides for the additional frontline and supervisory resources required to operate and maintain increasingly congested terminals and campus facilities safely, reliably and to the required service standards as passenger activity grows over 2027–2031.

1.6.2 CEPA's forecast methodology takes the average of two separate forecasts, before applying a cumulative efficiency target of 1% per annum:

- (1) Terminal facilities staffing is forecast at an elasticity of 0.5 to passenger growth and Control centre staff are forecast at an elasticity of 0.1 to passenger growth.
- (2) CEPA prepared its own task-based assessment of the staffing required to operate each area.

1.6.3 CEPA's methodology is transparent, but it is not sufficiently grounded in how Facilities resources are actually deployed at Dublin Airport. Averaging two materially different forecasts does not resolve the weaknesses in either approach and, when combined with a cumulative 1% annual efficiency target, risks producing an allowance that is disconnected from the minimum resources required to operate an increasingly congested airport safely and effectively.

1.6.4 Dublin Airport does not consider CEPA's methodology to provide an appropriate forecast of Facilities staffing for 2027–2031. The use of fixed passenger elasticities assumes a smooth and linear relationship between annual passenger growth and staffing, whereas Facilities resources are determined by the areas and processes in operation, their opening hours, minimum coverage requirements and the concentration of passenger demand. These operational requirements cannot be adequately represented by applying elasticities of 0.5 to terminal Facilities staffing and 0.1 to Control Centre staffing. The approach also does not recognise that passenger growth accommodated within a constrained footprint increases both the intensity of Facilities activity and the difficulty of delivering it efficiently.

1.6.5 CEPA's task-based assessment should, in principle, provide a more appropriate basis for the forecast. However, its output does not reflect the full set of tasks and resource requirements identified through Dublin Airport's detailed operational model. The central weakness is that CEPA's task-based forecast is effectively insensitive to its own higher passenger forecast. It produces the same meagre 3% increase in Service Delivery resources whether passenger numbers reach 42.3 million (16% growth on 2025) or 44.5 million in 2031 (22% growth on 2025), despite the additional 2.2 million passengers. That is not credible when considered against the actual role of Service Delivery Team Members and the constrained operating environment expected over the period.

- (1) Service Delivery Team Members undertake passenger-facing operational activities whose requirements vary directly with passenger flows, including queue management, wayfinding,

assistance at immigration and e-gates, transfers, US preclearance, gate areas and operational pinch points. Resources are allocated by area and passenger wave, with minimum staffing required when facilities are open and additional resources deployed as demand and complexity increase. While cross-training and redeployment support efficient use of the workforce, they do not create additional capacity where several operational areas experience peak demand simultaneously.

- (2) The absence of any resource response to the IAA's additional passengers is particularly inappropriate given that this growth must be accommodated within constrained terminal infrastructure and during a period of significant construction. Increased passenger density will create greater demand for active queue and passenger-flow management, crowd-safety interventions, wayfinding and disruption response. Construction will further reduce operational flexibility through temporary closures, revised passenger routes and new pinch points, increasing rather than reducing the level of on-the-ground intervention required. Dublin Airport's proposition explicitly identifies these impacts as drivers of additional operational oversight during the determination period.
- (3) Passenger safety is a central consideration in determining the appropriate Service Delivery resource. Service Delivery team members maintain a visible presence across the terminals, identify emerging hazards and congestion points, support passengers through busy or changing environments and escalate issues for resolution. As passenger volumes rise beyond the natural capacity of the terminals, the frequency and complexity of these interventions increase. Higher passenger density can make hazards more difficult to identify and resolve, while queues and crowding can restrict circulation and increase the risk of incidents, particularly for passengers who require additional assistance.
- (4) These pressures will intensify during the construction programme, as temporary routes, reduced circulation space and changing passenger flows create a more complex operating environment. Service Delivery team members will be critical to actively managing these interfaces, providing wayfinding and passenger assistance, monitoring conditions and intervening before localised issues escalate into wider safety or service failures. A resourcing allowance that increases by only 3% against passenger growth of 16% to 22%, with no additional resource for the further 2.2 million passengers in the IAA forecast, does not provide the operational capacity required to manage these risks safely. It would materially reduce the level of Service Delivery support available per passenger at the very time when congestion and construction increase the need for visible, responsive front-line intervention.

1.6.6 Taking the midpoint of these two estimates does not address their respective limitations. If the elasticity model does not capture task-specific and minimum-coverage requirements, and the task-based model does not fully capture peak intensity, concurrent demand and incremental activities, averaging the outputs does not cure either omission. It simply produces an arithmetic compromise between two estimates, without demonstrating that the resulting FTE allowance is capable of delivering the required activities. The midpoint has no independent operational basis and cannot be validated against the number, location, timing or duration of the tasks that the Facilities function will be required to perform.

1.6.7 The subsequent application of a cumulative 1% annual efficiency target further understates the requirement. CEPA has already assessed the baseline for efficiency, while the operating environment over 2027–2031 is expected to become more congested and resource-intensive. This will restrict access to operational areas, increase interruptions and reduce the productivity achievable by Facilities teams. Dublin Airport considers that the allowance should instead be based on its bottom-up task assessment.

Dublin Airport cost forecast

1.6.8 CEPA's analysis recognises the current Facilities cost base as broadly efficient. That expenditure supports a Service Delivery operation which maintains high passenger service standards, as evidenced through Dublin Airport's service quality measures, while managing passenger flows across an increasingly constrained terminal system. The starting point for the forecast is therefore an efficient and proven operation. The issue for the 2027–2031 period is whether the existing resource can continue to deliver the same safety,

compliance and service outcomes as passenger volumes, terminal congestion and construction activity increase materially.

- 1.6.9 Service Delivery Team Members provide the direct, on-the-ground operational support required to keep passenger journeys safe, orderly and predictable. Their duties include passenger wayfinding, active queue and flow management, assistance at check-in and immigration, support at e-gates and transfers, management of gate and pier congestion, US preclearance support, bussing interfaces and real-time response to disruption. The role is inherently flexible: team members are cross-trained and moved between check-in, piers, immigration, transfers, USCBP and bussing throughout the day based on passenger waves, flight schedules, queue conditions and live operational events.
- 1.6.10 Service Delivery Team Leads provide the continuous onsite leadership, oversight and decision-making needed to coordinate this distributed workforce. They manage zonal deployment, assign and reassign resources as conditions change, maintain operational oversight across passenger processes, support incident response and ensure that safety and service standards are applied consistently. Unlike team member roles, no coverage allowance is included for Team Leads or Service Delivery Managers, reflecting the requirement for continuous leadership and operational decision-making while the airport is open.
- 1.6.11 A significant increase in Service Delivery expenditure is required between 2027 and 2031 to maintain the current level of safety, compliance and passenger service as demand increases. Passenger numbers are forecast to rise materially within terminals that will remain physically constrained for much of the period. The operational requirement is driven not only by annual passenger numbers, but by the number of passengers onsite at the same time and the duration and overlap of peak passenger waves.
- 1.6.12 This extension of peak conditions is particularly important for Service Delivery. The existing model achieves efficiency by redeploying team members as demand falls in one area and rises in another. As peaks become higher, longer and increasingly concurrent, the opportunity for redeployment reduces. Resources required at immigration cannot simultaneously be moved to transfers, USCBP or a congested pier when those processes are also experiencing peak demand. Construction activity will add further complexity through temporary closures, revised passenger routings, reduced queueing space and new operational pinch points. The additional c.24.8 Terminal Delivery FTE identified in Dublin Airport's bottom-up forecast represents the minimum additional capacity required to preserve this flexible operating model, rather than a discretionary service enhancement.

Check-in and departures

- 1.6.13 Additional Service Delivery resource is required at check-in and departures to support passenger wayfinding, desk turnaround, queue management and real-time issue resolution during increasingly prolonged departure peaks. The current model operates check-in support as one combined team across T1 and T2. This becomes less sustainable as the scale and complexity of each terminal operation increases and both terminals experience extended periods of high demand.
- 1.6.14 To70's independent review flags the importance of deploying the proposed additional T2 check-in resources flexibly to keep T2 check-in within acceptable service levels. The flexible use of these desks requires Service Delivery Team Members involvement is switching from one airline to another.
- 1.6.15 The additional requirement is not included in the existing efficient baseline. T1 is expected to accommodate increased passenger and airline activity without additional check-in capacity, increasing desk turnover and the need for active passenger management. In T2, five additional desks are being developed in an area currently used for queue overflow, while increased airline activity is expected to create more frequent desk turnover and greater use of manual desks and bag drops. Upgrade works will also result in temporary desk closures. These changes create new and more intensive tasks that cannot be absorbed indefinitely through the existing combined-terminal resource model.

Piers

- 1.6.16 Additional pier coverage is required across Piers 1, 2 and 3 to manage higher gate utilisation, more frequent airline changeovers, boarding congestion, customer interventions and passenger safety in high-density gate

areas. Pier activity varies materially by airline, aircraft type and boarding process. When several flights board or arrive concurrently, Service Delivery staff are required to manage queues, prevent passenger flows from conflicting and respond quickly where gate seating and circulation capacity are exceeded. The operating metrics show that Pier 1 increases from 264 flights on a 75,000-passenger day to 294 flights on a 120,000-passenger day; Pier 2 increases from 27 to 32 flights; and Pier 3 increases from 64 to 101 flights, with average Pier 3 gate turnover rising from eight to 13 flights per gate.

- 1.6.17 The requirement arises from incremental activity not funded in the current baseline. Increased wide-body activity on Pier 3 can place approximately 1,000 passengers in the pier where three such aircraft overlap. Stand closures associated with delivery of the underpass are expected to push more narrow-body activity towards the south gates and north apron, increasing gate utilisation and reliance on Pier 2 bussing. These are additional passenger-flow and safety-management requirements arising from higher traffic and construction-related changes to the operating plan.

Immigration

- 1.6.18 Immigration requires additional Service Delivery coverage across constrained locations in Piers 1, 3 and 4. To70's independent capacity assessment confirms that the T1 main immigration facility serving Piers 1 and 2 remains congested and exceeds IATA queueing thresholds. At Pier 1, queueing is not permitted on the Skybridge. When queues build, escalators must be stopped and passengers must be actively held and released before and after the bridge. At Pier 4, immigration queues can extend into arrivals areas and beyond the transfer corridor, requiring active segregation of passenger streams and control of conflicting flows. Arrivals are also extending later into the night, reducing the gap between the final arriving passengers and the opening of the next day's departures operation.

- 1.6.19 The existing baseline supports the current immigration layout, passenger mix and flow profile. The forecast requirement reflects additional passengers, an expected increase in non-EU traffic with longer processing times, and a new Pier 3 immigration layout. These factors increase both the number of passengers requiring active management and the time they remain within constrained queueing areas. They also create new intervention points that are not funded through the current resource model.

Transfers

- 1.6.20 Additional Service Delivery support is required because forecast transfer demand increasingly exceeds the effective capacity of the existing transfer facility, particularly during concentrated passenger waves. The facility has limited capacity to absorb passengers presenting simultaneously at AutoPass and through the transfer corridor. Once demand exceeds the rate at which passengers can be processed, queues can build rapidly and extend back into the corridor. Active management is therefore required at both the entrance to the facility and within the transfer process to regulate passenger entry, manage queues, assist passengers at AutoPass gates and direct them to the correct route.

- 1.6.21 The existing Pier 4 Transfer Facility has a maximum processing capacity of 970 passengers per hour. While the CIP27 assessment forecasts scheduled peak demand of 455 passengers per hour in 2032, equivalent to approximately 47% of stated capacity, this does not reflect the volatility of actual transfer demand. Dublin Airport's busy-day operating analysis recorded a peak of approximately 1,163 transfer passengers in one hour on the sampled 120,000-passenger day, exceeding the facility's stated capacity by approximately 20%. The CIP27 submission confirms that delayed and overlapping transatlantic arrivals can create demand above the scheduled profile, causing the facility to struggle, increasing queue times and placing minimum connection times under pressure. The current facility therefore has apparent headroom under scheduled conditions but can already operate above capacity during disrupted or concentrated transfer waves, requiring active queue management and passenger-flow intervention by Service Delivery staff. The IAA passenger forecast has US passengers increasing by 24.5% between 2025 and 2031.

- 1.6.22 The additional requirement arises from transfer volumes and peak facility utilisation above the existing funded baseline. Growth in third-country transfers introduces an additional decision point within the existing facility, increasing the need to identify passengers, explain the applicable process and direct them to the correct route. Longer TSA processing times for US-bound passengers place further pressure on connection

times and increase the need for active intervention to prioritise and support passengers at risk of missing onward flights.

- 1.6.23 These demands cannot be absorbed through the existing resource base because they arise when the transfer facility is already under greatest pressure. The additional 2.2 million passengers included in the IAA forecast will further increase the number and intensity of peak transfer periods without increasing the physical capacity of the corridor or AutoPass processing points. The requirement is therefore not simply proportional to annual passenger growth. It reflects the additional Service Delivery presence required when passenger waves exceed the facility's effective processing capacity and active flow control becomes necessary to maintain safe circulation, avoid unmanaged queue build-up and protect the passenger transfer experience.

USCBP

- 1.6.24 USCBP is a multi-stage, resource-intensive passenger process requiring active queue management, passenger direction and operational intervention. The existing CBP facility has a stated capacity of 1,200 passengers per hour, compared with current peak demand of approximately 1,225 passengers per hour, meaning that it is already operating at or marginally above its designed hourly capacity during peak periods. Demand is forecast to increase further to approximately 1,300 passengers per hour from 2028 and 1,430 passengers per hour from 2032. Resource requirements vary according to passenger and transfer volumes, passenger profile, CBP officer availability, TSA screening performance and the resulting queue build. The current operating model requires a minimum of two Service Delivery Team Members when USCBP is open, increasing to as many as six during peak or disrupted periods. Pier 4 is extensively committed to USCBP activity through much of the core morning and afternoon period, with queues at times extending into adjacent circulation and gate areas.

- 1.6.25 As the existing facility is already operating at its peak-hour capacity, growth in US passenger numbers cannot be accommodated by processing materially more passengers within the current peak period. Until additional infrastructure is delivered, the principal means of accommodating growth is therefore to extend USCBP operating hours and spread demand across a longer part of the day. This creates an additional Service Delivery requirement even where the maximum hourly demand does not increase proportionately, as queue management, passenger direction and operational coverage must be maintained for longer. The forecast increase also reflects changes to TSA processes which are expected to affect processing times, queue lengths and the use of overflow space. These longer operating hours and extended coverage requirements are incremental to the current baseline and increase the periods during which active management is required at the entrance to preclearance and across its three principal processing points.

Bussing

- 1.6.26 Bussing will remain an important operational interface as more passenger activity is accommodated at remote stands. A significant proportion of the available future stand capacity is located in areas requiring access through south-gate or north-apron bussing operations. Service Delivery staff are required to manage passenger injection into the bussing process, provide wayfinding and maintain orderly flows between terminal and airside operations.
- 1.6.27 A new T1 injection point will require Service Delivery coverage to support the developing north-apron bussing product. However, Dublin Airport has not assumed that increasing bussing frequency automatically results in a continuing structural staffing uplift. Once the new facility opens in 2027, bussing-related Service Delivery resourcing is forecast to remain broadly static, with a slight reduction, because the facility design is expected to reduce the need for manual intervention. This demonstrates that the forecast recognises the benefit of infrastructure investment and adds resource only where an incremental operational task remains.

Efficiency of the proposed response

- 1.6.28 Dublin Airport considers that the proposed Service Delivery additions are the most efficient response to the identified need because the forecast is based on specific operational tasks rather than a general relationship between annual passengers and staffing. The bottom-up model considers busy-day passenger

demand, flows through the terminals using flight schedules, stand plans and terminal occupancy, identifies constraints and operational pinch points, and determines the resources required by area and time period.

1.6.29 The delivery model itself is designed to minimise staffing. Seasonal task-allocation reviews assess changes in flight schedules and passenger volumes and establish the hourly requirement for each operational area. Daily task sheets then match the available roster to actual demand. Team members rotate between tasks and are redeployed across check-in, piers, immigration, transfers, USCBP, arrivals, departures and bussing as passenger waves rise and fall. Close coordination with APOC supports further real-time reallocation during both on-plan and off-plan events. This means that the forecast does not provide a separate, permanently fixed team for every process. It provides a shared pool of cross-trained resource, with fixed posts used only where required for safety or operational reasons.

1.6.30 The assumptions also contain explicit efficiency offsets. The Service Delivery Team Member coverage allowance reduces from 10% in 2026 to 0% by 2031 as the team becomes more fully established, while winter team member demand is assumed to be 15% lower than summer demand. No additional structural growth is assumed for bussing after 2027 where the new facility is expected to reduce manual intervention. These assumptions reduce the FTE requirement and demonstrate that Dublin Airport has recognised achievable productivity and infrastructure benefits within the forecast.

1.6.31 The additional expenditure is therefore not a request to improve service above current standards. It funds defined incremental tasks arising from higher passenger volumes, longer and overlapping peaks, more intensive use of constrained terminal areas and construction-related changes to passenger flows. Without the additional capacity, Dublin Airport would have to withdraw staff from one live passenger process to manage another, reduce active coverage at safety-critical pinch points, or rely on reactive interventions after congestion has developed. The proposed c.24.8 Terminal Delivery FTE is the minimum efficient capacity required to sustain Dublin Airport's flexible deployment model and continue delivering the safety, compliance and service-quality outcomes achieved by the current efficient Facilities operation.

Dublin Airport request

1.6.32 CEPA's analysis has failed to provide an allowance that responds adequately to the principal drivers of Facilities and Cleaning resource requirements. This is most clearly evidenced by the fact that CEPA's task-based assessment produces no increase in Service Delivery FTE for the additional c.2 million passengers included in the IAA's 2031 forecast, notwithstanding that 2031 is expected to be the most congested year of the determination period and will coincide with significant construction activity across the airport. This result is not operationally credible. The additional passengers will be accommodated within an already constrained terminal footprint, increasing passenger density, extending the duration of peak periods and reducing the opportunity to redeploy resources between operational areas.

1.6.33 Dublin Airport continues to recommend that the Facilities and Cleaning allowances be determined through bottom-up assessments of the activities, tasks and resources required to maintain passenger safety, operational effectiveness, cleanliness and the applicable service-quality standards. Dublin Airport has provided further evidence on these future requirements, including the effects of passenger growth, longer dwell times, peak passenger concentrations, extended operating hours, construction activity and increasing congestion within a constrained terminal footprint. The resulting resource requirements should be assessed individually against CEPA's tests of need, additionality and efficiency, rather than constrained by high-level forecasting assumptions that do not respond appropriately to the operating environment.

1.6.34 If CEPA retains its existing forecast methodology, Dublin Airport requests that the following adjustments be made:

- (1) **Remove the ongoing efficiency target from Facilities and Cleaning.** CEPA has already assessed the current cost base for efficiency. Applying a further cumulative efficiency reduction assumes continuing productivity improvements during a period in which congestion and construction will restrict access, extend peak activity and reduce the ability to redeploy resources. The target also compounds the under-allowance arising from a methodology that does not adequately capture these pressures. Any additional efficiency reduction should be supported by specific, evidenced

and deliverable measures that reduce the underlying task requirement without adversely affecting passenger safety, service quality, cleanliness or operational resilience.

- (2) **Apply a service-quality allowance to Facilities** equivalent in principle to the adjustment recognised for Terminal 1 cleaning. CEPA has accepted that maintaining the required cleanliness standard in Terminal 1 can require expenditure above that produced by its high-level forecasting methodology. The same principle applies to Service Delivery. As passenger density, peak duration and construction-related complexity increase, additional operational effort will be required simply to maintain existing service-quality and passenger-safety outcomes. A targeted service-quality allowance should therefore be included where CEPA's model does not provide the resources necessary to sustain the applicable service standards. This would maintain, rather than enhance, current service outcomes.
- (3) **Add a congestion adjustment based on passengers per square metre.** Passengers per square metre provides an objective and transparent measure of the increasing intensity with which the terminal footprint is used. The adjustment should be anchored to the accepted baseline level of terminal utilisation and apply where forecast passengers per square metre exceed that baseline. It should be limited to the elements of Facilities and Cleaning expenditure demonstrably affected by congestion, with the relevant elasticity informed by Dublin Airport's operational and task-based evidence. This would recognise that accommodating additional passengers within substantially the same space increases the frequency and complexity of operational interventions while reducing productivity. It would also ensure that CEPA's allowance responds to the additional passengers in the IAA forecast, rather than producing the same resource requirement irrespective of whether Dublin Airport accommodates 42.3 million or 44.5 million passengers in 2031.

