

Decision
on an
Interim Review of the 2019 Determination
in relation to
2023-2026

Commission Paper 7/2022
23 December 2022

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FOREWORD

This is the third interim review of the 2019 Determination on the maximum levels of airport charges that may be levied at Dublin Airport.¹ It is effective from 1 January 2023. The Commission considers that the profound impact of the Covid-19 pandemic on the assumptions and business plans underpinning the 2019 Determination building blocks clearly constitutes substantial grounds to carry out this third review of the 2019 Determination. The circumstances arising from the pandemic are exceptional by any reasonable metric, and outside the control of daa, the managing body of Dublin Airport. The original regulatory settlements are no longer fit-for-purpose in a number of respects, and, if not adjusted, are likely to run contrary to our statutory objectives, thereby compromising the objectives of the original decision. Accordingly, the Commission has carried out this review and it has decided to amend the 2019 Determination in two principal ways: (i) it states new maximum levels of airport charges for the years 2023 and 2024 and (ii) it extends the duration of the determination by two years and consequently sets out new maximum levels of airport charges for these two years: 2025 and 2026. The manner in which this is done, and the underlying reasons, is explained in detail in the following sections of this document and supporting reports.

As provided for by section 32 of the Aviation Regulation Act 2001, as amended, the Commission engaged in a statutory consultation process with interested parties in relation to its proposals. In making the amendments to the 2019 Determination, the Commission has had due regard to its statutory objectives as set out in section 33 of the Aviation Regulation Act, as amended.² In this decision on the third interim review of the 2019 Determination, the Commission's position as to the acceptance or otherwise of representations made by interested parties has been set out under the relevant topic. I would like to thank all those who have made representations. The views received greatly assisted the Commission in discharging its statutory functions.



David Hodnett
Deputy Commissioner
23 December 2022

¹ As amended by the Varied Determination on the Maximum Level of Airport Charges at Dublin Airport 2020-2024, Commission Paper 5/2020, and the Decision on an Interim Review of the 2019 Determination in relation to 2020 and 2021, Commission Paper 12/2020 and the Decision on an Interim Review of the 2019 Determination in relation to 2022, Commission Paper 3/2021. See <https://www.aviationreg.ie/regulation-of-airport-charges-dublin-airport/2019-determination.841.html>

² Sections 32 and 33 of the Aviation Regulation Act 2001 amended by sections 98 and 99 of the Air Navigation and Transport Act, 2022.

1. Executive Summary

- 1.1 This document sets out our Decision on the Third Interim Review of the 2019 Determination. It amends the regulatory settlement by determining new maximum levels of airport charges for 2023 and 2024, and extends the period of the 2019 Determination by 2 years, setting new maximum levels of airport charges for 2025 and 2026, thus setting the Maximum level of Airport Charges at Dublin Airport for the period starting 1 January 2023 and ending on 31 December 2026. The maximum levels of charges are expressed as an annual euro per passenger yield.³ Airport Charges cover charges for taking off, landing and parking aircraft, using airbridges, arriving and departing passengers and the transportation of cargo.
- 1.2 The two-year extension is provided for in Section 32 of the Aviation Regulation Act, 2001 as amended by Section 98 of the Air Navigation and Transport Act, 2022, which was enacted on the 7 December 2022 and commenced by the Minister of Transport on 22 December 2022.
- 1.3 The 2019 Determination, published in October 2019, set the maximum level of Airport Charges at Dublin Airport for 2020-2024. In early 2020, the onset of the Covid-19 pandemic had an unprecedented impact on the aviation industry, including Dublin Airport. Passenger numbers at Dublin Airport fell by approximately 75% in 2020 and 2021, compared to 2019. The recovery is now underway, and we expect traffic next year to return to 96% of 2019 levels.
- 1.4 This led to our decision to carry out the first Interim Review of the 2019 Determination in 2020, in which we sought to address that impact of the pandemic on the regulatory settlements for 2020 and 2021 in a targeted and proportionate manner.
- 1.5 In 2021, we carried out a second Interim Review which broadly continued this approach into 2022. The scope of both reviews did not include reopening all the underlying assumptions and forecasts to derive new base price caps, however in our decision on the second review we committed to carrying out a third, full, review in 2022. We proposed that the 2022 review would also extend the length of the regulatory period by two years.
- 1.6 This Decision concludes the third interim review. The process included two public consultations. In February 2022, we published an Issues Paper, through which we sought views on our proposed methodologies, and in July 2022, we published our Draft Decision. We received representations from ACI, Aer Lingus, Car Rental Council of Ireland, Dublin Airport, Emerald Airlines, Galway Chamber, IALPA, IATA, ICTU, Joseph Ryan, Limerick Chamber, Ryanair and Shannon Airport, all of which have been considered in arriving at this decision.
- 1.7 In making, or amending, a determination on the maximum level of Airport Charges at Dublin Airport, we are guided by a range of Statutory Objectives and due regard factors. The thrust of these objectives relates to economic efficiency and seeking to maximise the value which Dublin Airport provides to current and future users. Our objectives were amended by the Air Navigation and Transport Act, 2022. Our economic

³ For brevity, throughout this document the maximum levels of airport charges are referred to as the price cap.

efficiency related objectives remain in place, with an additional focus given to promotion of sustainability and climate change related policy.

1.8 In the Draft Decision, published in July 2022, we proposed an average price cap of €8.52 for the period. This could increase by €0.59 on average if Dublin Airport delivered its investment plan to its own timelines. In this decision we are setting an average price cap of €7.59 for the period, which can increase by €0.80 on average if the investment is delivered as planned.⁴ These prices caps exclude the effect of inflation and are set out in Table 1.1.

1.9 In nominal prices (including inflation), for the 4 years 2023 to 2026, we now estimate that Dublin Airport will generate €2.8bn in revenue (€1.4bn from Airport Charges and €1.4bn from Commercial Revenue). This will allow the airport to return to delivering a high quality of service, providing for €1.5bn in operating expenditure and to invest €2.2bn in infrastructure (with further allowance expected to be spent post 2026) to improve the airport's sustainability and increase its capacity to 40m passengers per year. In addition, we expect Dublin Airport to return to strong profitability, generating, in nominal terms, €1.3bn in EBITDA resulting in €0.4bn in profit after tax in the period and we expect this decision will provide for the availability of €124m in dividend payments to Dublin Airport's shareholder.

1.10 The decision differs from the Draft Decision in the following key ways:

- We now expect the traffic recovery to be stronger, particularly in 2023 and 2024, with 2023 passengers at 96% of 2019 levels. Higher passenger numbers result in higher Commercial Revenues and higher Operating Costs, but as the denominator in the price cap formula, it puts downward pressure on the price per passenger.
- We have adjusted our treatment of inflation. We now inflate the price cap for a given year with inflation forecasts for that year. In the current high inflation environment this, all else been equal, increases the revenues from the building blocks and so reduces the requirement for a financeability adjustment.
- We have increased the number of triggered capital projects from 5 to 8. They now total €1.1bn of the capital expenditure, providing a powerful incentive to Dublin Airport to deliver the investment plan in line with their own timelines.
- There have also been numerous other changes which have resulted in higher Opex, higher Commercial Revenues, higher allowances for capital projects and a higher Cost of Capital.

⁴ Unless otherwise stated, all costs and prices are reported in February 2022 prices using the Central Statistics Office's consumer price index (CPI) to convert nominal values into real values.

Table 1.1: Real Price Caps comparison (€)

	2020	2021	2022	2023	2024	2025	2026	Average
2019 Determination								
Original 2019 Determination Base	7.97	7.97	8.24	8.56	8.85			8.32
2019 Determination with reprofiling triggers	7.64	6.44	7.26	7.19	7.13			7.13
Draft Decision on third Interim Review								
Draft Decision Base Price				8.68	8.60	8.29	8.48	8.52
Draft Decision with triggers				8.68	8.91	9.02	9.81	9.11
Final Decision on third Interim Review								
Final Decision Base Price				7.59	7.53	7.48	7.77	7.59
Final Decision with triggers				7.59	7.83	8.57	9.57	8.39
Dublin Airport Proposals								
Dublin Airport Proposals				13.04	13.60	13.89	14.77	13.83

Source: CAR, and the Varied 2019 Determination (in real prices), Dublin Airport Regulatory Proposition addendum. Reprofiling triggers include Terminal 2 Box 2.

- 1.11 As in previous decisions, we state the price caps and most numbers in real prices using the February 2022 price base (i.e. excluding inflation), unless it is otherwise stated that they are nominal (i.e. including inflation). The price cap levied will be in nominal prices. Our treatment of inflation results in our real price cap of €7.59 in 2023 being uplifted to €8.68 to reflect inflation. Table 1.2 shows our estimated price caps in nominal prices (including inflation), using IMF inflation forecasts.

Table 1.2: Nominal Price Caps Comparison (€)

	2023	2024	2025	2026	Average
2022 Decision Base Price (nominal)	8.68	8.87	9.00	9.53	9.02
2022 Decision with triggers (nominal)	8.68	9.23	10.30	11.73	9.98

Source: CAR, and the Varied 2019 Determination (in real prices), Dublin Airport Regulatory Proposition addendum. Reprofiling triggers include Terminal 2 Box 2.

- 1.12 In addition to adjustments for inflation or deflation, the price caps can change for a number of other reasons:
- Two runway triggers remain active and would add about €0.30 and €0.02 when the associated trigger events occur.⁵ We expect the first to enter the price cap in 2024 and the second in 2026.
 - There are triggers associated with €1.1bn of new Capex allowances. While there is uncertainty as to when these will be added to the price cap, based on planned timelines, we expect that €1.80 would be added to the base price cap by 2026.
 - A passthrough mechanism will apply to items for which the cost is largely outside the control of Dublin Airport (e.g., rates and regulatory charges). Upside or downside variation relative to our forecast for these costs will be recoverable

⁵ Exact amounts depend on passenger numbers.

after they have been incurred.

- A Quality of Service system is in place which puts up to €0.36 of the price cap at risk if Dublin Airport fails to reach specified quality targets. Bonuses of up to €0.15 could be added if Dublin Airport's performance exceeds bonus thresholds for certain metrics.

1.13 The average €7.59 base price cap in this decision is most comparable with the average €7.13 price cap including reprofiling triggers in the original 2019 Determination, because the associated projects are not onsite and therefore the reprofiling triggers would be activated. This decision differs from 2019 for a number of reasons. First, while we expect traffic to recover strongly, we are forecasting passenger numbers to be significantly lower than the forecast in 2019. Second, revised timelines on capital investments resulted in less capital expenditure in 2020 to 2022 and less expected in 2023 and 2024. Finally, increased inflation expectations have increased expected revenue and therefore reduced the requirement for a financeability adjustment.

Operational Difficulties at Dublin Airport in 2022

1.14 Like many other airports and aviation stakeholders in 2022, returning to pre-pandemic levels of passenger traffic in Summer 2022 posed a significant operational challenge to Dublin Airport. At times, key quality indicators such as security queue times have frequently exceeded our 30-minute target, on a number of occasions by a large margin. Such issues are complex in nature with multiple causes. Performance since the Summer has improved, with queue times more in line with pre-pandemic standards.

1.15 This review covers the period 2023 to 2026, and we expect Dublin Airport to provide high-quality service throughout the period, as it did pre-pandemic. Therefore, from the start of 2023 we have fully reinstated the Quality of Service regime (with some minor adjustments discussed in Section 13), which will further incentivise this outcome.

1.16 We have provided for operating cost allowances to enable Dublin Airport to achieve the required level of service quality.

Approach to Regulation

1.17 We have not changed our general approach to regulation as part of this review. We follow the approach of the 2019 Determination and previous determinations, amending and setting individual price caps for each year using the Regulatory Asset Base (RAB) based building block approach. For each building block, we use forecasts to arrive at targets.

1.18 As part of this review, we consulted on changing the risk allocation given the uncertainty created by the pandemic. No stakeholder supported such a change. We therefore continue to assign most risk within the period to Dublin Airport. We have concluded that, firstly, Dublin Airport is the party best able to manage these risks and secondly, this allocation of risk creates powerful incentives for Dublin Airport to outperform our targets. Extreme events, such as a pandemic, are best handled by way of interim reviews rather than seeking to develop an *ex-ante* mechanism. With our risk allocation, any outperformance is retained by the airport within the period and redistributed to users in the following period. Underperformance within the period is

funded by Dublin Airport.

Passenger Forecasts

- 1.19 Our passenger volume forecast is 31.7m in 2023, increasing to 35.7m by 2026. Reflecting the continued strong recovery in recent months, this is c1.5m passengers higher than the Draft Decision in each of 2023 and 2024 and c0.5m higher in 2025 and 2026.
- 1.20 Our forecast methodology for 2023 and 2024 uses the Eurocontrol October 'Base' (i.e. the centreline position) forecast for Ireland, together with aircraft load factors in line with 2019 levels. For 2025 and 2026, as proposed in the Draft Decision, our forecast reverts to our long-established GDP elasticity based approach.

Operating Costs

- 1.21 In order to improve the quality of service delivered, we expect Dublin Airport to increase operating costs from €286m in 2022 to €305m in 2023 and continue to increase to €328m by 2026. These numbers are in real prices and do not include increases due to inflation (prices and wages). When inflation is included, we expect Dublin Airport to increase operating costs to €349m in 2023 and €403m by 2026.
- 1.22 On staff numbers, in 2021 Dublin Airport had 1,943 Full Time Equivalent (FTEs). As traffic is now recovering strongly, we expect that this will increase over the regulatory period. We have estimated that a total of 2,611 FTEs will be required in 2023, increasing to 2,720 by 2026. Security screening makes up a large part of this, we forecast 866 security FTEs will be required in 2023 compared to the average number of c700 in place across 2022. However, it should be noted that we do not dictate a particular staffing number or indeed wage level; Dublin Airport has flexibility to decide how best to deliver the required service.
- 1.23 There have been a number of changes in Opex from the Draft Decision, with many offsetting each other. Our final forecast is c€6m higher than the draft for 2023 and 2024 (driven partially by our higher passenger number forecast), but close to the draft forecast for 2025 and 2026.
- 1.24 We commissioned CEPA/Taylor Airey to update and extend its 2019 bottom-up assessment of Dublin Airport's operating costs. This is a comprehensive study which examines all aspects of Dublin Airport's business and establishes an achievable level of efficient costs for the period.

Commercial Revenues

- 1.25 With the recovery of passenger traffic, we expect performance on Commercial Revenues to return to pre-pandemic levels. Our target for 2023 is €276m growing to €330m in 2026.
- 1.26 Our forecasts are higher than the Draft Decision which forecast €259m in 2023 and €319m in 2029. The three main reasons for this are, first, higher passenger numbers drive higher revenues, second, we have corrected our estimate of US Preclearance revenue and third we use a more granular methodology to assess the impact of Brexit

on duty free retail revenues.