1.7 Airside Operations

1.7.1 Dublin Airport welcomes CEPA's recognition that the 2025 Airside Operations cost base is efficient. Airside Operations supported higher passenger volumes and aircraft movements in 2025 than in 2019 with fewer employees on a like-for-like basis, demonstrating the sustained productivity improvements already delivered by Dublin Airport. However, CEPA's forecast does not adequately recognise that this efficient baseline must now support further passenger and aircraft growth while managing an increasingly constrained and operationally complex airfield and the delivery of an unprecedented capital investment programme.

1.7.2 Airside Operations currently delivers safety oversight, operational coordination and regulatory compliance through a flexible deployment model, with resources dynamically allocated across operational activities to meet daily demand.

1.7.3 Dublin Airport has continued to review the FTE requirement for Airside Operations and has revised down the staffing requirement in 2031 from 114 FTEs to 110 FTEs.

1.7.4 The requirement for additional resource during the 2027-2031 regulatory period is driven by a significant increase in operational complexity, not passenger growth alone. Three factors drive this requirement.

- (1) Firstly, growth in passenger numbers and aircraft activity will increase demand across airfield inspections, stand management, incident response, operational coordination and safety assurance activities.
- (2) Secondly, Dublin Airport will be required to safely operate through an unprecedented programme of airside construction and infrastructure delivery. This will create substantial additional workload through contractor oversight, worksite inspections, vehicle escorts, temporary operating procedures, Management of Change requirements, operational readiness activity and safety assurance processes. Much of this workload is independent of passenger growth and represents new responsibilities that do not exist today at the scale anticipated during the regulatory period.
- (3) Finally, Airside Operations must maintain resilience within a safety-critical environment while continuing to meet its regulatory obligations. As operational demand and construction activity

increasingly occur simultaneously, the opportunity to absorb workload through the redeployment of existing resources reduces significantly.

- 1.7.5 The proposed FTE requirement reflects demonstrable growth in operational workload, infrastructure delivery and regulatory oversight responsibilities. It represents the minimum resource required to maintain safe, compliant and resilient airside operations while supporting passenger growth and the successful delivery of Dublin Airport's capital programme.
- 1.7.6 CEPA has applied a simple passenger elasticity of 0.4 to the 2025 staffing baseline and provides only a modest increase in Airside Operations resources over the determination period. As a result, CEPA forecasts Airside Operations staffing of 88 FTEs by 2031, compared with the 110 FTEs required under Dublin Airport's updated forecast. The resulting 22 FTE shortfall is not explained by a finding that Dublin Airport's existing operation is inefficient. Rather, it arises principally because CEPA treats future requirements as a largely linear function of passenger growth and does not make adequate provision for the additional workload generated by airfield congestion, CIP27 construction interfaces, temporary operating arrangements, escort and Follow Me activity, enhanced operational coordination and increased FOD exposure. CEPA's assessment acknowledges the existence of operational pressures but concludes that the evidence provided did not sufficiently quantify the timing, workload and resource consequences of individual requirements.
- 1.7.7 Dublin Airport does not accept that the efficient resource requirement for Airside Operations can be determined through the mechanical application of a 0.4 passenger elasticity. Passenger numbers are an incomplete proxy for the workload of an Airside Operations function. The more relevant drivers include aircraft movements, peak-period operational intensity, the number and complexity of simultaneous construction interfaces, stand and taxiway constraints, temporary closures and diversions, escort requirements, the geographic extent of the operational airfield and the level of active coordination required to maintain safe and reliable operations. These effects are additional to ordinary passenger growth and are not captured adequately by CEPA's baseline extrapolation.
- 1.7.8 The 2027–2031 period will not represent a continuation of stable, unconstrained operations. Dublin Airport will be required to accommodate material growth while continuing to operate within existing capacity constraints and, at the same time, facilitating the construction and commissioning of the CIP27 programme. The operational impact is therefore non-linear. As the airfield approaches its practical limits, additional growth results in more frequent operational conflicts, greater coordination requirements and reduced flexibility to absorb disruption. Construction activity further removes or restricts operational capacity and creates additional interfaces that must be actively planned, controlled and supervised. The resources required to manage these activities are not discretionary enhancements to the existing service. They are necessary to preserve safety, regulatory compliance, operational resilience and service quality while delivering the passenger growth and capital programme assumed in the Draft Determination.
- 1.7.9 This section provides further evidence and identifies the specific operational drivers underlying Dublin Airport's forecast, demonstrates why these requirements are incremental to the efficient 2025 baseline and explains how the proposed resource levels have been sized. Dublin Airport therefore requests that the IAA revise the Airside Operations allowance in the Final Determination to reflect both the appropriate relationship between operational activity and resource requirements and the separately identifiable step changes arising from CIP27 delivery, airfield congestion, escorts, operational coordination and FOD management.

Dublin Airport forecast

1.7.10 Dublin Airport forecasts that an additional 19 FTEs will be required within Airside Operations to support the operating and capital programme requirements anticipated during the 2027–2031 regulatory period.

Resource category	Increase	Additional tasks
AFFT shift team	10	Additional AOR North Sweeper x1 AOR South Sweeper x1
AOSO shift team	7	Additional AOR Works x1, AOR South (Pier 5) AOR North (Pier 1 East ext)
SDM-A shift team	0	No increase sought
AFFT task/fleet trainer	1	Additional Training requirements to support additional staff and fleet and requirement for equipment training
AOSO safety-critical trainer	1	Additional training requirements in line with increased AOSO SCTs
Total	19	

1.7.11 The 19 FTE increase is not based on passenger growth alone. Dublin Airport has identified three overlapping drivers: growth in passenger numbers and aircraft activity; the scale and concurrency of airside construction and infrastructure delivery; and the need to maintain resilience and regulatory compliance while business-as-usual operations and construction activity occur simultaneously. Modelling forecasts approximately 967 daily aircraft movements, around 10% above current operating scenarios. It also identifies major projects including Pier 5, the T2 CBP and Transfer Extension, South Apron Expansion and CMRO Relocation as generators of additional operational oversight and coordination.

1.7.12 The existing Airside Operations model is flexible, with resources deployed dynamically across inspections, safety oversight, contractor assurance, escorts, Follow Me operations, stand management, incident response, works monitoring and operational coordination. The scale and concurrency of the CIP27 programme with complex passenger growth will materially reduce this flexibility. Where several projects operate within the same possession window, personnel cannot be freely redeployed because separate worksites require simultaneous control, inspection, FOD management, contractor oversight, operational acceptance and safe hand-back.

1.7.13 The resulting requirement is therefore presented as a combination of:

- (1) a material increase in labour-intensive AFFT activity;
- (2) additional safety-critical AOSO coordination and intervention;
- (3) dedicated training capacity required to sustain the competence of the expanded operational workforce; and
- (4) sufficient resilience to ensure that project support does not displace existing safety, compliance, incident-response and airfield-management responsibilities.

1.7.14 The table below sets out the current and future requirements of these teams

Core Operational Activity	Current Day-to-Day Responsibilities	2027 to 2031 Additional Demand	Operational Impact
Airfield Inspections & Safety Assurance	Conduct airfield inspections, audits, stand inspections, FOD monitoring, lighting and marking checks, and ensure infrastructure remains operationally serviceable.	Expanded infrastructure footprint, temporary works areas, concurrent construction projects and additional possession inspections.	Increased inspection frequencies, compliance reviews, safety assurance activity and operational acceptance requirements.
Works Management & Safety Oversight	Ensure airside works are delivered safely, monitor work areas, review controls and support safe systems of work.	Multiple concurrent possessions, asset renewals and capital development projects operating simultaneously.	Increased closure management, worksite inspections, safety assurance activity and operational handbacks.
Contractor Oversight & Escorted Access	Monitor contractor activity, provide escorts, oversee compliance and manage airside access requirements.	Significant increase in contractor numbers, compounds, vehicles and work interfaces.	Increased escorting, compliance monitoring, permit verification and contractor supervision.
Aircraft Movement Support	Deliver Follow Me services, aircraft marshalling, engine-run oversight and support non-standard aircraft movements.	Temporary taxiway restrictions, stand closures and changing aircraft routings during construction phases.	Increased aircraft guidance, stand-management intervention and operational support requirements.
Operational Coordination & Stakeholder Liaison	Coordinate with APOC, ATC, Infrastructure, Asset Management and operational stakeholders.	Increased coordination across multiple construction programmes, commissioning activities and operational changes.	Greater requirement for real-time operational decision-making, communications and stakeholder management.
Emergency Response & Operational Recovery	Manage emergency response, contingencies, incidents and disruption recovery.	Recovery activities complicated by temporary infrastructure, worksites and operational restrictions.	Increased complexity of operational recovery and tactical response requirements.
Safety Compliance & Enforcement	Enforce airside regulations, investigate incidents, conduct safety reporting and maintain regulatory compliance.	Additional construction interfaces, contractor activity and operational risks.	Increased safety monitoring, investigations, assurance activity and regulatory oversight.
Vehicle & Equipment Compliance	Inspect vehicles, equipment and permits while monitoring airside driving standards.	Increased construction traffic, logistics movements and contractor vehicle activity.	Increased compliance inspections, vehicle monitoring and incident-prevention activity.
Winter Operations & Adverse Weather Response	Support winter operations and maintain safe operations during snow, ice, strong winds and low-visibility events.	Larger operational footprint and increased asset base requiring protection and monitoring.	Increased coordination, inspection and operational-response workload.
Management of Change & Operational Readiness	Support implementation of operational procedures, standards and operational changes.	Continuous programme of infrastructure commissioning, temporary operating arrangements and project-driven change.	Increased operational-readiness activity, risk assessments, training, stakeholder engagement and acceptance testing.
Reporting, Performance & Communication	Produce operational reports and maintain communication flows across stakeholders.	Increased volume of operational, safety and project-related reporting requirements.	Greater administrative workload and performance-monitoring requirements.
Aircraft Growth & Capacity Management	Manage existing aircraft movements, stands and operational activity. Increased aircraft activity plus increased construction.	Approximately 10% growth in aircraft movements alongside major infrastructure-delivery programmes.	Increased demand for stand management, operational monitoring, incident response and airfield coordination.
Human Factors, Operational	Airside Operations workload growth is accompanied by a corresponding increase in	In a safety-critical environment, increasing workload does not result in a linear increase in risk.	The cumulative effect of aircraft growth and concurrent infrastructure

Complexity and Safety Risk	operational complexity and human-factors risk. The projected increase in aircraft movements, concurrent construction projects, contractor activity, temporary operating procedures, stand restrictions and airside vehicle movements results in a significantly greater number of operational interfaces requiring active management.	As operational demands increase, personnel are required to process greater volumes of information, manage a larger number of simultaneous tasks and make more time-critical decisions. This increases exposure to recognised human-performance limitations, including task saturation, distraction, communication breakdown, fatigue, reduced situational awareness and decision-making error.	delivery increases the likelihood of operational errors unless sufficient resource is available to maintain appropriate levels of supervision, inspection, coordination, safety assurance and operational resilience.
Airfield Cleanliness, FOD Control & Worksite Assurance	Conduct FOD inspections and removal, airfield-cleanliness inspections, worksite-housekeeping inspections, contractor-compliance monitoring, debris-containment checks, contamination response and pavement-sweeping activities.	Increased construction activity, multiple concurrent worksites, contractor compounds, logistics routes and temporary operating areas associated with CIP27 and Asset Management programmes.	Increased FOD inspection frequency, debris-removal activity, housekeeping monitoring, contamination-response requirements, pavement sweeping, post-worksite FOD-clearance inspections and reopening-cleanliness inspections to support the safe operational handback of airfield assets.

Airfield Construction Projects

- 1.7.15 The scale of planned airfield construction, infrastructure investment and asset renewal activity will significantly increase the operational demand placed on Airside Operations over the coming years.
- 1.7.16 Major capital projects and ongoing asset management programmes will create a growing number of temporary operating environments requiring active management within a live airfield. This will generate increased requirements for operational coordination, inspections, safety assurance, stakeholder engagement, Management of Change activities, contractor oversight and operational readiness.
- 1.7.17 The cumulative impact of multiple concurrent projects, particularly during overnight possession periods, will increase both the volume and complexity of operational interventions required to maintain safety, compliance, resilience and operational performance while enabling the airport's future growth and infrastructure strategy.
- 1.7.18 Importantly, the operational demand is not limited to projects contained within the CIP27 programme. Airside Operations continues to support and manage significant infrastructure projects initiated under previous capital investment programmes, including the West Apron Vehicle Underpass and other multi-year works programmes. As a result, Airside Operations must manage the cumulative impact of legacy projects, ongoing asset renewal activities and new CIP27 investments concurrently, often within the same operational periods and possession windows.

CIP Project / Programme	Operational Impact	Airside Activities Generated
Pier 5	New aircraft stands, taxi lanes, manoeuvring-area interfaces and phased operational implementation.	Closures, reopening inspections, safety assessments, Management of Change (MOC), stakeholder coordination and operational-readiness activities.
T2 CBP & Transfer Extension	Major construction interface within a live airside operating environment.	Worksite inspections, contractor escorts, temporary procedures, operational readiness, safety assurance and handback inspections.
Pier 1 East (NAH/MOD 1)	Apron expansion, taxiway modifications, stand construction and demolition works.	Possession management, inspections, contractor assurance, operational acceptance, temporary operating arrangements and safety monitoring.
South Apron Expansion	Significant apron restrictions, stand reconfiguration and phased infrastructure delivery.	Follow Me activity, stand management, temporary routing, operational coordination and disruption-recovery management.
West Apron Vehicle Underpass	Long-duration apron restrictions, temporary routings, airside traffic management and vehicle diversions.	Inspections, traffic-management oversight, drive testing, contractor monitoring, stand-conflict management and operational coordination.
Cargo Relocation	Airside logistics reconfiguration and increased contractor activity.	Escorts, contractor assurance, compliance inspections, access control, vehicle monitoring and stakeholder coordination.
MRO Relocation Programme	New operational interfaces, construction compounds and airside access arrangements.	Inspections, escorts, permit compliance, worksite monitoring and operational safety assurance.
Airfield Pavement Rehabilitation	Continuous runway, taxiway and apron rehabilitation works throughout 2027–2031.	Possessions, closures, reopening inspections, FOD inspections, contractor oversight and temporary operating procedures.
Taxiway S Reconstruction	Major taxiway reconstruction requiring phased closures and temporary routings.	Airfield inspections, operational handbacks, MOC activities and operational-readiness reviews.
Airfield Road Programme	Airside road rehabilitation and infrastructure replacement.	Contractor oversight, vehicle-compliance monitoring, inspections and works coordination.
Airfield Lighting & AGL Upgrades	Lighting replacement, signage works, stop-bar and electrical upgrades.	Night inspections, operational-acceptance testing, safety assurance and commissioning support.

AFFT shift team: increase of 10 FTEs

1.7.19 The largest component is an increase of 10 AFFT shift-team FTEs. This increase reflects the physical, recurring and time-critical nature of the additional facilities, FOD and worksite-assurance activity anticipated during the capital programme.

1.7.20 The 10 FTEs provide two additional 24 hour resources for each of the AOR North and AOR South (i.e. 48 hours per day) 365 days per year, with a 25% shift uplift (20% Non-availability & 5% Coverage).

Expanded inspections and asset footprint

1.7.21 The infrastructure programme will expand the number of stands, taxi lanes, roads, worksites, construction compounds and temporary operating areas requiring inspection. The document identifies additional demand for airfield, stand, lighting and marking inspections, together with increased possession inspections, compliance reviews, safety-assurance activity and operational acceptance checks. The increased workload is driven both by permanent growth in the airfield asset base and by temporary infrastructure and operating arrangements during construction.

FOD control and airfield cleanliness

1.7.22 CIP27 and related asset-management works will create multiple construction sites, contractor routes, compounds, logistics movements and temporary operating areas. These activities increase the exposure to

Foreign Object Debris arising from excavation, construction materials, vehicle movements and worksite activity. Dublin Airport identifies a corresponding need for:

- more frequent FOD inspections around construction and operational areas;
- additional sweeping and debris-removal activity;
- worksite housekeeping and debris-containment inspections;
- monitoring of contractor routes and adjacent aircraft operating areas;
- cleaning following works and construction-material movements;
- contamination response;
- post-worksite FOD clearance and reopening inspections; and
- increased assurance activity to maintain airfield cleanliness standards.

1.7.23 This work cannot be deferred or addressed solely through procedural changes. Inspection, sweeping, debris removal and worksite clearance require personnel to be physically deployed on the airfield before affected assets can be safely returned to aircraft operations.

Contractor and vehicle activity

1.7.24 The construction programme is expected to increase contractor numbers, compounds, work interfaces, logistics movements and airside vehicles. The resulting AFFT workload includes access and permit verification, contractor-route monitoring, vehicle and equipment compliance inspection, driving-standards monitoring, worksite housekeeping assurance and incident-prevention activity. The demand arises from the construction activity itself and is therefore additional to workload associated with passenger or aircraft growth.

Concurrent possessions and safe hand-back

1.7.25 Major capital and asset-renewal projects are expected to share overnight possession windows to preserve daytime operational capacity and support programme efficiency. This generates simultaneous demand for closure management, worksite inspections, FOD clearance, safety assurance and operational hand-back. Each affected area must be inspected and accepted before it re-enters service. Delayed hand-back of one area can constrain stand availability, taxiway access, aircraft movements and first-wave departures. The resource requirement is consequently determined not only by the total volume of work, but also by the number of sites that must be supervised, inspected and returned to service concurrently.

AOSO shift team: increase of 7 FTEs

1.7.26 Dublin Airport forecasts 7 additional AOSO shift-team FTEs. The additional resources are intended to manage the growth in aircraft activity and the increased number of operational interfaces created by live-airfield construction.

1.7.27 The 7 FTEs provide three additional 12 hour resources (0700 to 1800) for each of the AOR Work Central, AOR South (Pier 5 etc) and AOR North (Pier 1 East etc) (i.e. 36 hours per day) 365 days per year, with a 25% shift uplift (20% Non-availability & 5% Coverage).

Aircraft movement growth and capacity management

1.7.28 Approximately 10% growth in aircraft movements is expected to increase demand for stand management, operational monitoring, airfield coordination, incident response and support for non-standard aircraft movements. Temporary taxiway restrictions, stand closures and changing routings during construction will add further requirements for aircraft guidance, marshalling, Follow Me activity and active stand-management intervention.

Temporary operating arrangements

- 1.7.29 Construction within a live operational airfield requires temporary procedures, revised routes, closures, diversions and changing stand configurations. AOSOs will be required to implement and monitor these arrangements, undertake pre-implementation and post-implementation checks, conduct drive tests, provide aircraft guidance where normal routes are unavailable and respond to operational issues associated with the changed environment.

Works coordination and safety assurance

- 1.7.30 Increased AOSO demand from worksite inspections, possession management, contractor oversight, safety assessments, Management of Change processes, stakeholder coordination, operational-readiness reviews, commissioning and acceptance testing. The AOSO role must connect infrastructure delivery with live operations, including coordination with APOC, ATC, Infrastructure, Asset Management and other operational stakeholders. Multiple concurrent projects require more real-time decision-making and communication than a stable operating environment.

Emergency response and operational recovery

- 1.7.31 Temporary infrastructure, construction sites and operating restrictions make incident response and recovery more complex. AOSOs must retain sufficient capacity to manage contingencies, emergencies and disruption while also supporting construction interfaces. The forecast therefore includes a resilience requirement so that planned project duties do not weaken the response available for unplanned operational events.

Human factors and safety risk

- 1.7.32 The document explains that increasing workload within a safety-critical environment can expose personnel to task saturation, distraction, communication breakdown, fatigue, reduced situational awareness and decision-making error. Aircraft growth, temporary procedures, stand restrictions, contractor activity and vehicle movements increase the number of simultaneous interfaces that must be actively managed. The additional AOSO resources are intended to preserve effective supervision, coordination and safety assurance as those interfaces increase.

Dedicated training resources: increase of two FTEs

- 1.7.33 The forecast includes one AFFT task/fleet trainer and one AOSO safety-critical trainer. These are new dedicated posts, increasing the training-unit complement from zero to two FTEs. The AFFT trainer would maintain training compliance for the additional workforce and fleet, while the AOSO trainer would address increased demand for safety-critical training and proficiency checks.
- 1.7.34 A newly recruited AOSO requires approximately 15 to 20 weeks to achieve full operational competence. Existing personnel also require continuing training, recertification, permit renewal, operational familiarisation and competency assessment. The competency framework includes airside and manoeuvring-area driving permits, airfield inspections, safety-management processes, occurrence investigation, FOD management, works safety, contractor oversight, escorting, Follow Me operations, emergency response, Management of Change and familiarisation with new infrastructure and technology.
- 1.7.35 At present, training is delivered by experienced operational AFFT and AOSO personnel alongside live operations. This abstracts qualified staff from frontline duties for recruitment training, mentoring, recurrent training, competency assessment, winter-operations preparation, operational-readiness exercises, infrastructure commissioning and procedure or technology implementation. As the workforce and asset base grow, retaining this approach without dedicated training capacity would create a hidden reduction in available frontline coverage. The two training posts are therefore an enabling component of the 17 additional frontline FTEs, rather than separate administrative overhead.