- 1.27 We generally expect passengers to return to pre pandemic behaviour in the short term. Therefore, for most categories of Commercial Revenue, we use 2019 per passenger yield as the base from which we forecast 2023 revenues. We then grow the revenues from that base using econometric modelling, establishing relationships between categories of Commercial Revenue and drivers. The main drivers are passenger numbers and GDP. Our forecasts also include adjustments for the impacts of capital investment for which we have made allowances.

Cost of Capital

- 1.28 We commissioned Swiss Economics to update its 2019 report on the Cost of Capital. Taking the advice of Swiss Economics, we have set a real Cost of Capital of 4.35%, which is higher than the 4.22% used in the Draft Decision. There have been movements in both the cost of equity and the cost of debt since July, but they offset each other to a certain extent. The real cost of debt is lower because of higher inflation reducing the real cost of Dublin Airport's existing debt. This is more than offset by the real cost of equity being higher because of our higher estimate of the equity beta. The change in the beta is primarily driven by the removal of some airports from the sample due to data reliability issues.

Capital Expenditure

- 1.29 We estimate capital costs (depreciation and return on capital) to increase from €203m in 2023 to €343m in 2026 (in the triggered scenario). We support Dublin Airport's investment programme, concluding that it is in the interests of airport users (except for one project). Overall, we allow for over €2.1bn (nominal) of investment by Dublin Airport across the four years. The total allowed value of the investment plan is c€3bn, but some of this is not expected to be spent until after 2026. The investment will increase the capacity of the airport to 40 million passengers per annum, improve the commercial offerings throughout and renew older infrastructure. In addition, a new group of Sustainability projects includes €425m of project allowances which are designed to enable the airport to meet its environmental and emissions targets.
- 1.30 We have added trigger conditions to €1.1bn of Capex which is therefore not remunerated in the base price cap. Compared to the Draft Decision there are 3 additional triggered projects, bringing the total to 8. The trigger projects are capacity projects which include the major north and south apron developments. Some of these projects have uncertain timelines due to the planning process which needs to be completed, and/or will be complex to deliver from an operational perspective.

Financing, Risk and Financial Viability

- 1.31 We engaged Centrus to assist in the assessment of financeability. The report concludes: 1) The Dublin Airport regulated entity would likely have a standalone credit rating very similar to the daa group; 2) Dublin Airport should be able to raise the required debt in the period with a minimum BBB+ credit rating, FFO/Net Debt in the mid-teens and Net Debt/EBITDA of less than 6.0x; 3) Additional downside protection would be achieved if we enabled a path to a Debt/EBITDA of less than 5.0x.

- 1.32 We implement the advice of Centrus in two ways. First, to enable the financeability of the untriggered Capex we have brought €2.2m of depreciation from future periods into this period. This is much less than the €61m of accelerated depreciation in the Draft Decision. This is primarily because our change in methodology for inflation adjustments, and generally higher inflation forecasts, have improved the financial metrics delivered by the building blocks. Second, in relation to the financeability of the triggered Capex, as in the Draft Decision, we set the first tranche of remuneration of triggered projects to a level sufficient such that the Net Debt/EBITDA ratio is forecast to remain under 5.0x in the downside protection scenario. That is, 80% of the remuneration commences the year after the project has received full planning permission and it is on site, with the remainder added once the project is in operational use.
- 1.33 Our approach to financeability strikes an appropriate balance between enabling the financeability of the regulatory settlements and ensuring users do not bear unnecessary costs in the process.

Quality of Service

- 1.34 From 1 January 2023 we reinstate a comprehensive Quality of Service regime. We expect the performance of Dublin Airport to meet the level expected by passengers. We are providing for sufficient operating costs to enable this, and if Dublin Airport does not meet the standards set there will be downward adjustments to the price cap, with a maximum of €0.36 at risk (or about €12m of revenue per year). Metrics assessed include wait times at central security, wait times for passengers requiring additional assistance, passenger satisfaction survey scores, and asset uptime and availability.
- 1.35 We held a workshop with the Passenger Advisory Group prior to finalizing our decision, and their advice has informed our approach to Quality of Service and our Capex allowances.⁶ The decision on Quality of Service is largely in line with the Draft Decision.

Dublin Airport's Proposition

- 1.36 There is a significant difference between the average price cap we have set, which is €8.39 with triggers or €7.59 without, and the average €13.83 as per Dublin Airport's proposal we received on 30 June. In Dublin Airport's response to our Draft Decision it updated its position on a number of building blocks including passenger numbers, operating costs, and capital costs, but did not include revised price cap proposals.

⁶ <https://www.aviationreg.ie/regulation-of-airport-charges-dublin-airport/passenger-advisory-group.874.html>

2. Maximum Levels of Airport Charges at Dublin Airport for 2020-2026

- 2.1 In accordance with Section 32 of the Aviation Regulation Act 2001, as amended by section 98 of the Air Navigation and Transport Act, 2022, the Commission for Aviation Regulation, considering that there are substantial grounds for so doing, has reviewed the Determination on the Maximum Level of Airport Charges at Dublin Airport 2020-2024, Commission Paper 8/2019 of 24 October 2019, as amended.⁷ This is the third review decision in relation to the 2019 Determination in response to the impact of the Covid-19 pandemic on air transport at Dublin Airport. It is effective from 1 January 2023.
- 2.2 The Commission has decided to amend the 2019 Determination in two principal ways: (i) it states new maximum levels of airport charges for the years 2023 and 2024 and (ii) it extends the duration of the determination by two years and consequently sets out new maximum levels of airport charges for these two years: 2025 and 2026. The price caps set out below for 2020, 2021, and 2022 are restatements of the price caps for those years. They have not been amended in this interim review decision.
- 2.3 Accordingly, the Commission hereby determines that the maximum levels of airport charges that may be levied by daa at Dublin Airport in the period 1 January 2020 to 31 December 2026 shall be as set out below.
- 2.4 daa shall ensure that, for the regulatory period of the calendar year 2020, the level of revenue accruing to daa per service unit for each airport charge set out in Table 2.1 shall not exceed the levels specified in Table 2.1. For the regulatory period of the calendar year 2020, daa shall ensure that the level of revenue accruing to daa from airport charges other than those set out in Table 2.1 is not greater than zero.
- 2.5 daa shall ensure that, for each year of the regulatory period 2021 to 2026, the level of revenue collected from airport charges accrued in that year, expressed as a per passenger yield, does not exceed the maximum permitted revenue per passenger (P_t), as set out by the following formulae.
- 2.6 In the event that daa should collect more than permitted, it shall arrange to rebate users within 90 days of the year ending a sum sufficiently large such that revenues collected, net of this sum, do not exceed the maximum permitted level or levels.

Regulatory Period 1 January 2020 to 31 December 2020

- 2.7 Referring to Table 2.1, for the regulatory period running from 1 January 2020 to 31 December 2020, daa shall charge airport users airport charges such that for each airport charge in column A, for each category of airport charge in column B (with the units of measurement in all cases as set out in column C):
- for the period 1 January 2020 to the 28 March 2020 the accrued revenues per unit in column D are not exceeded;

⁷ As amended by the Varied Determination on the Maximum Level of Airport Charges at Dublin Airport 2020-2024, Commission Paper 5/2020, and the Decision on an Interim Review of the 2019 Determination in relation to 2020 and 2021, Commission Paper 12/2020 and the Decision on an Interim Review of the 2019 Determination in relation to 2022, Commission Paper 3/2021. See <https://www.aviationreg.ie/regulation-of-airport-charges-dublin-airport/2019-determination.841.html>

- for the period 29 March 2020 to 24 October 2020 the accrued revenues per unit in column E are not exceeded; and
- from 25 October 2020 to 31 December 2020 the accrued revenues per unit in column F are not exceeded.