Case Study: West Apron Vehicle Underpass Project

Evidence of the additional Airside Operations demand generated by a single capital project

The West Apron Vehicle Underpass Project illustrates the material and sustained operational workload created when major infrastructure is delivered within a live airfield environment. The overall project is expected to take more than two years to complete. Its first phase, commencing on 12 October 2026, involves the closure of Taxiway W2 for approximately ten months.

The works will introduce continuous construction activity, temporary traffic-management arrangements, night-time closures, aircraft-stand restrictions and increased construction-vehicle movements across the airfield. In particular, the project will require Airside Operations Safety Officer, or AOSO, “Follow Me” support for aircraft movements to and from the West Apron and for Code D and E aircraft movements during night works on Taxiway W1.

These requirements provide a practical example of why the Airside Operations resource forecast cannot be derived solely by applying a passenger elasticity to the existing staffing base. The additional workload arises from the construction programme and the temporary operating environment it creates. It is therefore incremental to the resources required to accommodate normal growth in passengers and aircraft movements.

Additional AOSO requirement

The project will require sustained AOSO involvement throughout its delivery to manage operational restrictions and maintain the safe movement of aircraft and vehicles within a changing airfield environment.

In addition to their existing safety-critical responsibilities, AOSOs will be required to:

- manage temporary airfield restrictions associated with the construction works;
- support aircraft movements through restricted taxiway systems;
- provide “Follow Me” support where normal aircraft taxi routes are unavailable;
- manage changing stand availability and associated operating restrictions;
- undertake operational checks before and after changes to worksites or aircraft routes are implemented;
- monitor compliance with temporary traffic-management arrangements;
- conduct additional airfield patrols and worksite inspections;
- investigate and respond to operational issues arising from construction activity;
- participate in project-coordination meetings and engage with operational stakeholders;
- complete drive tests associated with route changes and new operating arrangements; and
- manage the impact of disrupted ground-support equipment routes and apron-management arrangements.

The requirement to manage restricted taxiway systems and provide continuing “Follow Me” support will extend across both daytime and night-time operations. These activities cannot be deferred and must be delivered concurrently with the AOSO team’s existing responsibilities for airfield inspection, incident response, safety oversight and operational coordination.

The project therefore creates a recurring resource demand rather than an isolated or short-term intervention. Where an AOSO is assigned to “Follow Me” activity, a worksite inspection or the management of a temporary restriction, that resource is not simultaneously available to perform normal operational duties elsewhere on the airfield. The existing flexible deployment model cannot absorb this workload indefinitely without reducing the resources available for core safety and operational activities.

Additional AFFT requirement

The project will also increase demand on Airside Facilities and FOD Team, or AFFT, resources. Excavation, construction materials, contractor activity and increased vehicle movements will create an elevated Foreign Object Debris, or FOD, risk in proximity to live aircraft operating areas.

Maintaining safe operating areas throughout the project will require inspection, cleaning and debris-management activities beyond current business-as-usual requirements. Unlike some administrative or coordination activities, FOD

control cannot be postponed, addressed through a procedural change or absorbed when capacity becomes available. It requires physical inspection, cleaning and sweeping activity on the airfield at the time the risk arises.

Additional AFFT responsibilities will include:

- increasing the frequency of FOD inspections around construction areas;
- undertaking additional sweeping and debris-removal activities, including at security access points on both the landside and airside;
- monitoring contractor routes and adjacent aircraft operating areas;
- providing responsive cleaning following construction works and movements of materials;
- undertaking additional inspections and cleaning following adverse weather;
- increasing assurance activity to maintain required airfield-cleanliness standards; and
- absorbing the additional travel time arising from the relocation of the FOD service to Gatepost 22.

The relocation of the FOD service is itself operationally relevant. Increased journey time reduces the productive time available from each existing resource and affects the speed with which the team can respond across the airfield. The resourcing assessment must therefore consider not only the number of additional inspections and cleaning interventions, but also the time required to reach and service a larger and more constrained operational area.

Given the proximity of the works to live aircraft movements, effective FOD management will be essential to maintaining safe operations and protecting aircraft from damage. The associated resource cannot reasonably be assumed to be absorbed within the existing AFFT establishment without affecting either the frequency of inspections or the delivery of existing cleaning and FOD-control responsibilities.

Evidence of need and additionality

The West Apron Vehicle Underpass Project demonstrates both the **need** for the additional Airside Operations resource and its **additionality** to the existing efficient baseline.

The need arises from specific safety-critical tasks generated by the project, including aircraft guidance, management of temporary airfield restrictions, operational checks, worksite inspections, contractor-route monitoring, FOD inspection, sweeping and debris removal. These activities are required to enable the construction works to proceed while maintaining safe and continuous airport operations.

The requirement is additional because these tasks do not form part of the normal operating workload represented by the 2025 baseline. Nor are they adequately reflected in an allowance derived from passenger growth. They arise because existing stands, taxiways, vehicle routes and operating arrangements will be restricted or changed during the construction period.

The relevant distinction is also between the cost of constructing the asset and the cost of operating the live airport safely while that construction takes place. Project-management and construction costs may form part of the capital programme, but the continued deployment of AOSO and AFFT personnel to manage aircraft movements, undertake inspections, maintain FOD control and protect daily operations is an operating-resource requirement.

Wider relevance to the CIP programme

The Underpass Project is significant, but it represents only one project within the wider 2027–2031 investment programme. Other projects will generate similar requirements through:

- temporary taxiway, stand and apron closures;
- altered aircraft and vehicle routes;
- increased contractor presence and vehicle movements;
- additional worksite and safety-assurance inspections;
- greater FOD-management and airfield-cleaning requirements;
- changes to operational procedures;
- increased stakeholder coordination; and
- extended and overlapping project-delivery schedules.

The efficient delivery of the capital programme is also likely to require multiple projects to use the same limited possession windows, particularly overnight. This concurrency is important to the resource assessment. An existing officer cannot simultaneously supervise separate worksites, complete multiple reopening inspections or support aircraft movements in geographically distinct parts of the airfield.

The workload generated by the Underpass Project should not therefore be treated as an exceptional or isolated requirement. It is an evidenced example of the additional operational demand that will recur, and in some periods arise concurrently, as Dublin Airport delivers its capital programme.

Overall justification

1.7.36 Dublin Airport's forecast is therefore for 19 additional frontline FTEs, comprising 10 AFFT and 7 AOSO resources, supported by 2 dedicated training FTEs. The increase is intended to enable Dublin Airport to manage approximately 10% growth in aircraft movements, operate safely through multiple concurrent capital and asset-management projects, control increased FOD and contractor risks, manage temporary operating arrangements and preserve emergency-response and business-as-usual capacity.

1.7.37 The central point for the regulatory assessment is that a substantial part of this workload is independent of passenger growth. A passenger-based elasticity may capture some increase in routine operating activity, but it does not capture the number of simultaneous worksites, possession windows, temporary closures, escorts, contractor interfaces, inspections, hand-backs, FOD interventions or training abstractions generated by the capital programme. Dublin Airport's 19 FTE forecast is presented as the minimum additional capacity required to meet these identified obligations without diverting the existing establishment from its core safety, compliance and operational responsibilities.

1.8 Lounges

1.8.1 There is a material difference between CEPA's assessment and Dublin Airport's forecast of Executive Lounge Direct Costs, which originates in the treatment of the 2025 baseline and carries through the full 2027–2031 determination period.

1.8.2 The forecast differential is driven by two fundamental assumptions. First, CEPA calibrates its allowance using an EBITDA margin derived from a historic operating model. The resulting margin is significantly higher than that achieved by the peer lounge operators referenced by CEPA. Second, CEPA assumes lounge costs grow at only 0.5x passenger growth, while the IAA's revenue forecast assumes lounge revenues grow at approximately 1.4x passenger growth. The effect is that the allowance assumes substantial operating leverage, resulting in forecast margins that exceed both historic performance and relevant market benchmarks.

1.8.3 Both assumptions materially understate the efficient cost of operating Dublin Airport's lounge business. First, CEPA's forecast is anchored to an EBITDA margin derived from a historic operating model that predates the significant expansion in lounge capacity, target passenger penetration and revenue expectations assumed for the 2027–2031 period. By applying this historic margin to a substantially improved offer (required to deliver the revenue targets), CEPA effectively assumes that a greater proportion of future revenue growth converts to profit than has been demonstrated either historically or by the peer operators cited in its own analysis. Second, CEPA assumes that operating costs grow at only 0.5 times passenger growth, despite the IAA forecasting lounge revenues to grow at approximately 1.4 times passenger growth and despite the addition of new lounge capacity during the period. This assumption implies significant operating leverage and sustained margin expansion without evidencing how the required service standards, staffing, catering and customer experience can be delivered at that cost level. The resulting forecast is inconsistent with the actual cost structure of a growing premium lounge operation.

Updated lounge tender

- 1.8.4 Since the Regulatory Proposition, Dublin Airport has concluded a competitive tender process for the operation of its airport lounges. While final contractual negotiations remain ongoing, the outcome provides a robust market validation of the expected cost base for the business over the next regulatory period.
- 1.8.5 The current tender price equates to a cost per user of [REDACTED], compared to the pre-tender estimate of [REDACTED] delivering a saving of [REDACTED] per user. Despite this significant efficiency gain, the resulting cost base remains materially above the Opex allowance included within the Draft Determination.
- 1.8.6 The contract structure comprises a fixed-price arrangement in Year 1, transitioning to a cost-plus model from Year 2 onwards with a management fee of [REDACTED]. Annual budgets will be agreed with the lounge operator and costs are expected to increase broadly in line with revenue growth and inflation.
- 1.8.7 The tender demonstrates that airport lounge operations contain both fixed and variable cost elements. Variable costs increase broadly in line with revenue volumes, while fixed costs, particularly labour, do not scale on a linear basis and are constrained by service standards and operational requirements.

Updated lounge opex forecast

- 1.8.8 For the purposes of this analysis, daa has accepted the IAA's lounge revenue forecast and used it as the basis for calculating the passenger volumes required to achieve the revenue targets set out in the Draft Determination.
- 1.8.9 The Year 1 tender price has been used as the starting point for the Opex forecast, with future years adjusted as follows:
- (1) Variable passenger costs increased linearly at the tendered rate of [REDACTED] passenger.
 - (2) Operator profit increased linearly at the tendered rate of [REDACTED] passenger.
 - (3) Fixed labour costs increased using an efficiency assumption of 4.5 users per labour hour. Dublin Airport's forecast also assumes the incremental labour hours are costed at the lowest tendered cost per labour hour of [REDACTED] per hour (2026 prices) which is reflective of the seniority level of staff we expect will be required to flex up for additional users.
- 1.8.10 This approach already incorporates further efficiencies beyond those reflected in the winning tender and therefore represents a prudent estimate of future operating costs.

- 1.8.11 Even after incorporating the efficiencies secured through a competitive market tender and applying further productivity improvements within its forecast, Dublin Airport's projected lounge operating costs remain materially above the allowance included in the Draft Determination. The updated forecast reflects both the

market-tested cost of delivering lounge services and ongoing cost management programme for the 2027–2031 period.

1.8.12 Under Dublin Airport’s updated forecast, lounge operating margins increase from approximately [REDACTED] in 2027 to [REDACTED] (Airport Revenue) by 2031. These margins are already materially above those achieved by the peer operators referenced by the IAA, including CAVU (31%), TAV (19%) and No1 Airport Lounges (28%). As such, the forecast incorporates a substantial efficiency challenge and assumes profitability significantly in excess of the market benchmarks relied upon by the IAA.

1.8.13 The competitive tender process provides direct market evidence of the efficient cost required to operate the lounge business. This evidence is more robust and more current than assumptions derived from historic cost-revenue relationships or generic elasticity factors. The tender outcome therefore provides strong evidence that the allowance in the Draft Determination materially understates the efficient operating expenditure required to support the passenger volumes, expanded lounge capacity and service standards anticipated over the 2027–2031 period.

1.9 Maintenance

1.9.1 CEPA’s maintenance allowance is materially below Dublin Airport’s forecast, notwithstanding its conclusion that Dublin Airport’s 2025 maintenance expenditure represents an efficient baseline. The difference is negligible in 2026 but increases progressively over the determination period, reaching approximately [REDACTED] annum by 2031. At that point, CEPA’s allowance is approximately [REDACTED] below Dublin Airport’s forecast for maintenance payroll and approximately [REDACTED] below the forecast for maintenance non-pay costs.

1.9.2 This difference is primarily attributable to three aspects of CEPA’s forecast:

1.9.3 Asset ageing: CEPA has allowed only 25% of Dublin Airport’s proposed asset-ageing uplift. This removes approximately €2.4 million from the 2031 maintenance allowance, despite the number of assets more than 15 years old being forecast to increase from 3,268 in 2025 to 6,977 by 2031. The ageing adjustment applies only to the relevant non-passenger-driven maintenance resources and repair cost lines, rather than across the entire maintenance cost base. As assets age, inspection, preventative maintenance and reactive intervention requirements increase, while the risk of failure and loss of availability becomes greater. Recruitment and maintenance costs will therefore be phased against evidenced workload, asset age and condition, maintenance compliance, asset commissioning and regulatory

requirements. The resources are additional to existing staff and contract. Without these resources, preventative-maintenance deferral and reactive-work backlogs would increase, leaving Dublin Airport more dependent on emergency interventions. This would raise the risk of disruption to ageing lifts, escalators, travelators, boarding bridges and baggage systems, adversely affecting accessibility, passenger journeys, boarding and baggage delivery.

- (1) Commercial projects: CEPA has applied a separate 50% reduction to the maintenance costs associated with Dublin Airport's commercial investment programme. These projects expand or enhance commercial assets, including car parks, lounges, retail areas and other passenger-facing facilities, and the related expenditure is required to maintain those assets once operational. The reduction is particularly inconsistent because the Draft Determination incorporates the commercial revenues expected from these investments while allowing only half of the associated maintenance requirement.

1.9.4 West Apron Vehicle Underpass: CEPA has made no allowance for the annual maintenance requirement associated with the West Apron Vehicle Underpass, which is expected to become operational in the second half of 2030. CEPA accepts that the Underpass is, in principle, an additional asset but excludes the expenditure from its forecast. This results in no funding for its maintenance in 2031, despite the asset being operational and requiring ongoing inspection, servicing, repair and specialist support.

1.9.5 Dublin Airport's maintenance forecast reflects the identifiable cost of maintaining an ageing asset base, supporting the commercial infrastructure underpinning the IAA's revenue forecast, and maintaining new operational infrastructure as it enters service. Dublin Airport therefore considers that the maintenance allowance should be revised to recognise these efficient and unavoidable costs.

Asset aging

1.9.6 Dublin Airport's ageing adjustment reflects the increasing maintenance burden associated with a materially larger and older asset base. Between 2023 and 2025, the total number of maintainable assets increased by 11%, from 11,368 to 12,619. Over the same period, the number of assets more than 15 years old increased from 1,595 to 3,268, an increase of 105%. As a result, the proportion of the asset base over 15 years old increased from 14% to 26%, while the average asset age increased from 9.9 years to 10.6 years.

	2023	2025	Change
Total assets	11,368	12,619	11%
Assets >15 years old	1,595	3,268	105%
% of assets >15 years old	14%	26%	+12pp
Average asset age	9.9 years	10.6 years	+0.7 years

1.9.7 The significance of this change is evident in Dublin Airport's maintenance records. Between 2023 and 2025, annual maintenance work orders increased from approximately 67,000 to 80,000, an increase of 19%, while maintenance labour hours increased from approximately 178,000 to 224,000, an increase of 26%. Importantly, the increase in maintenance activity materially exceeded the growth in the underlying asset base.

1.9.8 To assess the impact of ageing separately from general asset growth, Dublin Airport compared the increase in maintenance activity against the increase in total assets. Had work orders increased solely in line with the 11% growth in the asset base, approximately 7,400 additional work orders would have been expected. Actual work orders increased by approximately 13,000, implying that approximately 5,600 additional work orders cannot be explained by asset growth alone. Similarly, had labour hours increased solely in line with asset growth, labour hours would have increased by approximately 20,000 hours compared with the actual increase of approximately 46,000 hours, leaving approximately 26,000 additional labour hours unexplained by asset growth alone.

1.9.9 This analysis suggests that a significant proportion of the increase in maintenance activity is associated with the ageing of the asset base rather than merely its expansion.

	Work Orders	Labour Hours
Increase in maintenance activity	19%	26%
Explained by 11% asset growth (11%)	11%	11%
Residual increase not explained by asset growth	8%	15%
Increase in assets >15 years old	105%	105%
Implied elasticity	0.08	0.14

1.9.10 The historical evidence therefore indicates an ageing elasticity in the range of approximately 0.08 to 0.14. Dublin Airport's forecast adopts an elasticity of 0.10, which sits within this observed range and is slightly below the average of the empirical outcomes. The assumption is therefore evidence-based and conservative.

1.9.11 The forecast ageing adjustment is also modest when compared to the projected growth in older assets. The number of assets over 15 years old is forecast to increase from 3,268 in 2025 to 6,977 in 2031, an increase of 113%. However, the corresponding maintenance adjustment reaches only 8.2% by 2031. The forecast therefore does not assume that maintenance expenditure increases in direct proportion to the number of ageing assets. Rather, it recognises that only a proportion of age-related deterioration ultimately translates into additional maintenance expenditure, reflecting the mitigating effects of preventative maintenance, refurbishment programmes, asset replacements and ongoing efficiency measures.

	2025	2031	Change
Assets >15 years old	3,268	6,977	113%
% of asset base >15 years old	26%	55%	+29pp
Maintenance ageing adjustment	-	8.2%	8.2%

1.9.12 Accordingly, Dublin Airport considers that its ageing adjustment represents a prudent and evidence-based estimate of future maintenance requirements. The historical maintenance data demonstrates a clear relationship between the growth in older assets and the increase in maintenance workload, while the adopted elasticity of 0.10 remains firmly within the range supported by observed work order and labour-hour trends. In contrast, CEPA's decision to allow only 25% of the proposed ageing adjustment is difficult to reconcile with the more than doubling of the population of assets over 15 years old and the corresponding increase in maintenance activity already evident within Dublin Airport's maintenance records.

Commercial CIP projects

1.9.13 CEPA has disallowed 50% of the operating expenditure associated with Commercial Investment Programme (CIP) projects on the basis that a portion of the costs may already be captured through elasticity-based forecasts. Dublin Airport does not consider this adjustment to be justified.

1.9.14 The costs included within this category are not generic passenger-related operating costs. They represent the specific and identifiable operating expenditure required to operate, support and maintain the commercial projects proposed within the CIP programme. The underlying business cases for these projects, including the associated operating cost requirements, have been provided to the IAA and were available to CEPA as part of its assessment. These business cases demonstrate both the need for the expenditure and the direct relationship between the operating costs and the revenues generated by the projects.

1.9.15 The adjustment also creates a material inconsistency within the Draft Determination. The IAA has recognised the commercial revenues associated with these projects within its commercial revenue forecast. However, it has simultaneously removed 50% of the operating costs required to generate those revenues. If the IAA's position is that a proportion of the projects, or their effects, are already captured elsewhere within the framework, then the same logic would need to be applied consistently to both revenues and costs. The Draft Determination does not do so. As a result, it incorporates the upside from the projects within the

commercial revenue forecast while excluding a significant proportion of the expenditure required to deliver that outcome.

1.9.16 Dublin Airport therefore requests that the Final Determination reinstate the full operating expenditure associated with approved commercial projects. Failing to do so would result in an internally inconsistent determination in which the benefits of the projects are recognised through higher commercial revenues, while a substantial share of the efficient costs required to achieve those revenues is excluded.