Table 2.1: 2020 Price Caps

Column A	Column B	Column C	Column D	Column E	Column F
Airport Charge	Type	Service Unit	Cap on Accrued Revenue per unit from 1 January 2020 to the 28 March 2020	Cap on Accrued Revenue per unit from 29 March 2020 to 24 October 2020	Cap on Accrued Revenue per unit from 25 October 2020 to 31 December 2020
Runway movement charge	Band 1 – Tonnes from 0 to 175 tonnes for a single aircraft	per tonne	€4.10	€5.50	€2.15
	Band 2 -Tonnes in excess of 175 tonnes for a single aircraft	per tonne	€3.30	€1.50	€0.00
Aircraft parking (by stand type)	Wide/Contact	Per 15 minutes or part thereof	€34.90	€34.90	€34.90
	Narrow/Contact	Per 15 minutes or part thereof	€27.90	€27.90	€27.90
	Wide/Remote	Per 15 minutes or part thereof	€9.60	€9.60	€9.60
	Narrow/Remote	Per 15 minutes or part thereof	€7.70	€7.70	€7.70
	Wide/Satellite	Per 15 minutes or part thereof	€33.10	€33.10	€33.10
	Narrow/Satellite	Per 15 minutes or part thereof	€26.50	€26.50	€26.50
	Light Aircraft parking areas	Per 15 minutes or part thereof	€2.65	€2.65	€2.65
	Long term remote	per day of part thereof	€180.00	€180.00	€180.00
Airbridge use	N/A	Per 15 minutes or part thereof	€7.35	€7.35	€7.35
Passenger charge	Departure on a contact stand	per departing passenger	€10.69	€9.80	€7.25
	Departure on a remote stand	per departing passenger	€7.69	€5.20	€2.65
	Departure on a satellite stand	per departing passenger	€10.19	€8.80	€6.25
	Transfer passengers	per departing passenger	€2.00	€2.00	€2.00
PRM charge (passenger charge)	N/A	Per departing passenger	€0.56	€0.58	€0.58
Fast-track change (passenger charge)	N/A	Per Fast-track passenger	€0.80	€0.80	€0.80

Regulatory Period 1 January 2021 to 31 December 2021

- 2.8 The maximum permitted yield per passenger for the regulatory period 1 January 2021 to 31 December 2021 shall be equal to:

$$P_{2021} = \text{€ } 7.50$$

Regulatory Period 1 January 2022 to 31 December 2022

- 2.9 The maximum permitted yield per passenger for the regulatory period 1 January 2022 to 31 December 2022 shall be equal to:

$$P_{2022} = (\text{€ } 7.75 - QS_{2022}) * (1 + CPI_{2021})$$

Where:

CPI_{2021} is the percentage change (whether positive or negative) in the consumer price index between February 2019 and October 2021.

Where:

$$QS_{2022} = \text{Minimum} ((A + B + C + D), \text{€}0.11)$$

Where:

$A = \text{€}0.0025$ * the number of days that the time passengers spend in security queue was less than 20 minutes 0 seconds less than 70% of the time but the maximum time passengers spend in security queue was less than 30 minutes 0 seconds

$B = \text{€}0.005$ * the number of days that the maximum time passengers spend in security queue was more than or equal to 30 minutes and 0 seconds but less than 45 minutes and 0 seconds

$C = \text{€}0.01$ * the number of days that the maximum time passengers spend in security queue was more than or equal to 45 minutes 0 seconds

$D = \text{€}0.01$ if, in total for the year, less than 95% of pre-notified departing passengers with reduced mobility or disabilities were assisted from the terminal reception point within 15 minutes; or if less than 95% of non-pre-notified departing passengers with reduced mobility or disabilities were assisted from the terminal reception point within 20 minutes; or if less than 93% of pre-notified arriving passengers with reduced mobility or disabilities were assisted from aircraft to terminal holding point within 10 minutes; or if less than 93% of non-pre-notified arriving passengers with reduced mobility or disabilities were assisted from aircraft to terminal holding point within 15 minutes; or less than 98% of pre-notified departing passengers with reduced mobility or disabilities were assisted from the terminal reception point within 20 minutes; or if less than 98% of non-pre-notified departing passengers with reduced mobility or disabilities were assisted from the terminal reception point within 30 minutes; or if less than 98% of pre-notified arriving passengers with reduced mobility or disabilities were assisted from aircraft to terminal holding point within 15 minutes; or if less than

98% of non-pre-notified arriving passengers with reduced mobility or disabilities were assisted from aircraft to terminal holding point within 20 minutes

Regulatory Period 1 January 2023 to 31 December 2023

2.10 The maximum permitted yield per passenger for the regulatory period 1 January 2023 to 31 December 2023 shall be equal to:

$$P_{2023} = (\text{€}7.59 + \text{Trigger}_{2023} - \text{QS}_{2023}) * (1 + \text{CPI}_{\text{HISTORIC}}) * (1 + \text{CPI}_{\text{FORECAST}})$$

Where:

$$\text{Trigger}_{2023} = \text{M2} + \text{M3} + \text{Sum}(\text{Type A}) + \text{Sum}(\text{Type B})$$

Where:

Triggers 2023	Description	Amount	Enters the formula if:
M2	North Runway	€0.32	North Runway fully operational and Dublin Airport provides CAR with evidence of accomplishment as set out in CP4/2017 ⁸ by 31 December 2022
M3	North Runway	€0.02	House buyout is complete, and Dublin Airport provides CAR with evidence of accomplishment as set out in CP4/2017 by 31 December 2022
Type A ₁	Terminal 1 Central Search – Relocation to Mezz Level	€0.10	2023 B ₁ trigger is not active Full planning permission received, and project is on-site by 31 December 2022
Type A ₂	Terminal 1 Departure Lounge (IDL) Reorientation & Rehabilitation	€0.08	2023 B ₂ trigger is not active Full planning permission received, and project is on-site by 31 December 2022
Type A ₃	New Pier 5 (T2 & CBP Enabled)	€0.46	2023 B ₃ trigger is not active Full planning permission received, and project is on-site by 31 December 2022
Type A ₄	Expansion of US Pre-Clearance Facilities	€0.12	2023 B ₄ trigger is not active Full planning permission received, and project is on-site by 31 December 2022
Type A ₅	South Apron Expansion	€0.28	2023 B ₅ trigger is not active Full planning permission received, and project is on-site by 31 December 2022
Type A ₆	North Apron Developments – Pier 1 extension and Apron 5H PBZ	€0.31	2023 B ₆ trigger is not active Full planning permission received, and project is on-site by 31 December 2022
Type A ₇	West Apron Vehicle Underpass- Pier 3 Option	€0.30	2023 B ₇ trigger is not active Full planning permission received, and project is on-site by 31 December 2022
Type A ₈	South Apron Airside Support Centre	€0.02	2023 B ₈ trigger is not active Full planning permission received, and project is on-site by 31 December 2022
Type B ₁	Terminal 1 Central Search – Relocation to Mezz Level	€0.13	Operational by 31 December 2022
Type B ₂	Terminal 1 Departure Lounge (IDL) Reorientation & Rehabilitation	€0.10	Operational by 31 December 2022
Type B ₃	New Pier 5 (T2 & CBP Enabled)	€0.58	Operational by 31 December 2022
Type B ₄	Expansion of US Pre-Clearance Facilities	€0.16	Operational by 31 December 2022
Type B ₅	South Apron Expansion	€0.35	Operational by 31 December 2022

⁸ www.aviationreg.ie/_fileupload/Decision%20MASTERCOPY%202017-04-28.pdf

Type B ₆	North Apron Developments – Pier 1 extension and Apron 5H PBZ	€0.39	Operational by 31 December 2022
Type B ₇	West Apron Vehicle Underpass-Pier 3 Option	€0.37	Operational by 31 December 2022
Type B ₈	South Apron Airside Support Centre	€0.03	Operational by 31 December 2022

Where:

$CPI_{HISTORIC}$ is the percentage change (whether positive or negative) in the consumer price index between February 2022 and October 2022.