Underpass

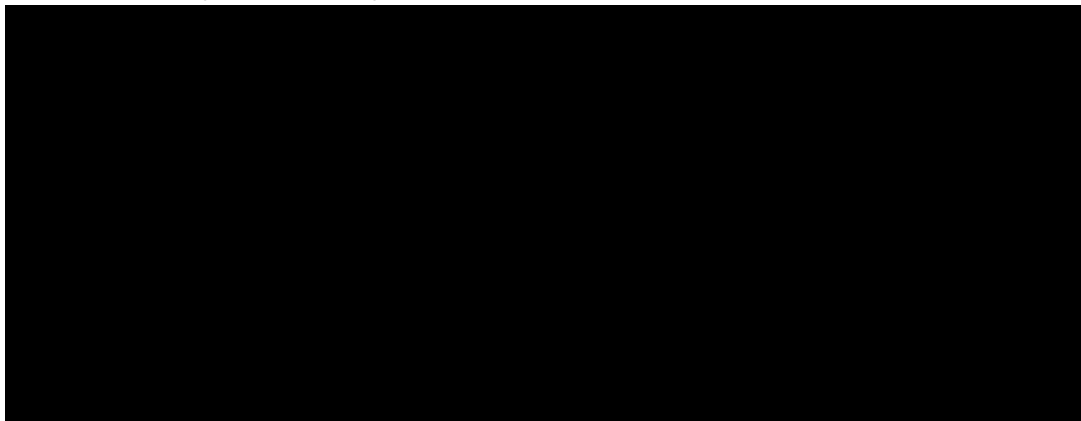
1.9.17 CEPA has not allowed the operating expenditure forecast for the new Underpass. Dublin Airport does not consider this adjustment to be justified. The Underpass is a new, safety-critical and systems-intensive asset that will create an operating requirement which does not exist within the current cost base and cannot reasonably be absorbed without incremental expenditure.

1.9.18 The Underpass is expected to open in Q4 2030. The operating expenditure sought for 2031 therefore represents the first full year of operation, rather than the long-term stabilised cost of operating and maintaining the asset. Dublin Airport has continued to review the expected operating model and has increased its forecast for 2031 from [REDACTED] to €[REDACTED] reflecting the latest assessment of the minimum costs that will arise immediately following opening.

1.9.19 The [REDACTED] forecast is deliberately limited. It assumes that the specialist equipment and IT systems will remain under supplier or original equipment manufacturer warranties during the initial operating period and that ongoing specialist maintenance, routine maintenance and lifecycle renewal expenditure will therefore be immaterial in 2031. On that basis, the first-year forecast includes only:

- [REDACTED] for tunnel operations and staffing, reflecting the incremental operational capability required to monitor and operate the Underpass; and
- [REDACTED] emergency preparedness and compliance, including the procedures, training, exercises and assurance activities required from the commencement of operations.

1.9.20 The remaining cost categories do not arise materially in the first full year because the forecast assumes that the relevant systems are under warranty or have not yet entered their normal maintenance and renewal cycles. The €0.8 million request is therefore not a stabilised estimate brought forward prematurely. It is a targeted and prudent allowance for the specific costs that Dublin Airport expects to incur from the point at which the Underpass becomes operational.



1.9.21 The cost profile reflects the fact that operating expenditure will develop as the asset moves from its initial warranty-supported phase to normal operation. In the first full year, the principal requirements are the resources needed to operate the Underpass and the emergency preparedness and compliance arrangements that must be in place from opening. Over time, the cost base will expand to include specialist maintenance contracts and OEM support, routine inspections, critical spares, systems licences, reactive repairs and provision for lifecycle renewal. These are intrinsic costs of operating a tunnel safely and reliably, rather than discretionary enhancements.

- 1.9.22 Dublin Airport's benchmarking demonstrates that tunnels create a material and specialist operating requirement. The Underpass will comprise approximately 1.2 kilometres of twin-bore tunnel, equivalent to 2.4 bore-kilometres, incorporating ventilation, smoke control, fire and life-safety systems, power resilience, drainage, CCTV, intelligent transport systems, communications and supervisory control systems. These systems operate together as an integrated safety chain and require continuous oversight, specialist competence, defined emergency procedures and planned maintenance. Published Irish tunnel expenditure provides an independent sense-check. The benchmarking identifies 2024 costs of €27.811 million for the Dublin Tunnel, equivalent to approximately €3.09 million per bore-kilometre, and €6.340 million for the Jack Lynch Tunnel, equivalent to approximately €5.20 million per bore-kilometre.
- 1.9.23 CEPA's exclusion of the Underpass operating expenditure would leave Dublin Airport without an allowance for the minimum incremental costs that arise when this new safety-critical asset commences operation. The Underpass cannot operate without dedicated operational capacity and emergency preparedness, and these obligations arise from opening irrespective of whether the specialist systems remain under warranty.
- 1.9.24 Dublin Airport therefore requests that the IAA include the full [REDACTED] operating expenditure allowance for 2031 in the Final Determination. This represents a prudent first-full-year provision for tunnel operations, staffing, emergency preparedness and compliance. It does not include the wider maintenance and lifecycle costs that will arise as the asset moves beyond its initial warranty-supported phase.

Dublin Airport Request

- 1.9.25 Dublin Airport requests that the IAA revise the maintenance allowance in the Final Determination to reflect the efficient and evidenced cost of maintaining the airport's existing and future asset base. In particular, Dublin Airport requests that the IAA:
- 1.9.26 allow Dublin Airport's full asset-ageing adjustment, rather than limiting the allowance to 25% of the forecast requirement. The adjustment is supported by observed increases in work orders and maintenance labour hours, the rapid growth in the number of assets over 15 years old, and an ageing elasticity of 0.10 that is within the range indicated by Dublin Airport's historical evidence;
- 1.9.27 reinstate the full maintenance Opex associated with approved commercial investment projects. These are identifiable operating costs arising from the assets delivered by the projects and are required to support the commercial revenues included in the Draft Determination. Any concern regarding overlap should be addressed through a project-specific reconciliation rather than an unsupported 50% reduction;
- 1.9.28 include the €0.8 million first-full-year operating allowance for the West Apron Vehicle Underpass in 2031. This is a limited allowance for tunnel operations and staffing, emergency preparedness and compliance from the point at which the asset becomes operational. It excludes wider specialist maintenance and lifecycle costs assumed not to arise materially during the initial warranty-supported period; and
- 1.9.29 allow the evidenced maintenance staffing requirement, subject to a clear reconciliation of the requested resources against the existing establishment, contracted support and project-funded activities. The required resources should be assessed by reference to demonstrated workload, the commissioning of new assets, maintenance-compliance requirements and the specialist capabilities needed to support a larger and more technically complex asset base.
- 1.9.30 These adjustments do not represent a general uplift to maintenance expenditure. They relate to identifiable requirements arising from the ageing of the existing estate, approved assets entering operation and the resources required to maintain those assets safely, reliably and efficiently. Dublin Airport's forecast applies targeted adjustments to the relevant cost lines rather than increasing the maintenance cost base uniformly.
- 1.9.31 The Draft Determination should not fund the revenues or operational benefits associated with new and existing assets while excluding the efficient expenditure required to maintain them. Dublin Airport therefore requests that the IAA include these costs in the Final Determination, with any specific concern regarding scope, duplication or timing addressed through an item-by-item assessment rather than broad percentage reductions or exclusions.

1.10 Retail staffing

1.10.1 CEPA's retail FTE allowance is materially below DAP's forecast, with a gap of approximately 27 FTEs in 2027 and 23 FTEs by 2031. This difference arises because Dublin Airport links front-line staffing to direct retail sales, whereas CEPA applies a 0.4 elasticity to passenger growth from the 2025 staffing base. Dublin Airport considers that CEPA's methodology does not adequately reflect the operational activity and staffing required to deliver the substantial retail revenue growth assumed by the IAA over the 2027–2031 period.

1.10.2 Dublin Airport's retail FTE forecast reflects the operating requirements associated with the Terminal 1 retail redevelopment and the wider expansion of the retail proposition over the regulatory period. For front-line retail staff, Dublin Airport applies an elasticity of 1.0 to forecast direct retail revenue, recognising that staffing requirements are driven by the level of retail activity rather than passenger growth alone. As the revenue forecast incorporates the incremental benefits of the T1 redevelopment and relevant CIP27 retail projects, the associated workforce impacts are captured within the revenue-driven elasticity rather than included as separate FTE step changes. This approach is intended to ensure that the staffing forecast remains aligned with the expanded retail footprint, increased customer activity and additional revenue that the IAA expects Dublin Airport to deliver over 2027–2031.

1.10.3 CEPA's Retail FTE forecast is materially too low because it does not align staffing with the level of retail activity assumed elsewhere in the Draft Determination, does not recognise the staffing consequences of the T1 Retail Redevelopment, and applies an elasticity that is significantly below Dublin Airport's recent operating experience.

IAA's retail revenue forecast implies a higher level of activity

1.10.4 The IAA's commercial revenue model assumes a retail revenue elasticity of 1.12 to passenger growth. In other words, every 1% increase in passenger numbers is expected to generate approximately 1.12% growth in retail revenue. This requires Dublin Airport to increase retail conversion, transaction volumes and passenger spend, rather than simply maintain the existing level of retail activity per passenger.

1.10.5 However, CEPA forecasts Retail FTEs using an elasticity of only 0.4 to passenger growth. The two assumptions are not operationally consistent. The revenue forecast assumes retail activity will grow faster than passengers, while the Opex forecast assumes staffing can grow at substantially less than half the rate of passenger growth. This does not adequately recognise the resources required to serve customers, operate tills, provide appropriate floor coverage, replenish stock and support the additional sales activity embedded in the IAA's revenue forecast.

T1 Retail Redevelopment creates a discrete requirement for 14 FTEs

1.10.6 CEPA's forecast also does not include the staffing consequences of the T1 ARI Redevelopment, CIP20.03.013. This is not a like-for-like refurbishment. The revised scheme increases the direct retail area by 480 sqm and materially changes the configuration and scale of the directly operated retail proposition.

1.10.7 The project expands and reconfigures the principal retail categories, including Perfumery and Cosmetics, Liquor, Confectionery and Irish products. Its scope also includes new till points, customer collection desks, storage facilities and an expanded retail presence on The Street. These features increase the number of customer-facing areas and service points requiring operational coverage, as well as the associated replenishment and stock-handling activity.

1.10.8 The approved project business case explicitly provides for €0.6 million of additional annual payroll associated with 14 incremental FTEs. The 14 FTEs are therefore not an assumption derived solely from passenger growth. They are an identified operating requirement incorporated into the project's commercial evaluation to operate the larger retail footprint, additional service points and enhanced category proposition.

1.10.9 These FTEs should be recognised as a separate project-driven step change, phased in as the redeveloped store becomes operational. They should not be expected to emerge from CEPA's standard passenger elasticity, which is intended to capture underlying volume growth rather than a discrete change in retail capacity and operating configuration.

The appropriate elasticity is between 0.6 and 0.8

1.10.10 A Retail FTE elasticity in the range of 0.6 to 0.8 to retail revenue growth would provide a more reasonable balance between operational requirements and continuing productivity improvement. It would recognise that sales activity creates additional workload, while still requiring FTE growth to remain materially below revenue growth.

1.10.11 This range is supported by Dublin Airport's recent experience. Over the relevant historic period:

Retail sales revenue increased by 28%;

Retail FTEs increased by 19%; and

1.10.12 The resulting observed Retail FTE elasticity to revenue was approximately:

$19\% \text{ FTE growth} \div 28\% \text{ revenue growth} = 0.68$

1.10.13 An elasticity of 0.68 means that every 1% increase in retail revenue was associated with approximately 0.68% growth in staffing. This demonstrates that additional retail activity does require additional resources, but that staffing has grown significantly more slowly than revenue. Dublin Airport has therefore already delivered substantial productivity improvement.

1.10.14 The recent experience of 0.68 sits towards the middle of the proposed 0.6 to 0.8 range. The lower end would require stronger productivity improvement than recently achieved, while the upper end would provide greater recognition of the operational intensity of delivering higher sales and operating an expanded retail proposition. The proposed range is therefore evidence-based and continues to impose a meaningful efficiency challenge.

Dublin Airport request

1.10.15 CEPA's Retail FTE forecast should be revised because it:

- (1) assumes Retail FTE growth of only 0.4 times passenger growth while the IAA expects retail revenue to grow at 1.12 times passenger growth;
- (2) omits the 14 incremental FTEs explicitly included in the T1 Retail Redevelopment business case; and
- (3) is materially below Dublin Airport's observed FTE elasticity to retail revenue of 0.68, notwithstanding that this historic outcome already incorporates an 8% improvement in sales per FTE.

1.10.16 Dublin Airport therefore requests that the IAA separately recognise the 14 project-specific T1 Retail Redevelopment FTEs and forecast the remaining Retail workforce using an elasticity of 0.6 to 0.8 to retail revenue growth, calibrated around the evidenced recent experience of 0.68. This would align the Opex allowance more closely with the commercial revenue forecast while retaining a stretching and demonstrable productivity requirement.

1.11 Utilities

1.11.1 CEPA's proposed utilities allowance does not provide a sufficient forecast of the efficient costs that Dublin Airport will incur over the 2027 to 2031 regulatory period. CEPA forecasts utilities costs of €10.3 million in 2027, declining to €8.5 million in 2028 before increasing to €9.8 million by 2031. Dublin Airport forecasts costs of €11.5 million in 2027 and €12.4 million by 2031. The annual difference therefore increases from approximately €1.2 million in 2027 to €2.6 million in 2031, resulting in a cumulative shortfall of approximately €9.3 million over the regulatory period.

	2025	2026	2027	2028	2029	2030	2031
CEPA/IAA forecast (€m)	11.7	10.5	10.3	8.5	9.4	9.7	9.8
Dublin Airport forecast (€m)	12.3	11.3	11.5	9.7	11.5	12.0	12.4
Underallowance (€m)	-0.6	-0.8	-1.2	-1.2	-2.1	-2.3	-2.6

1.11.2 The difference arises from CEPA's reduction to the starting point, its application of a passenger elasticity of 0.3 compared with Dublin Airport's elasticity of 1.0, and its more restrictive treatment of the incremental utilities demand associated with new infrastructure and additional operational equipment. CEPA has excluded a number of CIP-related energy impacts, while incorporating expected savings from sustainability projects, including Phase 2 Solar PV and the Renewable Heat Project.

1.11.3 The appropriate forecast must assess the net effect of consumption efficiencies, sustainability initiatives, passenger growth and the commissioning of new infrastructure. Dublin Airport considers that CEPA's approach understates this net cost because it combines a reduced starting point with a low passenger elasticity and incomplete recognition of project-specific energy requirements. This produces an allowance that does not adequately reflect the efficient utilities costs required to operate the airport and accommodate the passenger volumes underpinning the Draft Determination.

CIP related increases

1.11.4 The table below outlines the energy demand from major projects across the forecast period.

CIP Number	Name	Annual Energy (kWh)	Calculation Method
CIP.20.03.052	Airfield Drainage Project	459,060	420kW pump loads x 1093 run hours
CIP.20.04.009	Staff Car Park South	318,735	13kWh x 950 spaces + 96 x 3.55kW chargers x 900hr
CIP 20.06.014	Screening & Logistics Office	276,640	128 kWh/m2 x 2160 m2
CIP 20.01.071	Electric Charger Network Facilities	237,600	22kW chargers x 6 at 1800hr/yr
CIP 20.03.036	Temp NALMC Accom	214,200	1800 m2 at 119 kWh/m2
CIP 20.04.021	West Apron Accommodation & Welfare	190,400	1600m2 at 119 kWh/m2
CIP 20.03.036	New Passenger Reception and FOD	185,640	1560 m2 at 119 kWh/m2
CIP 20.04.005	Expansion of Red Car Park CIP 20.04.005	28,600	2200 spaces at 13 kWh/space
	PBZ South	380,700	Based on existing PBZ at Pier 4
CIP 20.04.004/CIP 20.08.002	Digital Advertising/Retail Marketing & Media Installation	700,000	137 screens from 152 W up to 20,220 W, based on 20hrs day and additional cooling load required
20.01.002, CIP.20.01.071, CIP.20.07.002 /CIP 20.03.031 / 20.03.081	West Apron, South Apron, Apron 5H Expansions	708,724	6kWh/m2 new apron plus TOC analysers
CIP.20.03.051B	Underpass D20109	1,783,689	5kW sump pumps at 650 hrs year, 1.5GWh lighting approx + 60MWh ventilation - based on sample projects and W/m2 guidelines
CIP.20.03.071	West Apron Fuel Spur + Welfare Bldg	1,136,413	From project team based on required pumploads & a new building/welfare office
Total listed projects		6,620,401	
Other Projects, Future Phases & Forecast Growth		4,498,187	
Total		11,118,588	

1.11.5 The forecast assumption of 119 kWh/m² is supported by energy modelling undertaken for a number of recent airport development projects. These assessments have consistently indicated energy intensities in the range of 109 to 150 kWh/m², placing the assumed value towards the lower end of observed outcomes.

1.11.6 Furthermore, actual building electricity demand can exceed design-stage estimates due to operational and unregulated loads associated with airport operations. The assumption is supported by evidence from consultant energy reports, TM54 assessments, feasibility studies and Dublin Airport's Carbon Strategy monitoring and review process.

Dublin Airport Request

1.11.7 Dublin Airport requests that the IAA include the substantiated incremental utilities costs arising from CIP projects entering operation during the regulatory period. CEPA's current approach recognises savings from certain sustainability projects but excludes a number of project-related increases in electricity, gas and water demand, producing an asymmetric and incomplete forecast.

1.11.8 These costs should be assessed on a project-specific basis, reflecting commissioning dates, operating profiles and incremental consumption, rather than through CEPA's general passenger elasticity of 0.3. Dublin Airport asks the IAA to include the net utilities impact of each evidenced CIP project so that the Final Determination funds the efficient cost of operating the infrastructure required to accommodate the IAA's passenger forecast.

1.12 Capital FTEs

1.12.1 CEPA has retained the Capital Projects allowance at 38 FTEs throughout 2027 to 2031. This compares with Dublin Airport's forecast of 39 FTEs in 2027, increasing to 42 FTEs in 2029 and 2030 and 41 FTEs in 2031. The resulting shortfall increases from one FTE in 2027 to four FTEs in 2029 and 2030, before reducing to three FTEs in 2031. CEPA has therefore not allowed the full staffing requirement associated with the expansion and transformation of Dublin Airport's capital programme.

1.12.2 Dublin Airport welcomes CEPA's recognition that the capital programme is larger and more complex than anticipated at the time of the 2022 Determination, that an increase in Capital Projects staffing is justified in principle, and that programme complexity, the number of concurrent projects and governance obligations are more appropriate workload measures than expenditure alone. However, CEPA has not allowed any increase above the 2025 baseline, on the basis that further evidence was required regarding need, additionality and efficiency and the distinction between the requested FTEs, capitalised project-management costs and external delivery support. The four FTEs are intended to address new, enduring client-side capability requirements rather than project-specific delivery activities.

1.12.3 Dublin Airport requests that the Final Determination include an allowance for the four additional Capital Projects FTEs from 2027, rather than waiting until the programme reaches peak activity. The capabilities concerned must be established as the new PMO operating model, systems and controls are implemented so that they are available to govern the programme as expenditure and project activity increase.

Scale and complexity of the Capital Investment Programme

1.12.4 Dublin Airport's CIP27 submission comprises 115 projects with a proposed total capital investment of approximately €5.6 billion. The portfolio extends across airport development, sustainability, asset management, commercial, security, IT and other programme requirements. It includes medium and large-scale construction works, asset replacement and refurbishment, operational equipment and strategic planning activities, with a number of projects extending beyond the 2027 to 2031 regulatory period.

1.12.5 The requirement is not driven solely by the monetary value of the programme. CIP27 involves the coordinated delivery of a large portfolio of projects with different regulatory treatments, planning requirements, delivery timescales and operational interfaces. These projects must be delivered within a live,

safety-critical airport environment while maintaining operational continuity, regulatory compliance and appropriate governance over scope, cost, schedule, risk and benefits.

1.12.6 Dublin Airport has carried out a detailed review of its Project Management Office (“PMO”) and concluded that, although the existing arrangements are broadly suitable for the current programme, Dublin Airport’s present PMO processes, systems, data management and reporting practices do not provide the level of control, transparency, insight and productivity required for the future capital programme. The review found that the existing PMO arrangements are not sufficiently mature to support the scale and complexity of the future capital programme. Key challenges involve data and reporting, risking reduced transparency and less effective programme oversight. The review concluded that enhanced PMO capabilities, systems and governance are required to provide the level of control, assurance and management information necessary to support delivery of the expanded capital investment programme.

1.12.7 These findings demonstrate that continuation of the current PMO model with an unchanged FTE complement would not be an efficient response to the increased scale and complexity of CIP27. The issue is not simply whether individual projects have sufficient project managers. It is whether Dublin Airport has the enduring client-side systems, data, controls and management-information capability needed to govern the programme as a whole.

Need for the PMO transformation and four additional FTEs

1.12.8 The PMO Transformation Programme is required to establish an integrated control environment capable of supporting the delivery of CIP27 and the airport’s longer-term investment programme. The proposed target model includes an updated PMO operating model and processes, replacement cost and contract-management systems, a dedicated data-management and reporting platform, an integrated management-information hub, and structured cutover, training and capability development. The transformation is intended to create a reliable source of programme information and strengthen cost, change, contract, schedule, risk and performance control across the portfolio.

1.12.9 The four additional FTEs are required to operate and sustain this control environment following implementation. They will provide the following enduring capabilities:

- (1) Management information and reporting: coordination of PMO systems outcomes, reporting cycles, KPI definitions, data governance, dashboard assurance and continuous improvement.
- (2) Cost and change management: ownership and administration of the change management system environment, including workflow validation, user adoption and ongoing improvement.
- (3) Contract management: ownership and administration of contract management system, including agreed workflows, user onboarding and adoption.
- (4) Data platform and technical enablement: coordination of business data requirements, platform access, data availability, integrations, security and long-term technical operation in conjunction with Dublin Airport IT.

1.12.10 These are four FTE positions covering the five connected functional requirements identified in the PMO review. Where appropriate, closely related management-information, reporting or data-platform responsibilities will be combined within individual roles, consistent with the review’s conclusion that certain administration responsibilities may be undertaken by a relevant roleholder or named delegate.

1.12.11 The additional FTEs are necessary because the scale and complexity of CIP27 create materially greater requirements for portfolio-level governance, systems ownership, data assurance, reporting, stakeholder coordination, business readiness and risk management. The current team is committed to supporting the existing programme and does not have sufficient capacity to absorb these new responsibilities. Without dedicated ownership, there is a risk that the new systems will not be embedded effectively, information will remain fragmented or manually produced, and the improvements in cost control, transparency and programme oversight sought through the PMO transformation will not be realised.

- 1.12.12 The roles are portfolio-wide, enduring client-side functions. They are not directly attributable to the delivery of an individual asset and are therefore distinct from capitalised project labour such as project managers, quantity surveyors, contract administrators, design-assurance staff, health and safety representatives and site-management functions. The Independent Fund Surveyor separately assessed Dublin Airport's capitalised labour allowances as reasonable and made no adjustment to them.
- 1.12.13 The four FTEs will provide permanent Dublin Airport ownership, assurance, administration and continuous improvement after implementation. Their purpose is to retain institutional knowledge, provide effective client-side challenge and avoid long-term dependence on external support.
- 1.12.14 Providing four internal FTEs is a proportionate response to a portfolio of 115 projects and approximately €5.6 billion. The roles consolidate ownership of programme systems, data and reporting at portfolio level rather than replicating these capabilities within individual project teams. This supports standardised processes, a reliable source of programme data, more timely reporting, stronger governance and earlier identification of cost, schedule and delivery risks.
- 1.12.15 The approach should also reduce reliance on manual workarounds and external resources while ensuring that Dublin Airport retains the capability required to operate, assure and improve the PMO environment over its useful life. Comparable infrastructure programmes maintain dedicated teams of five PMO data and systems specialists or five programme digital FTEs, supporting the proportionality of Dublin Airport's request for four FTEs.

Dublin Airport request

- 1.12.16 Dublin Airport therefore requests that the IAA amend the Final Determination to allow the four additional Capital Projects FTEs from 2027. The evidence demonstrates that these resources:
- (1) are necessary to address the scale, complexity and governance requirements of CIP27;
 - (2) constitute new, enduring portfolio-level capabilities that are not funded through capitalised project labour or temporary external implementation support; and
 - (3) represent a proportionate and cost-effective means of strengthening control, transparency and delivery assurance across Dublin Airport's capital programme.
- 1.12.17 Retaining the Capital Projects allowance at the 2025 baseline would recognise the expansion of the programme without providing the client-side capability necessary to govern and deliver it effectively. The requested FTEs should therefore be included in the efficient operating cost allowance for 2027 to 2031.

1.13 Rental costs

- 1.13.1 CEPA has disallowed the rental cost of the DAC office space on the basis that it is temporary. This does not reflect the permanent reorganisation of Dublin Airport's office accommodation. Staff now occupying DAC have permanently relocated from Cloghran House, the OCTB and Collinstown House.
- 1.13.2 The relocations have enabled the vacated space to be put to productive use. Space in Cloghran House is now occupied by the expanded infrastructure project teams required to deliver the significant increase in Dublin Airport's capital programme between 2019 and 2025. The costs of these project employees are capitalised against the relevant projects, but the office space they occupy must still be provided. Separately, space released in Collinstown House has facilitated the expansion of Platinum Services, supporting additional commercial revenue generation.
- 1.13.3 The relocation of daa staff from the Old Central Terminal Building to DAC forms part of a planned and efficient reorganisation of Dublin Airport's property estate. The Old Central Terminal Building is a protected heritage asset with an unusual and inefficient layout. Retaining it as general office accommodation would not represent a cost-free alternative to DAC: it would involve material ongoing utilities and maintenance costs, together with significant capital investment in building fabric, accessibility, mechanical and electrical systems, glazing and sanitary facilities to bring the building to an appropriate and compliant standard. The relocation releases the building for a more appropriate operational and commercial use.

1.13.4 Accordingly, the DAC rental cost is not a short-term or avoidable expense. It is an ongoing operating cost arising from the efficient use of Dublin Airport's existing accommodation to support both delivery of the expanded capital programme and commercial revenue growth. Dublin Airport therefore requests that CEPA reinstate the full DAC rental cost in its Opex forecast.

1.14 Marketing costs

1.14.1 Dublin Airport's 2026 forecast includes a €0.7 million increase in marketing non-pay costs, whereas CEPA's forecast does not recognise this incremental expenditure and effectively rolls forward the existing 2025 cost base. The resulting difference is therefore not attributable to general cost growth or inflation. It reflects CEPA's omission of a specific, revenue-linked investment included in Dublin Airport's 2026 Budget to support the delivery of the commercial digital strategy. The €0.7 million was separately identified in the approved Budget as a revenue-driven cost, following a budget process that required marketing expenditure to be developed on a bottom-up basis and linked to a defined profit and loss benefit.

1.14.2 The investment is required to convert Dublin Airport's expanded digital capability and additional commercial capacity into passenger demand and revenue. It will fund targeted digital campaigns and promotions, app-user acquisition, CRM activity, in-airport communications and launch support for new and expanded products, including lounges, Fast Track, Drop & Go and other digital propositions. The expenditure is therefore incremental to the existing marketing cost base and linked to specific commercial initiatives and capacity additions, rather than representing a general increase in brand or corporate marketing expenditure.

1.14.3 The planned activity is aimed at:

- (1) increasing the directly addressable customer audience, including growing the email base to 760,000 users and accelerating app-user acquisition;
- (2) increasing app engagement, with a target of 3.15 million monthly active users;
- (3) using Salesforce integration, personalisation, geofencing, in-app messaging and CRM automation to improve targeting and identify cross-selling opportunities;
- (4) accelerating customer awareness and take-up of additional lounge and Fast Track capacity, Drop & Go, transport products and other new commercial propositions; and
- (5) supporting the 2026 revenue targets identified for key products, including €3.1 million of growth in car park revenue, €0.84 million in lounges and €0.35 million in Fast Track.

1.14.4 The expenditure forms part of the cost required to achieve the commercial revenue growth assumed in the regulatory settlement. It is not internally consistent to adopt stretching commercial revenue forecasts while excluding the targeted marketing expenditure required to acquire customers, promote additional capacity and convert demand into sales. The digital approach also provides a more efficient route to market through reusable channels, targeted campaigns and measurable conversion funnels. Dublin Airport's proposition shows that, notwithstanding this investment, total marketing and in-path costs were forecast at 2.2% of business-to-consumer sales in 2026, below the 2.8% recorded in 2019.

1.14.5 Dublin Airport therefore requests that the IAA include the €0.7 million increase in the efficient 2026 cost base and carried through the forecast period. This would align the operating expenditure allowance with the investments required to deliver the commercial revenue forecasts included in the Draft Determination.

1.15 Staff Mobility

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1.16 IT FTEs

1.16.1 CEPA has forecast IT resources using a high-level approach that provides for 94 FTEs in 2026, compared with Dublin Airport's forecast of 97 FTEs. This represents a disallowance of three FTEs in 2026. CEPA's forecast then remains broadly flat, increasing only to 96 FTEs by 2031, while Dublin Airport's forecast remains at 97 FTEs.

1.16.2 This aggregate assessment does not adequately reflect the composition of Dublin Airport's IT resource requirement or distinguish between conventional IT support, the enduring operation of passenger-facing digital channels, and the specialist cyber security capability required to protect critical airport infrastructure. In particular, the 2026 resource base reflects capabilities that are already embedded in Dublin Airport's operating model and are required to operate, protect and derive value from a materially expanded technology estate. The proposed resources are not a general provision for future growth and should instead be assessed against the specific activities, responsibilities and risks addressed by the Digital and Cyber functions.

Digital resources

1.16.3 Dublin Airport's Digital team comprises 18 existing and active roles. These roles do not represent a request for new or incremental headcount in 2026. They are part of the current operating model established following the decision in 2024 to bring Digital and Development capability in-house, reducing dependency on third parties for the development, management and maintenance of Dublin Airport's digital channels. Five roles transferred from Marketing and a further eight roles were added in late 2024 and early 2025, with the remaining roles covering Innovation and Development.

1.16.4 The Digital team now operates an integrated passenger and commercial ecosystem encompassing DublinAirport.com, the Dublin Airport app, the ecommerce marketplace, Salesforce CRM, DUB Rewards, passenger-facing content and associated digital marketing channels. The team provides the ongoing product management, ecommerce optimisation, CRM automation, UX and UI design, digital marketing, creative production, platform support and live-service management needed to operate these channels. These are recurring operating activities rather than one-off capital development activities. Capitalisable development effort is separately charged to the relevant capital programmes where the applicable accounting criteria are met. The Opex requirement relates to the continuing operation of live services, including platform support.

defect resolution, minor enhancements, release support, performance maintenance and service management.

- 1.16.5 The completion of the initial digital capital programme does not remove this operating requirement. It has created a substantially larger and more sophisticated set of live passenger and revenue channels that must be continuously managed, supported and optimised. Without the necessary internal resources, Dublin Airport would be unable to maintain content and customer journeys, respond quickly to operational or passenger requirements, optimise conversion, support new product launches or realise the full commercial benefit of its digital investment.
- 1.16.6 The resource model is also efficient. Product, CRM, UX and UI, Creative and Digital Marketing capability is shared across the website, app, marketplace and CRM, avoiding duplication between channels. In-house creative capability has removed the requirement for external agency support across digital campaigns and content, while internal product ownership reduces supplier dependency and enables faster prioritisation, testing and release cycles. The team directly supports non-aeronautical revenue through product optimisation, improved booking journeys, campaign execution and digital product launches. Between January and July 2026, reported online revenue increased by 8% for car parking, 14% for lounges and 11% for Fast Track compared with the corresponding figures for 2025, although revenue performance is also influenced by passenger volumes, pricing, capacity, availability and wider commercial activity.
- 1.16.7 Accordingly, the 2026 Digital resource base should be allowed in full. These are existing resources undertaking identifiable and recurring operating activities within Dublin Airport's current cost base. A reduction would not represent an efficiency saving. It would either reduce Dublin Airport's capacity to operate and commercialise its digital channels or recreate reliance on external agencies and suppliers at potentially greater cost and with less retention of institutional knowledge.

Cyber Security resources

- 1.16.8 The Cyber Security resource requirement reflects the specialist capability necessary to protect essential aviation systems and passenger services, sustain safe and resilient airport operations, and meet Dublin Airport's obligations as an operator of critical national infrastructure. The Cyber function has increased from eight to 13 FTEs since the previous regulatory period to deliver Dublin Airport's Cyber Security Strategy and respond to a more sophisticated threat environment, increasing regulatory obligations and the expansion of the Airport's technology estate.
- 1.16.9 The requirement is driven by obligations under EASA Part-IS, NIS2 and ISO 27001, including incident detection and response, compliance monitoring, third-party risk management and the continued operation and improvement of the Information Security Management System. It also reflects the growth of Dublin Airport's technology estate, with technology investment having doubled over the previous three years, increasing both the cyber-attack surface and the associated security assurance requirement. The Cyber team is responsible for capability spanning more than 80 IT service platforms and approximately 90 ISO 27001 control areas.
- 1.16.10 The additional resources address clearly defined capability gaps. These include expanding Cyber Operations from two to four Cyber Engineers to strengthen monitoring and incident response; establishing dedicated compliance monitoring and continuous improvement capability through two senior Information Security Specialist roles; increasing security architecture capability to support project delivery and Security by Design; and strengthening third-party risk management and cyber resilience. These responsibilities are additional to those supported by the previous resource base and cannot reasonably be absorbed without weakening operational oversight, regulatory compliance or incident-response capability.
- 1.16.11 The proposed model remains proportionate and efficient. Dublin Airport continues to use outsourced providers for specialist monitoring, testing and assurance, while retaining a lean internal team responsible for governance, compliance, operational oversight and organisational knowledge. Internal resources are required to direct and oversee these outsourced services and to mitigate the risks arising from contractor turnover, personnel rotation and the loss of airport-specific knowledge. The model also reduces excessive

dependence on higher-cost contractor resources and concentrates internal capability in the areas of greatest operational and regulatory importance.

- 1.16.12 The Cyber resource base should therefore also be allowed in full. Disallowing these resources would not remove the cyber threat, the expanded technology estate or Dublin Airport's regulatory obligations. It would instead weaken the Airport's control environment, increase reliance on reactive and potentially higher-cost remediation, and expose critical airport systems to a greater risk of disruption. Given the potential implications for operational continuity, passenger safety, regulatory compliance and Ireland's principal airport infrastructure, the 13-FTE Cyber resource complement represents a necessary, additional and efficiently targeted operating requirement.

1.17 IT Non-Pay costs

- 1.17.1 CEPA's forecast results in a material reduction to Dublin Airport's IT non-pay expenditure. Relative to Dublin Airport's forecast, the allowance is approximately €2.5 million lower in 2026, increasing to approximately €3.2 million lower by 2031. The 2031 adjustment represents approximately 5% of the overall difference between CEPA's and Dublin Airport's operating expenditure forecasts in that year.

- 1.17.2 The difference arises principally from CEPA's treatment of the 2026 cost base and its reductions to the operating expenditure associated with the Capital Investment Programme. CEPA accepts that an Opex-to-Capex methodology is a reasonable basis for forecasting future CIP-related operating costs. However, it subsequently reduces or disallows costs across a number of technology categories, including costs associated with replacement projects, operational devices, enterprise applications and security investments. The reductions do not appear to be supported by alternative project-level estimates, vendor quotations, market benchmarks or a quantified reconciliation demonstrating that the forecast expenditure is already included elsewhere in the baseline.

Dublin Airport's position

- 1.17.3 Dublin Airport does not agree that these reductions provide an appropriate estimate of the efficient cost of operating, securing and maintaining the airport's expanding technology estate. The forecast increase in IT non-pay expenditure is not a general or unexplained uplift. It reflects the recurring operating costs created by identifiable technology investments and by a structural change in how modern technology services are procured and consumed.
- 1.17.4 Technology investment is increasingly delivered through Software-as-a-Service, cloud hosting, subscription licences, managed services, cybersecurity platforms and vendor-supported solutions. These arrangements replace, in whole or in part, traditional upfront capital expenditure with recurring licence, hosting, maintenance, security and support costs. Such expenditure is inherent in keeping the associated systems available, secure, supported and operational over their lifecycle. It cannot reasonably be treated as discretionary expenditure simply because it is incurred after the underlying capital project has been delivered.
- 1.17.5 This is particularly relevant to Dublin Airport's CIP portfolio. New and upgraded technology solutions can have materially different operating cost profiles from the legacy systems they replace. Replacement projects may introduce additional functionality, enhanced cybersecurity controls, cloud services, vendor support and managed-service requirements that did not form part of the legacy cost base. Other projects introduce entirely new capabilities, including cyber resilience measures, data platforms, digital passenger services, AI-enabled solutions and operational technologies. These investments expand the technology estate and create genuine incremental requirements for licensing, monitoring, connectivity, maintenance and specialist support.
- 1.17.6 A blanket assumption that replacement assets generate no additional operating expenditure is therefore not appropriate. Similarly, the full disallowance of operating costs associated with additional operational devices assumes that deploying and managing those devices creates no recurring expenditure. In practice, an expanded device estate requires endpoint security, mobile-device management, connectivity, software

licensing, maintenance and vendor support. Those costs arise directly from operating and securing the additional assets.

- 1.17.7 The forecast expenditure is required to operate, secure and maintain technology that supports the airport's operational and corporate environment. The Microsoft estate alone supports email, SharePoint, Teams telephony and collaboration, Office applications, Power BI and data analytics, mobility, Windows devices, server operating systems, SQL databases, infrastructure management and integrated security controls. It also supports critical systems and services including HBS, ATRS, CCTV, AutoPass, flight information displays, retail systems, Airport2020, business intelligence and virtual desktop services.
- 1.17.8 The scale of the existing environment is substantial, including approximately 900 Windows servers, 300 Microsoft SQL databases, 2,700 laptops and desktops, 2,044 back-office users and managed access for 2,225 frontline workers. The forecast also incorporates security capabilities including malware protection, identity protection, multi-factor authentication, threat detection, and data, application and device controls. These are continuing service, support and security requirements rather than optional enhancements.
- 1.17.9 The same principle applies to cybersecurity investment more broadly. Security technologies require continuous licensing, monitoring, maintenance, threat intelligence and vendor support to remain effective. Allowing the capital investment while materially reducing the expenditure required to operate and maintain it risks weakening the security and resilience benefits that the investment is intended to deliver.
- 1.17.10 The CIP-related costs are additional where a project introduces a new system, extends the number of users or devices, adds new functionality, increases the technology footprint, or moves a service to a recurring cloud, SaaS or managed-service model. These costs are not captured automatically in the historic IT baseline merely because the associated capital project replaces or upgrades an existing asset.
- 1.17.11 CEPA identifies a potential risk of double counting between baseline IT expenditure and CIP-related operating costs. Dublin Airport accepts that actual duplication should be removed. However, the current adjustment does not appear to identify or quantify specific instances of duplication. A theoretical risk of overlap is not sufficient evidence that the forecast costs are already funded. The appropriate approach is to reconcile individual project operating costs to the baseline and remove only costs shown to be duplicated, rather than applying broad reductions across project categories.
- 1.17.12 Dublin Airport's forecast is based on the expected recurring cost consequences of its investment programme and the commercial models under which modern technology is supplied. CEPA has not presented alternative bottom-up estimates based on project requirements, vendor quotations, contractual commitments, market benchmarks or an independent technology cost model. Its reductions therefore do not demonstrate that Dublin Airport's forecast is inefficient or that the lower allowance is sufficient to operate and sustain the assets approved through the CIP.
- 1.17.13 Where CEPA has concerns regarding the amount attributed to an individual project, Dublin Airport considers that the efficient response is a project-level assessment of the underlying licences, hosting, support, security, maintenance and managed-service requirements. This would allow the IAA to test the scope, additionality and quantum of the expenditure directly. A high-level percentage reduction cannot establish which underlying service should be removed, reduced or delivered at a lower cost.

Normalisation of the 2026 baseline

- 1.17.14 The assessment must also recognise the accounting-driven reclassification of Microsoft and VMware licence expenditure. From 1 January 2026, approximately €3.0 million of Microsoft licence costs, together with approximately €0.3 million of VMware licence costs, previously capitalised, are recognised in operating expenditure following an accounting review. This does not reflect growth in consumption, service levels or operational scope. It is a change in accounting treatment for costs that already existed.
- 1.17.15 The resulting increase should therefore not be treated as evidence of an inefficient step change in IT expenditure or used to justify a reduction to the efficient baseline. It also affects comparability with prior years and with external benchmarks where comparable licence expenditure may continue to be capitalised or accounted for differently.

1.17.16 Under CEPA's framework:

Need: the underlying licences remain necessary to provide the existing technology services.

Additionality: the reclassified amount is not new expenditure; the cost existed previously and has moved between accounting categories.

Efficiency: the accounting change does not represent an increase in resources, consumption or the efficient cost of providing the service.

1.17.17 The 2026 IT baseline should consequently be normalised for approximately €3.3 million of accounting reclassifications when CEPA assesses expenditure growth and makes comparisons with historic or benchmark costs.