$CPI_{FORECAST}$ is the projected percentage change (whether positive or negative) in the consumer price index from 2022 full-year to 2023 full-year based on the most recent projection produced by the International Monetary Fund⁹.

Where:

$$QS_{2023} = (QS_{REBATE, 2023}) - (QS_{BONUS, 2023})$$

Where:

$$QS_{REBATE, 2023} = \text{Minimum} ((A + B + C + D + E + F + G + H + I + J + K + L + M + N + O + P), \text{€}0.21) + \text{Minimum} ((Q_1 + R_1 + S_1 + T_1 + U_1 + V_1 + W_1 + X_1), \text{€}0.07) + \text{Minimum} ((Y_1 + Z_1 + AA_1), \text{€}0.04) + \text{Minimum} ((AB_1 + AC_1 + AD_1), \text{€}0.04)$$

$$QS_{BONUS, 2023} = \text{Minimum} ((Q_2 + R_2 + S_2 + T_2 + U_2 + V_2 + W_2 + X_2), \text{€}0.07) + \text{Minimum} ((Y_2 + Z_2 + AA_2), \text{€}0.04) + \text{Minimum} ((AB_2 + AC_2 + AD_2), \text{€}0.04)$$

Where:

$A = \text{€}0.005$ * the number of days that the time passengers spend in security queue was less than 20 minutes 0 seconds less than 70% of the time but the maximum time passengers spend in security queue was less than 30 minutes 0 seconds

$B = \text{€}0.01$ * the number of days that the maximum time passengers spend in security queue was more than or equal to 30 minutes and 0 seconds but less than 45 minutes and 0 seconds

$C = \text{€}0.02$ * the number of days that the maximum time passengers spend in security queue was more than or equal to 45 minutes 0 seconds

$D = \text{€}0.01$ if, in total for the year, less than 98% of pre-notified departing passengers with reduced mobility or disabilities were assisted from an external point within the airport campus within 10 minutes and at least 0.1% of PRMs used the "assistance from external point" service; or if less than 98% of non-pre-notified departing passengers with reduced mobility or disabilities were assisted from an external point within the airport campus within 20 minutes and at least 0.1% of PRMs used the "assistance from

⁹ <https://www.imf.org/en/Publications/WEO>

external point” service; or if less than 95% (but at least 90%) of pre-notified departing passengers with reduced mobility or disabilities were assisted from the terminal reception point within 15 minutes; or if less than 98% (but at least 91%) of pre-notified departing passengers with reduced mobility or disabilities were assisted from the terminal reception point within 20 minutes; or if less than 95% of non-pre-notified departing passengers with reduced mobility or disabilities were assisted from the terminal reception point within 20 minutes; or if less than 98% of non-pre-notified departing passengers with reduced mobility or disabilities were assisted from the terminal reception point within 30 minutes.

$E = €0.02$ if, in total for the year, less than 90% of pre-notified departing passengers with reduced mobility or disabilities were assisted from the terminal reception point within 15 minutes; or if less than 91% of pre-notified departing passengers with reduced mobility or disabilities were assisted from the terminal reception point within 20 minutes.

$F = €0.01$ if, in total for the year, less than 93% of pre-notified arriving passengers with reduced mobility or disabilities were assisted from aircraft to terminal holding point within 10 minutes; or if less than 98% of pre-notified arriving passengers with reduced mobility or disabilities were assisted from aircraft to terminal holding point within 15 minutes; or less than 93% of non-pre-notified arriving passengers with reduced mobility or disabilities were assisted from the terminal reception point within 15 minutes; or if less than 98% of non-pre-notified arriving passengers with reduced mobility or disabilities were assisted from the terminal reception point within 20 minutes.

$G = €0.01$ * the number of times where access to the outbound baggage belt system, in a terminal that has not fully implemented hold baggage screening standard 3 (HBS3), is denied to an airline or airlines more than 30 minutes after the request due to a single event system failure; or when the outcome of delivering departing bags through the outbound baggage system, in a terminal that has fully implemented HBS3, is denied to an airline or airlines for more than 30 minutes after the request due to a single event system failure.

$H = €0.01$ * the number of times where access to the inbound baggage belt system, in a terminal that has not fully implemented hold baggage screening standard 3 (HBS3), is denied to an airline or airlines more than 30 minutes after the request due to a single event system failure; or when the outcome of delivering arriving bags through the inbound baggage system, in a terminal that has fully implemented HBS3, is denied to an airline or airlines more than 30 minutes after the request due to a single event system failure.

$I = €0.01$ * the number of months when Fixed Electric Ground Power (FEGP) is available, for new units, on average less than 93.5% of operational time, and, for old units, on average less than 98% of operational time.

$J = €0.005$ * the number of months when Fixed Electric Ground Power (FEGP) is available, for old units, on average less than 99% but greater than or equal to 98% of operational time in Q3 and Q4 only.

$K = \text{€}0.01$ * the number of months when the Advanced Visual Docking Guidance System (AVDGS) is available, for new units, on average less than 93.5% of operational time and, for old units, on average less than 98% of operational time.

$L = \text{€}0.005$ * the number of months when the Advanced Visual Docking Guidance System (AVDGS) is available, for old units, on average less than 99% but greater than or equal to 98% of operational time.

$M = \text{€}0.01$ * the number of quarters where passenger-facing escalators, lifts and travellers in Terminal 2 are available, on average less than 98% of the time.

$N = \text{€}0.005$ * the number of quarters where passenger-facing escalators, lifts and travellers in Terminal 2 are available, on average less than 99% but greater or equal to 98% of the time in Q3 and Q4 only.

$O = \text{€}0.01$ * the number of quarters where self-service check-in kiosks and bag drop machines are available, on average less than 98% of the time.

$P = \text{€}0.005$ * the number of quarters where self-service check-in kiosks and bag drop machines are available, on average less than 99% but greater or equal to 98% of the time.

$Q_1 = \text{€}0.01$ in a year where Dublin Airport scores less than 9.0 in the 'satisfaction with assistance for mobility or sensory impairment' measure of the Customer Service Monitor survey of Dublin Airport in 2023.

$Q_2 = \text{€}0.01$ in a year where Dublin Airport scores at least 9.5 in the 'satisfaction with assistance for mobility or sensory impairment' measure of the Customer Service Monitor survey of Dublin Airport in 2023.