Dublin Airport Request

1.17.18 Dublin Airport requests that the IAA:

- (1) Normalise the 2026 IT non-pay baseline for the approximately €3.3 million accounting-driven reclassification of Microsoft and VMware licences;
- (2) Reinstate CIP-related IT operating expenditure unless CEPA can identify project-specific evidence that the expenditure is unnecessary, duplicated or inefficient;
- (3) Replace broad category-level reductions with a project-level assessment of licences, cloud hosting, cyber controls, maintenance, vendor support and managed-service requirements.

1.17.19 Without these changes, the allowance risks funding the capital implementation of new and upgraded technology while not providing the recurring expenditure required to operate, maintain and secure it. This would undermine the operational, customer, security and resilience benefits underpinning the approved investment programme and would not represent a robust assessment of the efficient cost of operating Dublin Airport's future technology environment.

1.18 Graduate programme

1.18.1 Dublin Airport requests that CEPA provide an allowance for the full 35 graduate FTEs included in its forecast. The graduate programme was recommenced in 2023 and is a structured two-year programme under which two cohorts are employed concurrently. Graduates undertake substantive roles across operations, finance, engineering, HR and commercial, supported by rotations, mentoring and formal development. The forecast complement of 35 FTEs therefore reflects the steady-state design of the programme, rather than discretionary growth in Central Functions or an increase driven by passenger volumes.

1.18.2 The programme is an important component of daa's ESG and workforce strategy. Graduate and intern recruitment supports the ESG strategy commitments, while also prioritising the accelerated development of young talent and ensuring that appropriately skilled employees are available earlier. The programme provides structured employment and development opportunities, builds a pipeline of specialist capability and supports succession planning across critical airport functions.

1.18.3 CEPA's allowance of approximately 15 to 16 FTEs does not reflect the cohort-based design of a two-year programme or assess the resources required to deliver Dublin Airport's stated ESG and workforce objectives. It is also inconsistent with the historical evidence that graduate resources were previously distributed across business functions rather than separately reported. Dublin Airport therefore requests that the IAA allow the full 35 graduate FTEs, subject to confirmation that these employees are counted only once and are not duplicated within the permanent establishment of their host functions.

1.19 Human Resources

- 1.19.1 The benchmark assessment should not be interpreted as a straightforward comparison of HR headcount or cost in isolation. Dublin Airport's People function operates in a materially different regulatory, operational and organisational context to many comparator airports, particularly UK peers, and carries a broader scope of responsibility than would typically be reflected in standard HR benchmarks. Any fair assessment of resourcing must therefore adjust for these differences, including additional Irish and EU compliance obligations, locally managed payroll and workforce systems activity, and the increasing strategic requirement to support leadership capability, employee engagement, wellbeing and organisational resilience in a complex 24/7 airport environment.
- 1.19.2 Dublin Airport is subject to an expanding range of workforce-related reporting and compliance obligations, including CSRD workforce reporting, EU Pay Transparency readiness, enhanced ESG disclosures, human rights due diligence, and related governance and assurance requirements. Delivering against these obligations requires sustained investment in workforce data governance, reporting, analytics, policy development, job architecture, pay equity analysis and stakeholder engagement. These are specialist, recurring activities which materially increase demand on HR resources and extend the function's remit beyond traditional HR administration.
- 1.19.3 This context is particularly important when benchmarking HR resourcing against UK airport comparators. Many of the regulatory and compliance activities outlined above arise from EU legislation and therefore do not apply in the same way to UK airports. A direct FTE or cost comparison with UK peers is therefore unlikely to be fully comparable unless it is adjusted for these additional Irish and EU statutory obligations. Without this adjustment, the benchmark risks understating the level of HR resource required at Dublin Airport to meet mandatory compliance, assurance and reporting expectations.
- 1.19.4 In parallel, the business expectation of the People function has also increased. Strengthening leadership capability across all levels of the organisation is a strategic priority, particularly in a complex airport operating environment. This requires additional capability and capacity in talent management, succession planning, leadership development, workforce planning and organisational capability building. These activities are strategic in nature and should be considered separately from baseline HR service delivery when assessing whether the function is appropriately resourced.
- 1.19.5 Employee engagement, wellbeing, health and fitness initiatives are also central to maintaining performance in a 24/7 operational environment. These programmes support service continuity, retention, resilience, employee experience and operational effectiveness. As the airport continues to grow and operational complexity increases, the People function is expected to provide more proactive interventions, listening strategies, engagement programmes and workforce wellbeing support. This creates a further layer of demand which should be reflected in benchmark comparisons.
- 1.19.6 There are also important scope differences which must be normalised before drawing conclusions from external benchmarks. Time and attendance administration for Payroll (13 FTEs in 2026) is managed within the HR function at Dublin Airport, whereas in many organisations this activity typically sits within Operations. In addition, the maintenance, development and enhancement of both the time and attendance system and HR Information Systems are managed locally within HR by technical system subject matter experts. In other organisations, comparable system ownership and support would often sit within IT. Unless these responsibilities are identified and adjusted for, any benchmark comparison will understate the true scope of activity performed by Dublin Airport's People function and may present an artificially high view of HR resourcing relative to peers.
- 1.19.7 Taken together, these factors demonstrate that Dublin Airport's People function is operating with a broader and more complex remit than would be captured by a simple headcount or cost benchmark. The benchmark should therefore be interpreted with caution and adjusted for statutory compliance obligations, locally managed payroll and systems activities, and the strategic leadership, engagement and wellbeing agenda now expected of the function. On that basis, the proposed resource levels are not simply an increase in HR capacity; they reflect the additional capability required to deliver mandatory compliance, support business growth and sustain long-term organisational performance.

1.19.8 Dublin Airport requests that CEPA adjust its benchmarking to remove the 13 time-and-attendance FTEs and relevant HR systems roles from the comparable HR population, recognise the additional Irish and EU compliance scope, and allow the resulting evidenced resource requirement.

2 Opex Appendix: Supporting information for Dublin Airport Operating Metrics

Total Passengers Onsite

A sample day for 75k (26 January 2026), 100k (23 April 2026) and 120k (14 July 2026) passengers was taken. Total Pax Onsite per hour calculated using all arrivals within that hour plus all departures within that hour, all departures in the following hour and 44% of departures in two hours time. This is under the assumption that the 44% of passengers use check in or SSKs.

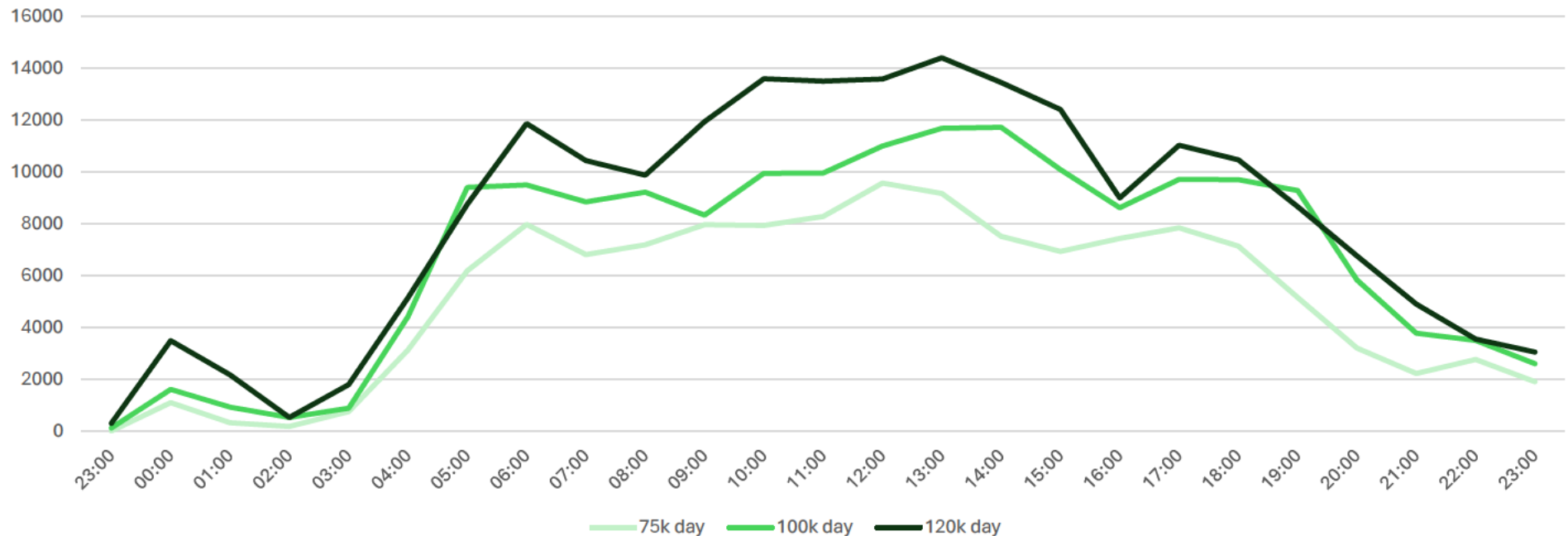
75k day between 0400 – 2300 – average 5.3k onsite each hour

100k day between 0400 – 2300 – average 7.3k onsite each hour

120k day between 0400 – 2300 – average 8.6k onsite each hour

62% increase in average hourly pax onsite (0400 – 2300) on a 75k day vs a 120k day

Total Pax Onsite By Hour



Overall pax onsite per hour increases on a 120k day

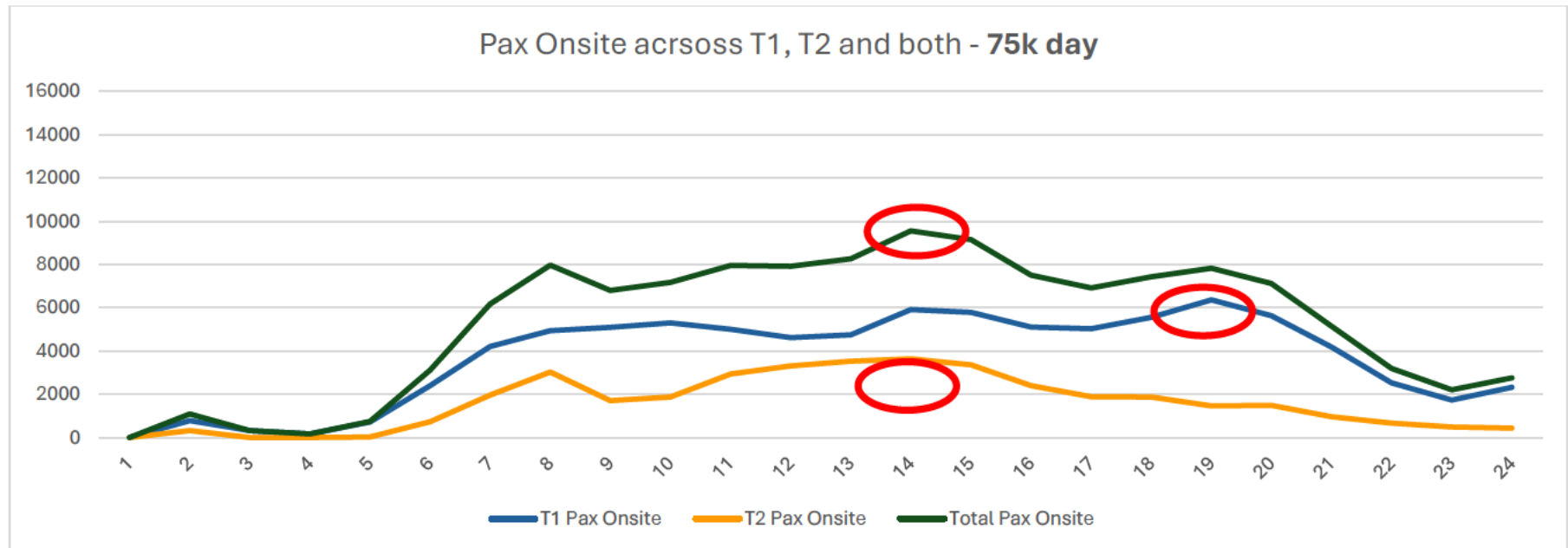
- 75k day peak = 9.5k in an hour
- 120k day peak = 14.3k in an hour

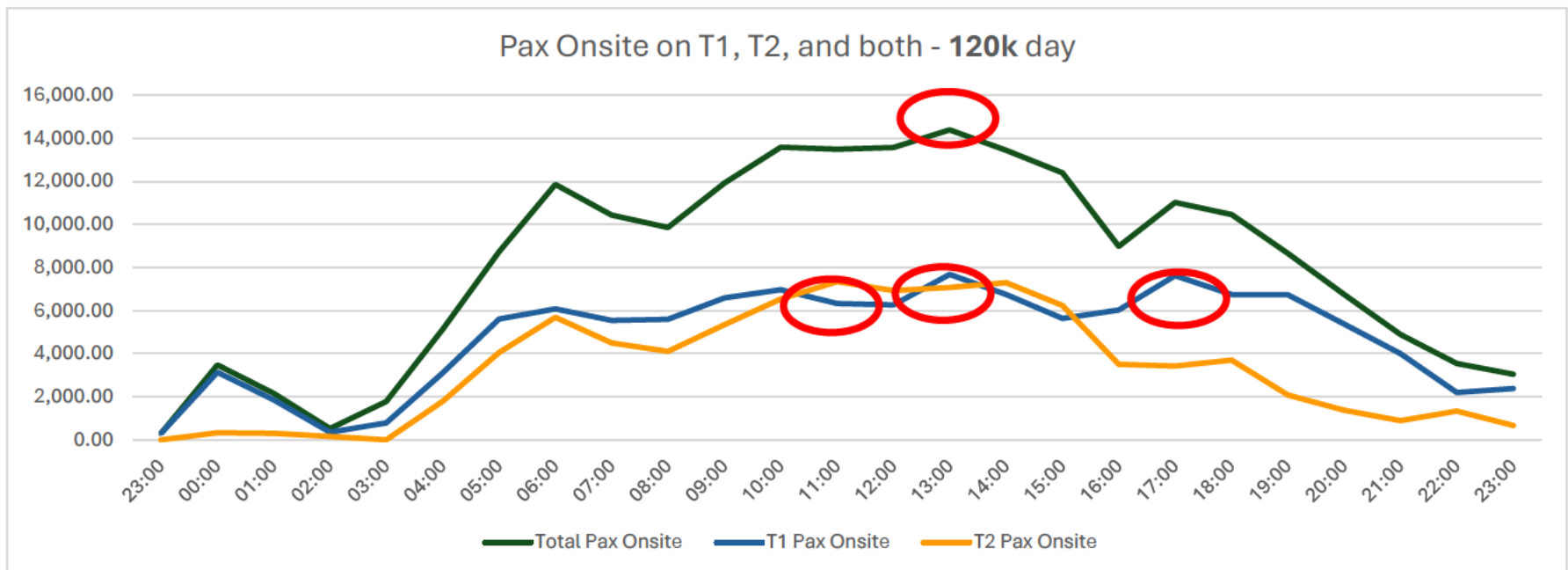
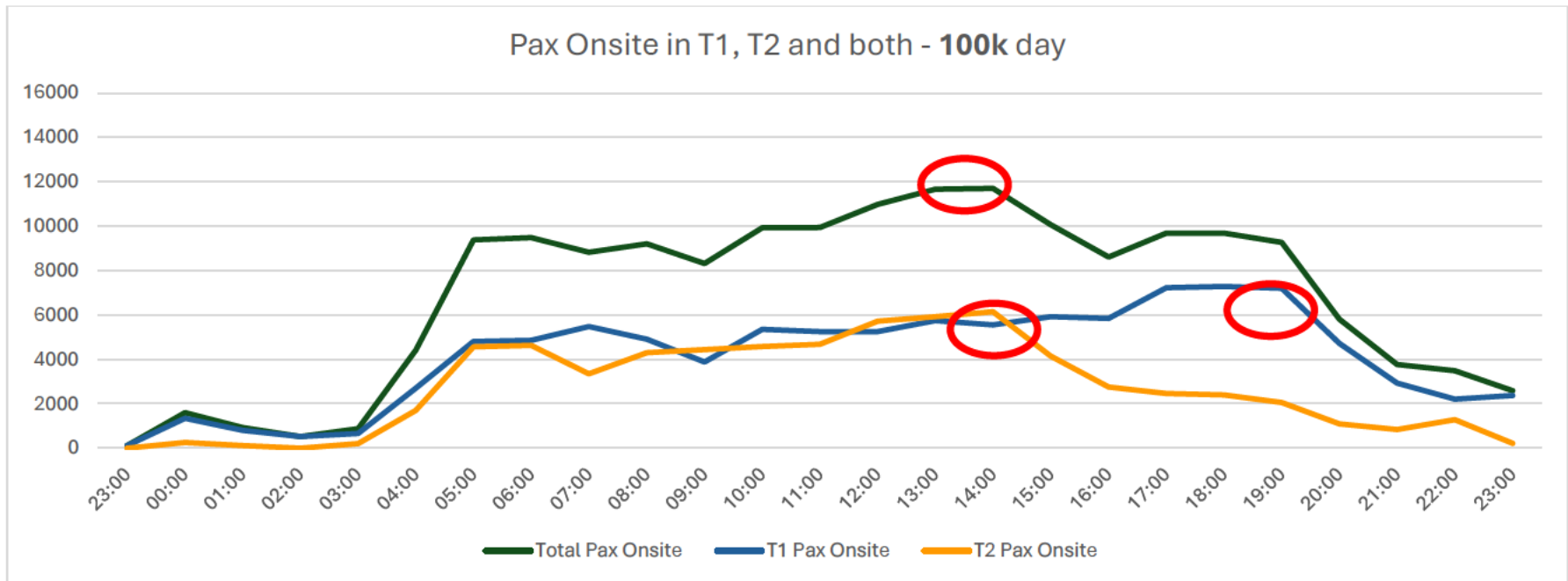
Peak hour numbers are similar for T1 but the peak extends across the day

- 75k day T1 peak = 6364, only one hour over 6000 on that day
- 120k day T1 peak = 7,676, but 8 hours over 6000 on that day

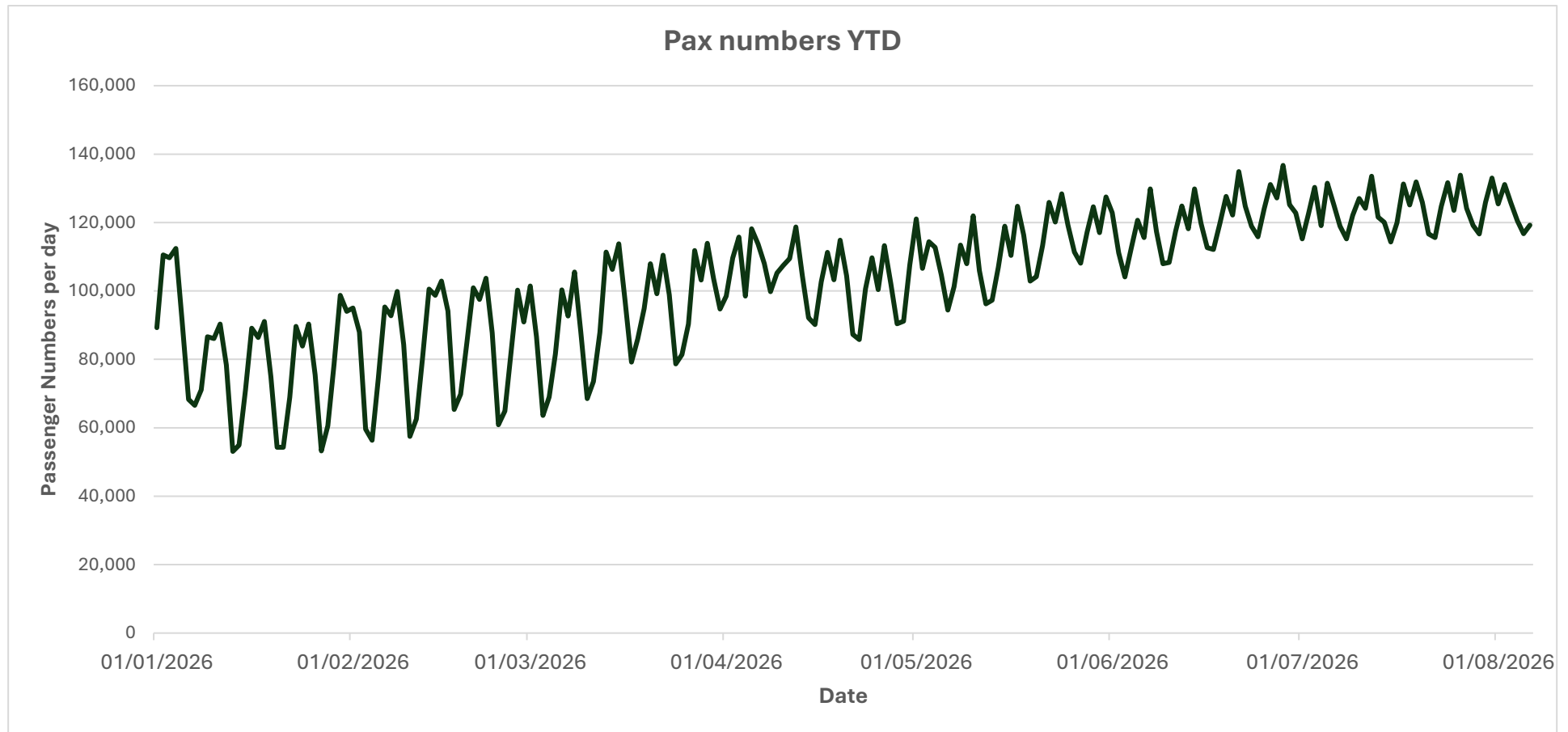
Peak numbers per hour for T2 grow on busier days AND extend across day.

- 75k day T2 peak = 3638, one hour over 3500 on that day
- 120k day T2 peak = 7339, 13 hours over 3500 on that day





Annex 1 - What daily passenger numbers are defined as a Low, Medium, High day has shifted



The above graphs the daily passenger numbers year-to-date in 2026.

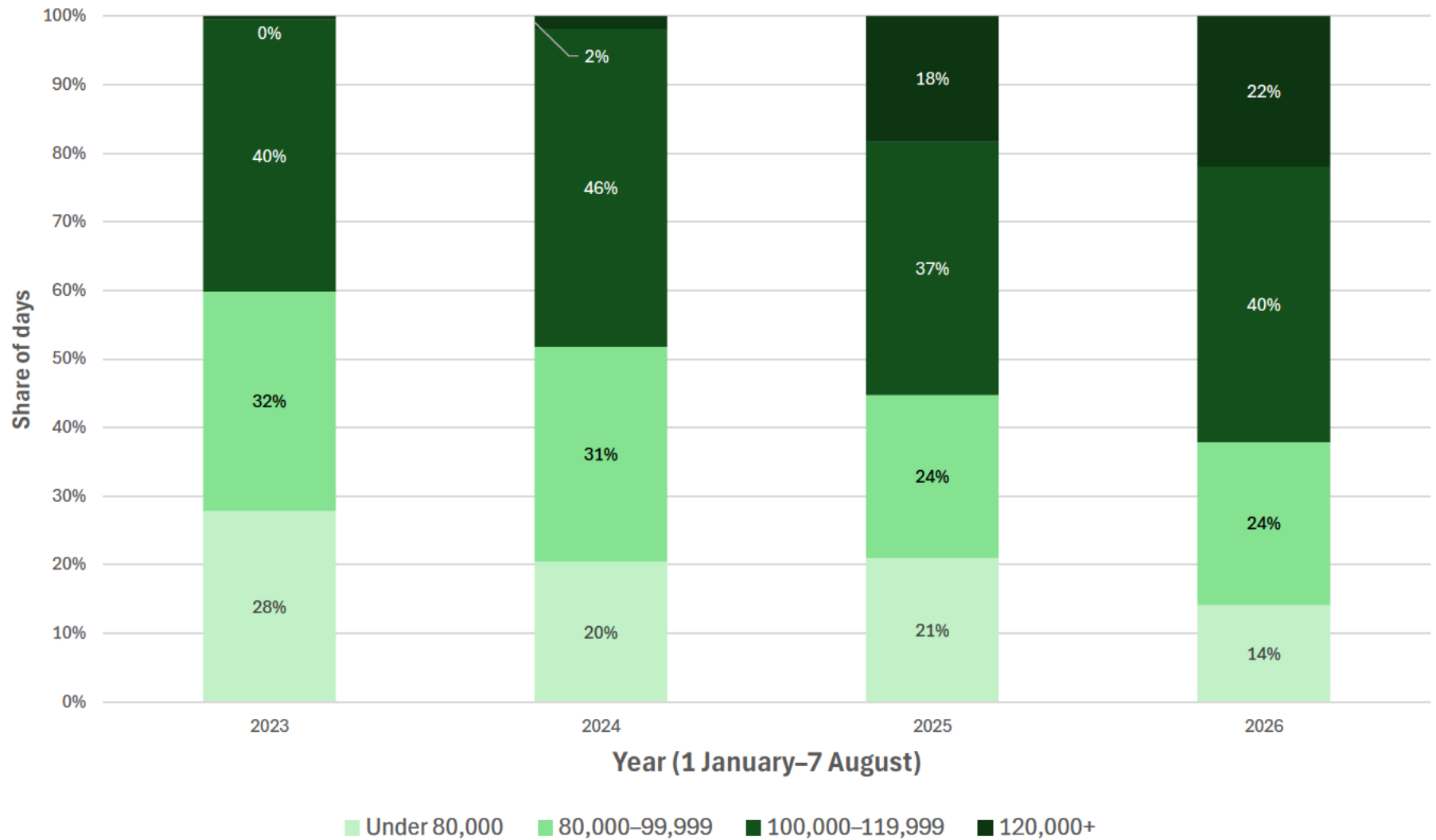
1. **100,000+ days** - Under the winter schedule (Jan 1 – March 29), 19 days are over 100,000 passengers. Under the summer schedule (March 29 – Aug 7), 117 of 131 days with over 100,000. **From 14th May until YTD (Aug. 7) - all days are over 100,000.**
2. **Weekly gap** - Under the winter schedule, the average weekly gap between the lowest and highest passenger day was approx. 39,000 passengers. Under the summer schedule, this reduced to approx. 22,500 passengers.

Year	Lowest day	10 th Percentile	Q1 (P25)	Median	Q3 (P75)	90 th Percentile	Peak
2023	50,242	65,017	77,067	93,605	106,691	112,030	120,850
2024	48,463	63,762	82,707	98,932	110,699	115,282	122,662
2025	48,735	62,967	84,498	103,210	116,682	122,879	129,752
2026	53,090	71,130	90,327	106,931	119,001	125,749	136,707

	% of days	2023	2026
LOW	Bottom 25% of days	$\leq 77,067$	$\leq 90,327$
MEDIUM	Middle 50% of days	77,068 - 106,691	90,328 - 119,001
HIGH	Top 25% of days	$> 106,691$	$> 119,001$

- 1. Lowest day** - The lowest day has not changed significantly - 50,242 in 2023 and 53,090 in 2026.
- 2. 25th Percentile** - The whole bottom end of the scale has moved up. In 2023, the lowest quarter of days ended at 77,067, in 2026 it ended at 90,327. About 75% of 2026 days were above 90k.
- 3. The middle 50%** - A normal day is busier than it used to be. 77,068–106,691 in 2023, 90,328–119,001 in 2026.
- 4. Top 25%** - The top quarter began above 106,691 passengers in 2023, now reached 119,001 in 2026.
- 5. No. of 120,000+ days** - Only 0.5% of days reached that level in 2023, compared to 21.9% in 2026 – one day in five.

Daily Passenger Mix: Lower volume days give way to 120k+ days



Passenger Numbers	2023 Days	2023 % of Days	2024 Days	2024 % of Days	2023→2024 Δ pts	2025 Days	2025 % of Days	2024→2025 Δ pts	2026 Days	2026 % of Days	2025→2026 Δ pts
40,000 - 49,999	0	0.0%	2	0.9%	+0.9%	1	0.5%	-0.5%	0	0.0%	-0.5%
50,000 - 59,999	15	6.8%	14	6.4%	-0.5%	16	7.3%	+0.9%	9	4.1%	-3.2%
60,000 - 69,999	20	9.1%	16	7.3%	-1.9%	14	6.4%	-0.9%	12	5.5%	-0.9%
70,000 - 79,999	26	11.9%	13	5.9%	-6.0%	15	6.8%	+0.9%	10	4.6%	-2.3%
80,000 - 89,999	34	15.5%	33	15.0%	-0.5%	25	11.4%	-3.6%	21	9.6%	-1.8%
90,000 - 99,999	36	16.4%	36	16.4%	-0.1%	27	12.3%	-4.0%	31	14.2%	+1.8%
100,000 - 109,999	49	22.4%	47	21.4%	-1.0%	28	12.8%	-8.6%	39	17.8%	+5.0%
110,000 - 119,999	38	17.4%	55	25.0%	+7.6%	53	24.2%	-0.8%	49	22.4%	-1.8%
120,000 - 129,999	1	0.5%	4	1.8%	+1.4%	40	18.3%	+16.4%	36	16.4%	-1.8%
130,000 - 139,999	0	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	12	5.5%	+5.5%
Total	219	100%	220	100%		219	100%		219	100%	

This table groups each day into 10,000-passenger brackets and demonstrates how the distribution of daily passenger volumes has changed year-on-year. The passenger numbers above are taken from the first 219/220 days of the year from 1 January to 7 August from 2023 – 2026.

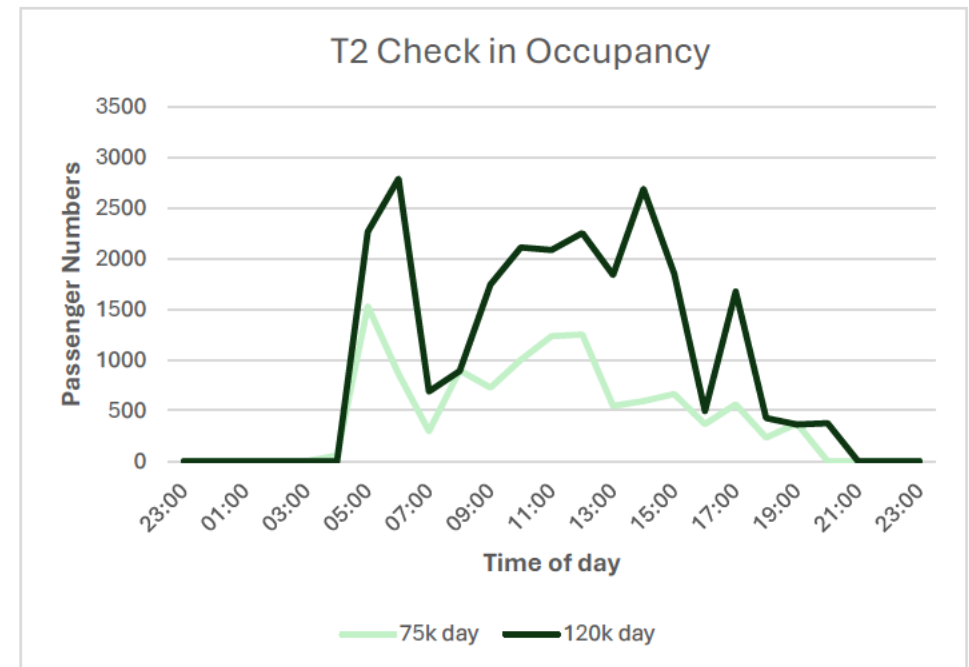
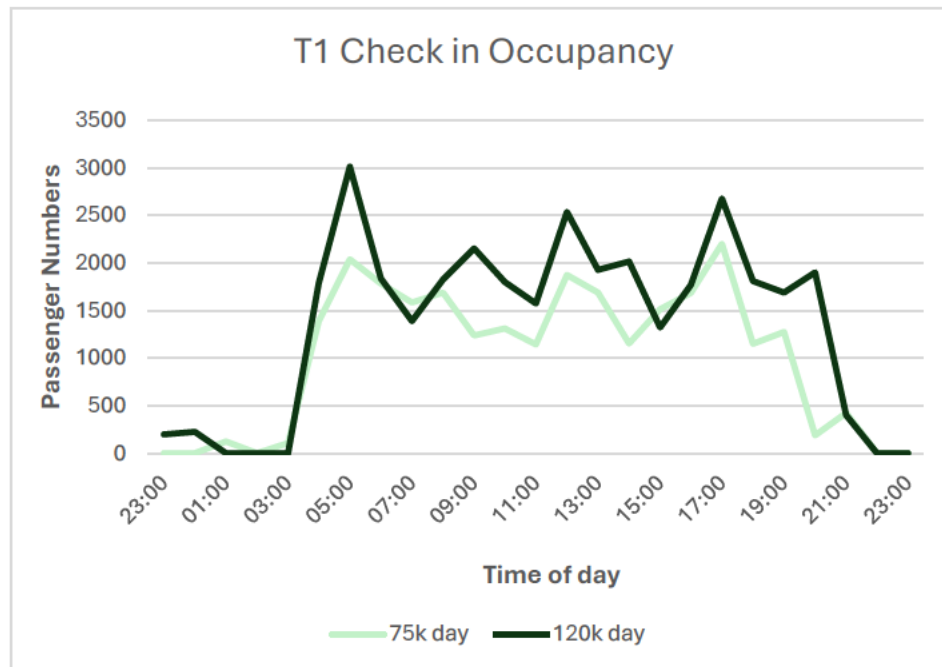
Lower passenger number ranges have reduced, while higher ranges have increased. Pre 2026, daily passenger numbers had never passed 130,000. In 2026 to date, 12 days were in the 130,000 to 139,999 range.

Annex 2 - Number of pax on site per check-in area

Check In

In T1, a 120k day has 5 hours over 2000, 1 hour over 3000. A 75k day has 2 hours over 2000, 0 hours over 3000.

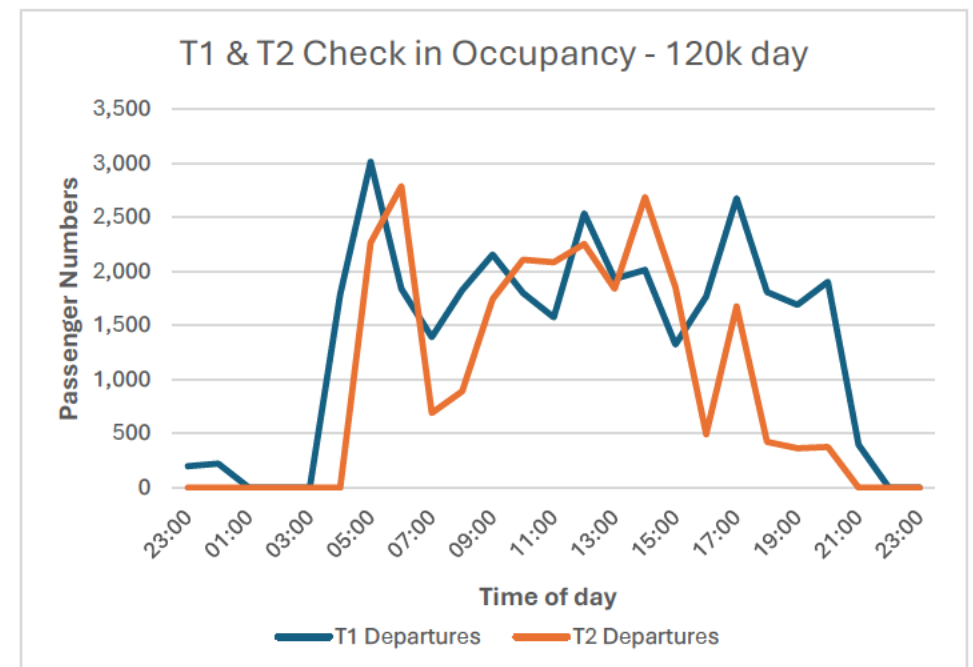
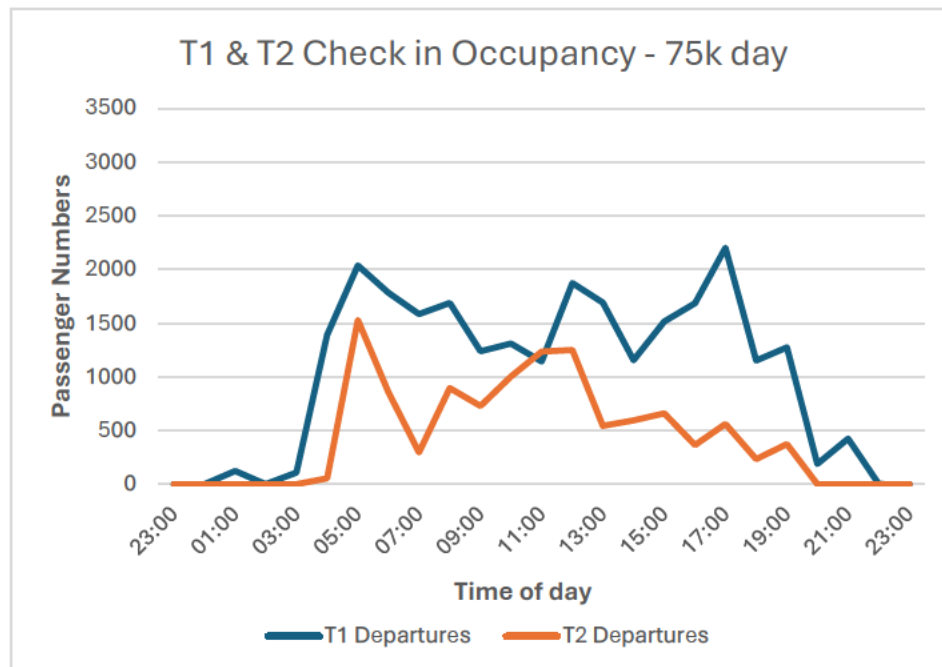
In T2, a 120k day has 6 hours over 2000. A 75k day has 0 hours over 2000, just 4 hours over 1000.



Check In

For a 75k day, T1 is consistently busier across the day, with the exception of 11:00.