$R_1 = \text{€}0.01$ * the number of quarters where Dublin Airport scores less than 8.5 in the 'courtesy and helpfulness of security staff' measure on the Customer Service Monitor survey of Dublin Airport in 2023 for departing passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

$R_2 = \text{€}0.01$ * the number of quarters where Dublin Airport scores at least 9.3 in the 'courtesy and helpfulness of security staff' measure on the Customer Service Monitor survey of Dublin Airport in 2023 for departing passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

$S_1 = \text{€}0.01$ * the number of quarters where Dublin Airport scores less than 8.5 in the 'courtesy and helpfulness of airport staff' measure on the Customer Service Monitor survey of Dublin Airport in 2023 for departing passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

$S_2 = \text{€}0.01$ * the number of quarters where Dublin Airport scores at least 9.3 in the 'courtesy and helpfulness of airport staff' measure on the Customer Service Monitor

survey of Dublin Airport in 2023 for departing passengers or in a year for departing passengers who used assistance for mobility or sensory impairment

$T_1 = \text{€}0.01$ * the number of quarters Dublin airport scores less than 8.5 in the 'overall cleanliness of the airport terminal' measure of the Customer Service Monitor survey of Dublin Airport in 2023 for departing or arriving passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

$T_2 = \text{€}0.01$ * the number of quarters Dublin airport scores at least 9.2 in the 'overall cleanliness of the airport terminal' measure of the Customer Service Monitor survey of Dublin Airport in 2023 for departing or arriving passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

$U_1 = \text{€}0.01$ * the number of quarters Dublin Airport scores less than 8.5 in the 'overall satisfaction with the departure (arrival) experience' measure of the Customer Service Monitor survey of Dublin Airport in 2023 for departing (arriving) passengers or in a year for transfer passengers or departing passengers who used assistance for mobility or sensory impairment.

$U_2 = \text{€}0.01$ * the number of quarters Dublin Airport scores at least 9.3 in the 'overall satisfaction with the departure (arrival) experience' measure of the Customer Service Monitor survey of Dublin Airport in 2023 for departing (arriving) passengers or in a year for transfer passengers or departing passengers who used assistance for mobility or sensory impairment.

$V_1 = \text{€}0.01$ * the number of quarters Dublin Airport scores less than 8.5 in the 'cleanliness of toilets' measure of the Customer Service Monitor survey of Dublin Airport in 2023 for departing or arriving passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

$V_2 = \text{€}0.01$ * the number of quarters Dublin Airport scores at least 9.2 in the 'cleanliness of toilets' measure of the Customer Service Monitor survey of Dublin Airport in 2023 for departing or arriving passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

$W_1 = \text{€}0.01$ * the number of quarters Dublin Airport scores less than 8.0 in the 'satisfaction with the departure lounges (gates)' measure of the Customer Service Monitor survey of Dublin Airport in 2023 for departing passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

$W_2 = \text{€}0.01$ * the number of quarters Dublin Airport scores at least 9.0 in the 'satisfaction with the departure lounges (gates)' measure of the Customer Service Monitor survey of Dublin Airport in 2023 for departing passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

$X_1 = \text{€}0.01$ * the number of quarters Dublin Airport scores less than 8.0 in the 'Ease of Movement' measure of the Customer Service Monitor survey of Dublin Airport in 2023 for departing or arriving passengers or in a year for transfer passengers or departing passengers who used assistance for mobility or sensory impairment.

$X_2 = \text{€}0.01$ * the number of quarters Dublin Airport scores at least 9.0 in the 'Ease of Movement' measure of the Customer Service Monitor survey of Dublin Airport in 2023 for departing or arriving passengers or in a year for transfer passengers or departing passengers who used assistance for mobility or sensory impairment.

$Y_1 = \text{€}0.01$ * the number of quarters Dublin Airport scores less than 8.5 in the 'finding your way around' ('ease of finding the baggage carousel for your flight') measure of the Customer Service Monitor survey of Dublin Airport in 2023 for departing (arriving) passengers or in a year for transfer passengers or departing passengers who used assistance for mobility or sensory impairment.

$Y_2 = \text{€}0.01$ * the number of quarters Dublin Airport scores at least 9.0 in the 'finding your way around' ('ease of finding the baggage carousel for your flight') measure of the Customer Service Monitor survey of Dublin Airport in 2023 for departing (arriving) passengers or in a year for transfer passengers or departing passengers who used assistance for mobility or sensory impairment.

$Z_1 = \text{€}0.01$ * the number of quarters that Dublin Airport scores less than 8.5 in the 'flight information screens' measure in the Customer Service Monitor survey of Dublin Airport in 2023 for departing passengers or in a year for transfer passengers or departing passengers who used assistance for mobility or sensory impairment.

$Z_2 = \text{€}0.01$ * the number of quarters that Dublin Airport scores at least 9.0 in the 'flight information screens' measure in the Customer Service Monitor survey of Dublin Airport in 2023 for departing passengers or in a year for transfer passengers or departing passengers who used assistance for mobility or sensory impairment.

$AA_1 = \text{€}0.01$ * the number of quarters Dublin Airport scores less than 8.0 in the 'satisfaction with ground transportation information on arrival' measure of new ground transport survey of Dublin Airport in 2023 for arriving passengers in 2023.

$AA_2 = \text{€}0.01$ * the number of quarters Dublin Airport scores at least 8.5 in the 'satisfaction with ground transportation information on arrival' measure of new ground transport survey of Dublin Airport in 2023 for arriving passengers in 2023.

$AB_1 = \text{€}0.01$ * the number of quarters Dublin Airport scores less than 9.0 in the 'satisfaction with facilities for passengers with reduced mobility' measure in the Customer Service Monitor survey of Dublin Airport in 2023.

$AB_2 = \text{€}0.01$ * the number of quarters Dublin Airport at least 9.5 in the 'satisfaction with facilities for passengers with reduced mobility' measure in the Customer Service Monitor survey of Dublin Airport in 2023.

$AC_1 = \text{€}0.01$ * the number of quarters Dublin Airport scores less than 8.5 in the 'Availability of trolleys' ('Ease of finding a trolley') measure in the Customer Service Monitor survey of Dublin Airport in 2023 for departing (arriving) passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

$AC_2 = \text{€}0.01$ * the number of quarters Dublin Airport scores at least 9.0 in the 'Availability of trolleys' ('Ease of finding a trolley') measure in the Customer Service Monitor survey of Dublin Airport in 2023 for departing (arriving) passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

$AD_1 = \text{€}0.01$ * the number of quarters Dublin Airport scores less than 8.5 in the 'satisfaction with Wi-Fi' measure in the Customer Service Monitor survey of Dublin Airport in 2023 for departing or arriving passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

$AD_2 = \text{€}0.01$ * the number of quarters Dublin Airport scores at least 9.0 in the 'satisfaction with Wi-Fi' measure in the Customer Service Monitor survey of Dublin Airport in 2023 for departing or arriving passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

Regulatory Period 1 January 2024 to 31 December 2024

2.11 The maximum permitted yield per passenger for the regulatory period 1 January 2024 to 31 December 2024 shall be equal to:

$$P_{2024} = (\text{€}7.53 + \text{Trigger}_{2024} - \text{QS}_{2024}) * (1 + \text{CPI}_{\text{HISTORIC}}) * (1 + \text{CPI}_{\text{FORECAST}}) + w_{2024} + k_{2024}$$

Where:

$$\text{Trigger}_{2024} = M2 + M3 + \text{Sum}(\text{Type A}) + \text{Sum}(\text{Type B})$$

Where:

Triggers 2024	Description	Amount	Enters the formula if:
M2	North Runway	€0.31	North Runway fully operational and Dublin Airport provides CAR with evidence of accomplishment as set out in CP4/2017 ¹⁰ by 31 December 2023
M3	North Runway	€0.02	House buyout is complete, and Dublin Airport provides CAR with evidence of accomplishment as set out in CP4/2017 by 31 December 2023
Type A ₁	Terminal 1 Central Search – Relocation to Mezz Level	€0.10	2024 B ₁ trigger is not active Full planning permission received, and project is on-site by 31 December 2023
Type A ₂	Terminal 1 Departure Lounge (IDL) Reorientation & Rehabilitation	€0.07	2024 B ₂ trigger is not active Full planning permission received, and project is on-site by 31 December 2023
Type A ₃	New Pier 5 (T2 & CBP Enabled)	€0.44	2024 B ₃ trigger is not active Full planning permission received, and project is on-site by 31 December 2023
Type A ₄	Expansion of US Pre-Clearance Facilities	€0.12	2024 B ₄ trigger is not active Full planning permission received, and project is on-site by 31 December 2023
Type A ₅	South Apron Expansion	€0.27	2024 B ₅ trigger is not active Full planning permission received, and project is on-site by 31 December 2023
Type A ₆	North Apron Developments – Pier 1 extension and Apron 5H PBZ	€0.29	2024 B ₆ trigger is not active Full planning permission received, and project is on-site by 31 December 2023
Type A ₇	West Apron Vehicle Underpass- Pier 3 Option	€0.28	2024 B ₇ trigger is not active Full planning permission received, and project is on-site by 31 December 2023
Type A ₈	South Apron Airside Support Centre	€0.02	2024 B ₈ trigger is not active Full planning permission received, and project is on-site by 31 December 2023
Type B ₁	Terminal 1 Central Search – Relocation to Mezz Level	€0.12	Operational by 31 December 2023
Type B ₂	Terminal 1 Departure Lounge (IDL) Reorientation & Rehabilitation	€0.09	Operational by 31 December 2023
Type B ₃	New Pier 5 (T2 & CBP Enabled)	€0.55	Operational by 31 December 2023
Type B ₄	Expansion of US Pre-Clearance Facilities	€0.15	Operational by 31 December 2023
Type B ₅	South Apron Expansion	€0.33	Operational by 31 December 2023

¹⁰ www.aviationreg.ie/_fileupload/Decision%20MASTERCOPY%202017-04-28.pdf

Type B₆	North Apron Developments – Pier 1 extension and Apron 5H PBZ	€0.36	Operational by 31 December 2023
Type B₇	West Apron Vehicle Underpass- Pier 3 Option	€0.35	Operational by 31 December 2023
Type B₈	South Apron Airside Support Centre	€0.02	Operational by 31 December 2023

Where:

$CPI_{HISTORIC}$ is the percentage change (whether positive or negative) in the consumer price index between February 2022 and October 2023.

$CPI_{FORECAST}$ is the projected percentage change (whether positive or negative) in the consumer price index from 2023 full-year to 2024 full-year based on the most recent projection produced by the International Monetary Fund¹¹.

Where:

$$QS_{2024} = (QS_{REBATE, 2024}) - (QS_{BONUS, 2024})$$

Where:

$$QS_{REBATE, 2024} = \text{Minimum} ((A + B + C + D + E + F + G + H + I + J + K + L + M + N + O + P), \text{€}0.21) + \text{Minimum} ((Q_1 + R_1 + S_1 + T_1 + U_1 + V_1 + W_1 + X_1), \text{€}0.07) + \text{Minimum} ((Y_1 + Z_1 + AA_1), \text{€}0.04) + \text{Minimum} ((AB_1 + AC_1 + AD_1), \text{€}0.04)$$

$$QS_{BONUS, 2024} = \text{Minimum} ((Q_2 + R_2 + S_2 + T_2 + U_2 + V_2 + W_2 + X_2), \text{€}0.07) + \text{Minimum} ((Y_2 + Z_2 + AA_2), \text{€}0.04) + \text{Minimum} ((AB_2 + AC_2 + AD_2), \text{€}0.04)$$

Where:

$A = \text{€}0.005$ * the number of days that the time passengers spend in security queue was less than 20 minutes 0 seconds less than 70% of the time but the maximum time passengers spend in security queue was less than 30 minutes 0 seconds.

$B = \text{€}0.01$ * the number of days that the maximum time passengers spend in security queue was more than or equal to 30 minutes and 0 seconds but less than 45 minutes and 0 seconds.

$C = \text{€}0.02$ * the number of days that the maximum time passengers spend in security queue was more than or equal to 45 minutes 0 seconds.

$D = \text{€}0.01$ if, in total for the year, less than 98% of pre-notified departing passengers with reduced mobility or disabilities were assisted from an external point within the airport campus within 10 minutes and at least 0.1% of PRMs used the "assistance from external point" service; or if less than 98% of non-pre-notified departing passengers with reduced mobility or disabilities were assisted from an external point within the

¹¹ <https://www.imf.org/en/Publications/WEO>

airport campus within 20 minutes and at least 0.1% of PRMs used the “assistance from external point” service; or if less than 95% (but at least 90%) of pre-notified departing passengers with reduced mobility or disabilities were assisted from the terminal reception point within 15 minutes; or if less than 98% (but at least 91%) of pre-notified departing passengers with reduced mobility or disabilities were assisted from the terminal reception point within 20 minutes; or if less than 95% of non-pre-notified departing passengers with reduced mobility or disabilities were assisted from the terminal reception point within 20 minutes; or if less than 98% of non-pre-notified departing passengers with reduced mobility or disabilities were assisted from the terminal reception point within 30 minutes.

$E = \text{€}0.02$ if, in total for the year, less than 90% of pre-notified departing passengers with reduced mobility or disabilities were assisted from the terminal reception point within 15 minutes; or if less than 91% of pre-notified departing passengers with reduced mobility or disabilities were assisted from the terminal reception point within 20 minutes.

$F = \text{€}0.01$ if, in total for the year, less than 93% of pre-notified arriving passengers with reduced mobility or disabilities were assisted from aircraft to terminal holding point within 10 minutes; or if less than 98% of pre-notified arriving passengers with reduced mobility or disabilities were assisted from aircraft to terminal holding point within 15 minutes; or less than 93% of non-pre-notified arriving passengers with reduced mobility or disabilities were assisted from the terminal reception point within 15 minutes; or if less than 98% of non-pre-notified arriving passengers with reduced mobility or disabilities were assisted from the terminal reception point within 20 minutes.

$G = \text{€}0.01$ * the number of times where access to the outbound baggage belt system, in a terminal that has not fully implemented hold baggage screening standard 3 (HBS3), is denied to an airline or airlines more than 30 minutes after the request due to a single event system failure; or when the outcome of delivering departing bags through the outbound baggage system, in a terminal that has fully implemented HBS3, is denied to an airline or airlines for more than 30 minutes after the request due to a single event system failure.

$H = \text{€}0.01$ * the number of times where access to the inbound baggage belt system, in a terminal that has not fully implemented hold baggage screening standard 3 (HBS3), is denied to an airline or airlines more than 30 minutes after the request due to a single event system failure; or when the outcome of delivering arriving bags through the inbound baggage system, in a terminal that has fully implemented HBS3, is denied to an airline or airlines more than 30 minutes after the request due to a single event system failure.

$I = \text{€}0.01$ * the number of months when Fixed Electric Ground Power (FEGP) is available, for new units, on average less than 93.5% of operational time, and, for old units, on average less than 98% of operational time.

$J = \text{€}0.005$ * the number of months when Fixed Electric Ground Power (FEGP) is available, for old units, on average less than 99% but greater than or equal to 98% of operational time.

$K = \text{€}0.01$ * the number of months when the Advanced Visual Docking Guidance System (AVDGS) is available, for new units, on average less than 93.5% of operational time and, for old units, on average less than 98% of operational time.

$L = \text{€}0.005$ * the number of months when the Advanced Visual Docking Guidance System (AVDGS) is available, for old units, on average less than 99% but greater than or equal to 98% of operational time.