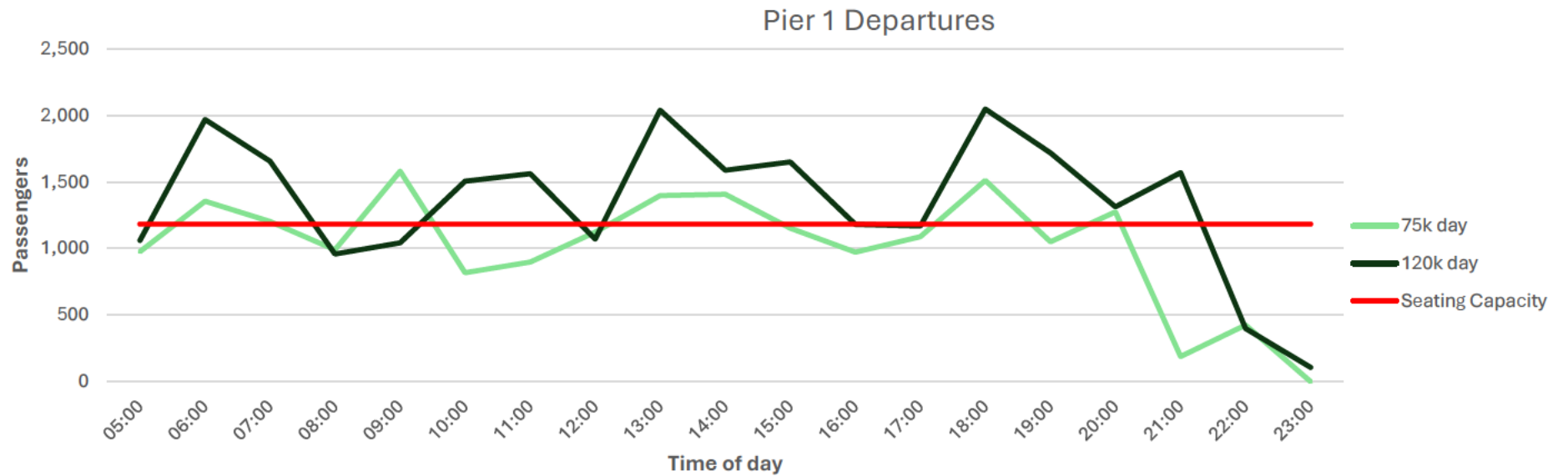
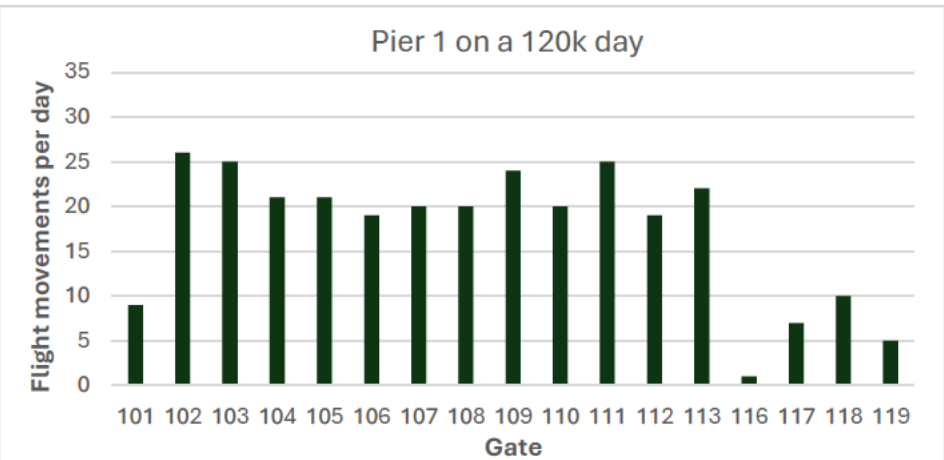
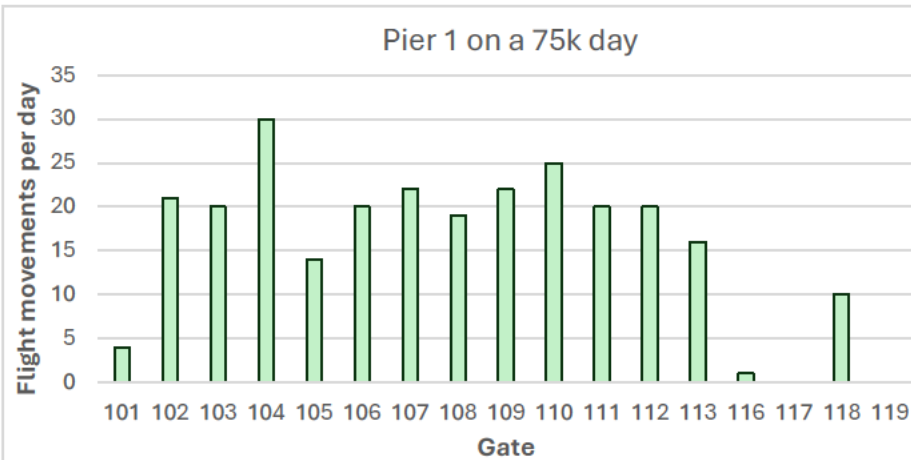
For a 120k day, T1 and T2 both busier hour by hour with extended peaks across the day



Annex 3 - Avg. gate turnover/number of flights per day by pier

Pier 1

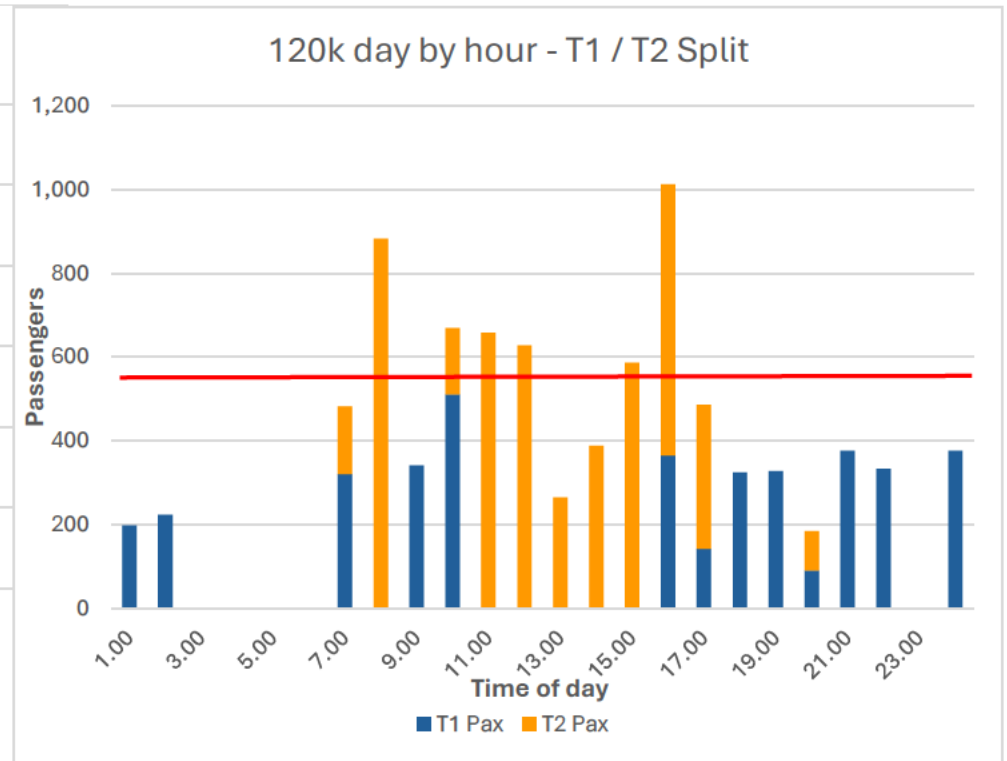
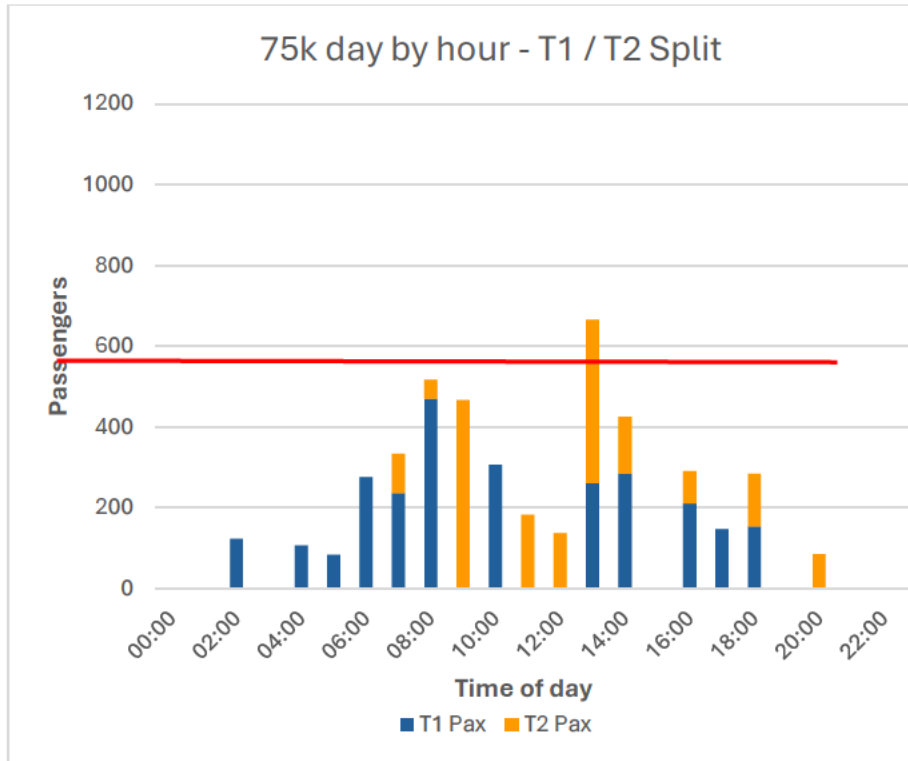
Activity increases from 264 flights on a 75k day, averaging 16 flights per gate, to 294 flights on a 120k day, averaging 19 flights per



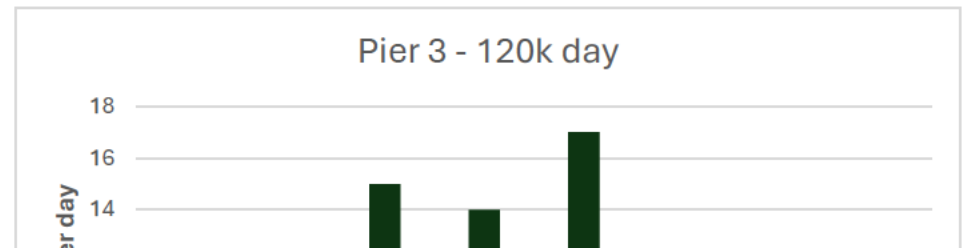
Red line indicates seating capacity in Pier 1 (1,183)

Pier 3

Flight movements rise from 64 flights on a 75k day to 101 flights on a 120k day, with average gate turnover increasing from 8 to 13 flights per gate.



Red line indicates seating capacity in Pier 3 (588)



Total Pier 3 flights 75k day – 64, average per gate = 8

Total Pier 3 flights 120k day – 101, average per gate = 13

Pier 4

On Pier 4, flight activity rises from 93 flights on a 75k day to 140 flights on a 120k day, with average gate turnover increasing from 4 to 6 flights per gate.

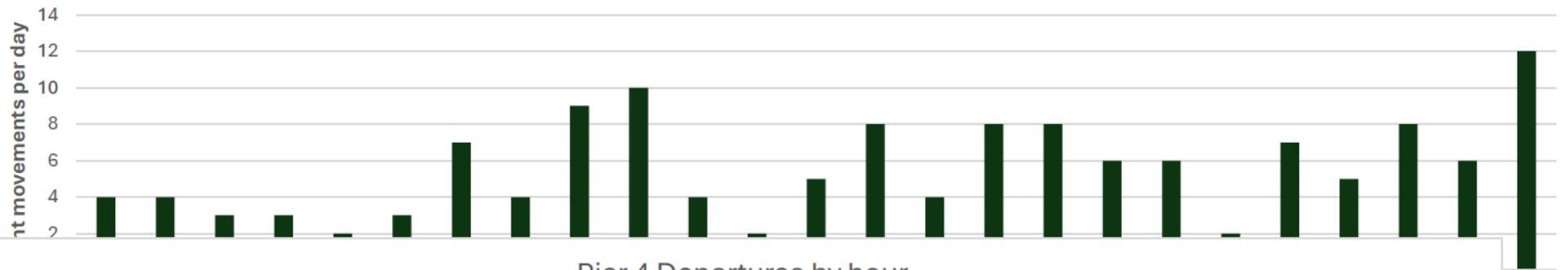
CBP is process and labour heavy. A significant proportion of the day in Pier 4 is spent under CBP operation:

- Swing Gate 2 accounts for 40% of Pier 4, on summer schedule it is in place 07:15 – 16:30.
- Swing Gate 3 accounts for approx. 60% of Pier 4, on summer schedule it is in place 0845 – 1530.
- Swing Gate 4 accounts for approx. 80% of Pier 4, on summer schedule it is in place 0900 – 1530

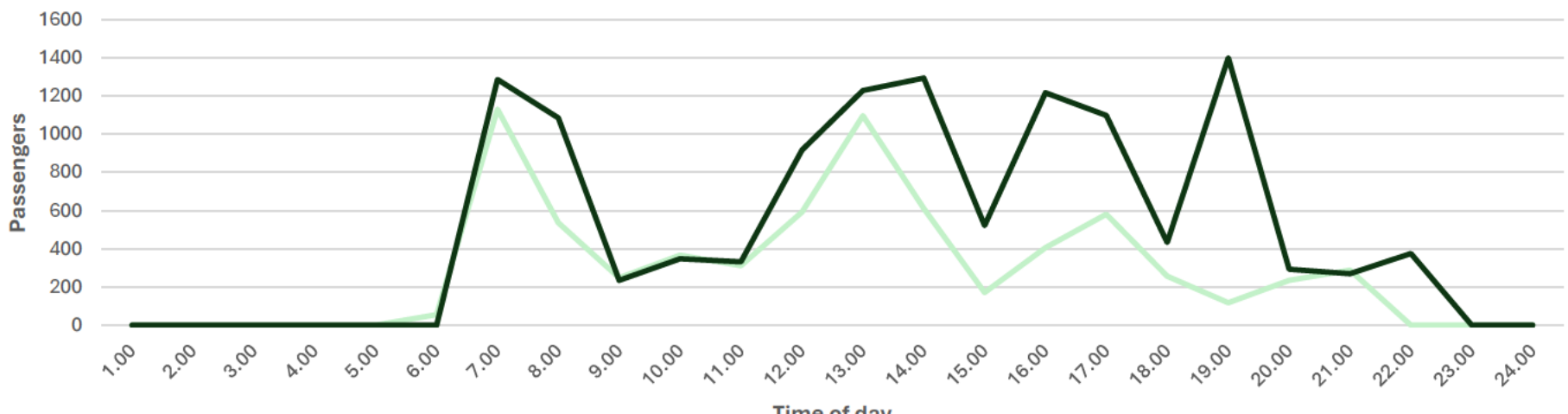
Pier 4 - 75k day



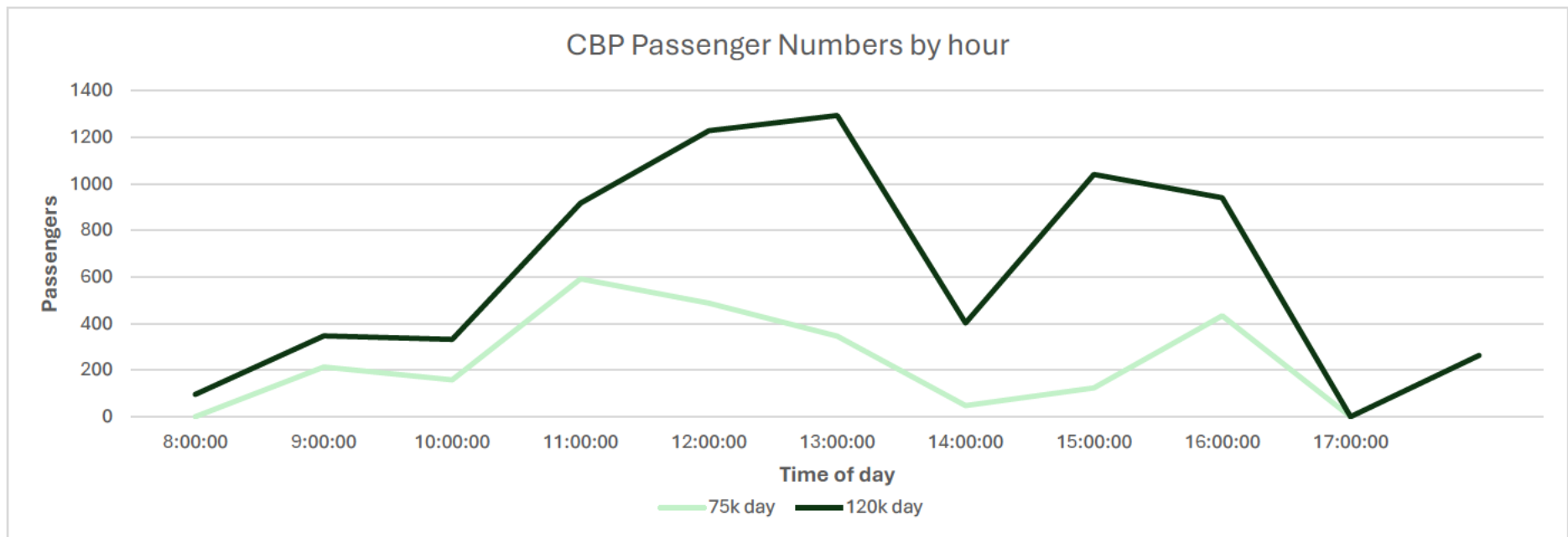
Pier 4 - 120k day



Pier 4 Departures by hour



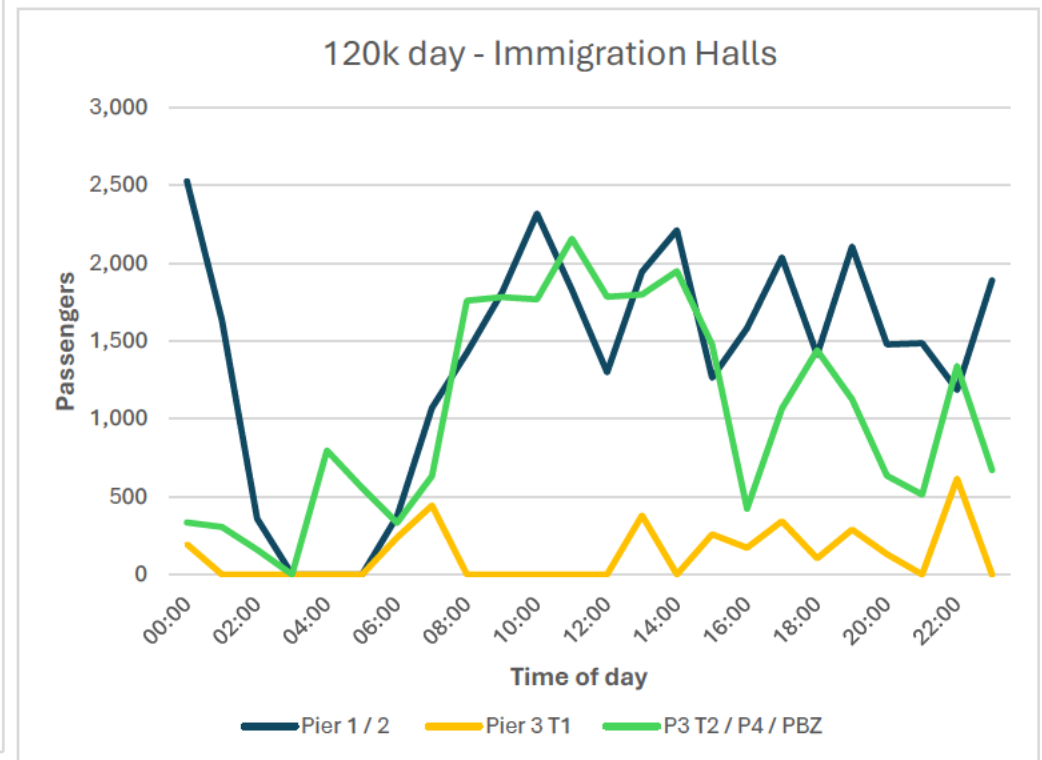
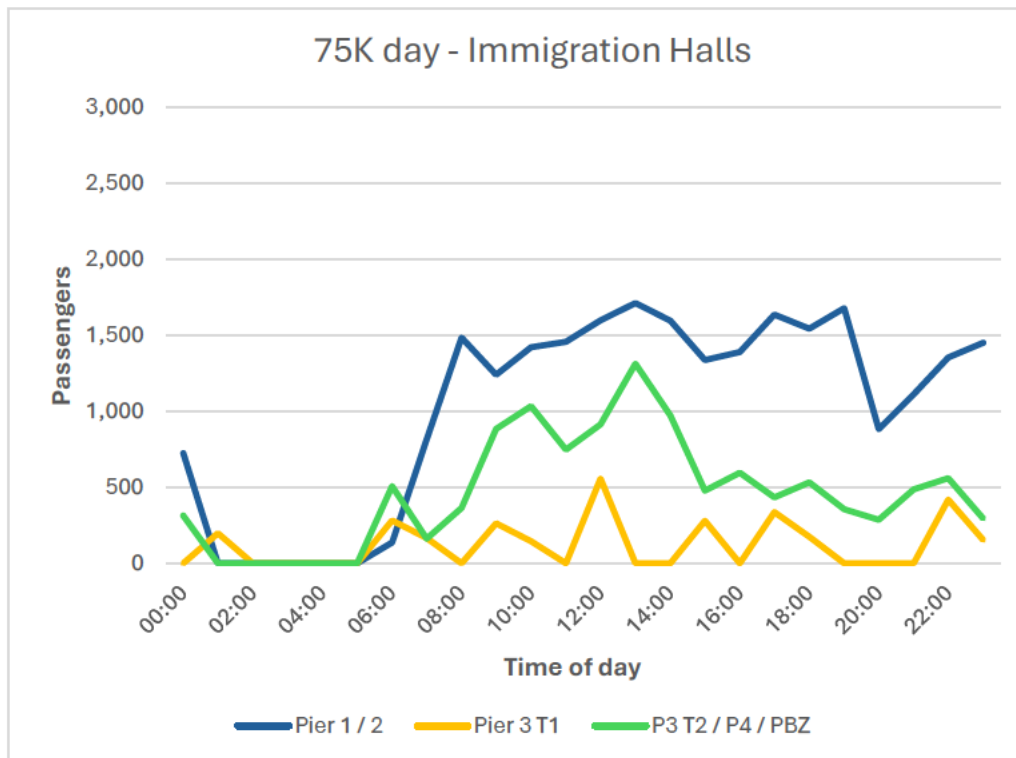
426



Annex 4 – Immigration Pax flow.

Immigration

Arrivals continue to shift later into the night, closing the gap between last arrival and first departure / check in opening.
Pier 1 / 2 Arrivals busiest hour is at 00:00 – 01:00.



Annex 5 – Total transfer numbers by hour

Transfers

Average of 103 transfer passengers per hour on a 75k day versus an average of 355 transfer passengers per hour on a 120k day.