$M = \text{€}0.01$ * the number of quarters where passenger-facing escalators, lifts and travellers in Terminal 2 are available, on average less than 98% of the time.

$N = \text{€}0.005$ * the number of quarters where passenger-facing escalators, lifts and travellers in Terminal 2 are available, on average less than 99% but greater or equal to 98% of the time.

$O = \text{€}0.01$ * the number of quarters where self-service check-in kiosks and bag drop machines are available, on average less than 98% of the time.

$P = \text{€}0.005$ * the number of quarters where self-service check-in kiosks and bag drop machines are available, on average less than 99% but greater or equal to 98% of the time.

$Q_1 = \text{€}0.01$ in a year where Dublin Airport scores less than 9.0 in the 'satisfaction with assistance for mobility or sensory impairment' measure of the Customer Service Monitor survey of Dublin Airport in 2024.

$Q_2 = \text{€}0.01$ in a year where Dublin Airport scores at least 9.5 in the 'satisfaction with assistance for mobility or sensory impairment' measure of the Customer Service Monitor survey of Dublin Airport in 2024.

$R_1 = \text{€}0.01$ * the number of quarters where Dublin Airport scores less than 8.5 in the 'courtesy and helpfulness of security staff' measure on the Customer Service Monitor survey of Dublin Airport in 2024 for departing passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

$R_2 = \text{€}0.01$ * the number of quarters where Dublin Airport scores at least 9.3 in the 'courtesy and helpfulness of security staff' measure on the Customer Service Monitor survey of Dublin Airport in 2024 for departing passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

$S_1 = \text{€}0.01$ * the number of quarters where Dublin Airport scores less than 8.5 in the 'courtesy and helpfulness of airport staff' measure on the Customer Service Monitor survey of Dublin Airport in 2024 for departing passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

$S_2 = \text{€}0.01$ * the number of quarters where Dublin Airport scores at least 9.3 in the 'courtesy and helpfulness of airport staff' measure on the Customer Service Monitor survey of Dublin Airport in 2024 for departing passengers or in a year for departing passengers who used assistance for mobility or sensory impairment

$T_1 = \text{€}0.01$ * the number of quarters Dublin airport scores less than 8.5 in the 'overall cleanliness of the airport terminal' measure of the Customer Service Monitor survey of Dublin Airport in 2024 for departing and arriving passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

$T_2 = \text{€}0.01$ * the number of quarters Dublin airport scores at least 9.2 in the 'overall cleanliness of the airport terminal' measure of the Customer Service Monitor survey of Dublin Airport in 2024 for departing and arriving passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

$U_1 = \text{€}0.01$ * the number of quarters Dublin Airport scores less than 8.5 in the 'overall satisfaction with the departure (arrival) experience' measure of the Customer Service Monitor survey of Dublin Airport in 2024 for departing (arriving) passengers or in a year for transfer passengers or departing passengers who used assistance for mobility or sensory impairment.

$U_2 = \text{€}0.01$ * the number of quarters Dublin Airport scores at least 9.3 in the 'overall satisfaction with the departure (arrival) experience' measure of the Customer Service Monitor survey of Dublin Airport in 2024 for departing (arriving) passengers or in a year for transfer passengers or departing passengers who used assistance for mobility or sensory impairment.

$V_1 = \text{€}0.01$ * the number of quarters Dublin Airport scores less than 8.5 in the 'cleanliness of toilets' measure of the Customer Service Monitor survey of Dublin Airport in 2024 for departing and arriving passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

$V_2 = \text{€}0.01$ * the number of quarters Dublin Airport scores at least 9.2 in the 'cleanliness of toilets' measure of the Customer Service Monitor survey of Dublin Airport in 2024 for departing and arriving passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

$W_1 = \text{€}0.01$ * the number of quarters Dublin Airport scores less than 8.0 in the 'satisfaction with the departure lounges (gates)' measure of the Customer Service Monitor survey of Dublin Airport in 2024 for departing passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

$W_2 = \text{€}0.01$ * the number of quarters Dublin Airport scores at least 9.0 in the 'satisfaction with the departure lounges (gates)' measure of the Customer Service Monitor survey of Dublin Airport in 2024 for departing passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

$X_1 = \text{€}0.01$ * the number of quarters Dublin Airport scores less than 8.0 in the 'Ease of Movement' measure of the Customer Service Monitor survey of Dublin Airport in 2024

for departing and arriving passengers or in a year for transfer passengers or departing passengers who used assistance for mobility or sensory impairment.

$X_2 = \text{€}0.01$ * the number of quarters Dublin Airport scores at least 9.0 in the 'Ease of Movement' measure of the Customer Service Monitor survey of Dublin Airport in 2024 for departing and arriving passengers or in a year for transfer passengers or departing passengers who used assistance for mobility or sensory impairment.

$Y_1 = \text{€}0.01$ * the number of quarters Dublin Airport scores less than 8.5 in the 'finding your way around' ('ease of finding the baggage carousel for your flight') measure of the Customer Service Monitor survey of Dublin Airport in 2024 for departing (arriving) passengers or in a year for transfer passengers or departing passengers who used assistance for mobility or sensory impairment.

$Y_2 = \text{€}0.01$ * the number of quarters Dublin Airport scores at least 9.0 in the 'finding your way around' ('ease of finding the baggage carousel for your flight') measure of the Customer Service Monitor survey of Dublin Airport in 2024 for departing (arriving) passengers or in a year for transfer passengers or departing passengers who used assistance for mobility or sensory impairment.

$Z_1 = \text{€}0.01$ * the number of quarters that Dublin Airport scores less than 8.5 in the 'flight information screens' measure in the Customer Service Monitor survey of Dublin Airport in 2024 for departing passengers or in a year for transfer passengers or departing passengers who used assistance for mobility or sensory impairment.

$Z_2 = \text{€}0.01$ * the number of quarters that Dublin Airport scores at least 9.0 in the 'flight information screens' measure in the Customer Service Monitor survey of Dublin Airport in 2024 for departing passengers or in a year for transfer passengers or departing passengers who used assistance for mobility or sensory impairment.

$AA_1 = \text{€}0.01$ * the number of quarters Dublin Airport scores less than 8.3 in the 'satisfaction with ground transportation information on arrival' measure of new ground transport survey of Dublin Airport in 2024 for arriving passengers in 2024.

$AA_2 = \text{€}0.01$ * the number of quarters Dublin Airport scores at least 9.0 in the 'satisfaction with ground transportation information on arrival' measure of new ground transport survey of Dublin Airport in 2024 for arriving passengers in 2024.

$AB_1 = \text{€}0.01$ * the number of quarters Dublin Airport scores less than 9.0 in the 'satisfaction with facilities for passengers with reduced mobility' measure in the Customer Service Monitor survey of Dublin Airport in 2024.

$AB_2 = \text{€}0.01$ * the number of quarters Dublin Airport at least 9.5 in the 'satisfaction with facilities for passengers with reduced mobility' measure in the Customer Service Monitor survey of Dublin Airport in 2024.

$AC_1 = \text{€}0.01$ * the number of quarters Dublin Airport scores less than 8.5 in the 'Availability of trolleys' ('Ease of finding a trolley') measure in the Customer Service

Monitor survey of Dublin Airport in 2024 for departing (arriving) passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

$AC_2 = \text{€}0.01 * \text{the number of quarters Dublin Airport scores at least 9.0 in the 'Availability of trolleys' ('Ease of finding a trolley') measure in the Customer Service Monitor survey of Dublin Airport in 2024 for departing (arriving) passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.}$

$AD_1 = \text{€}0.01 * \text{the number of quarters Dublin Airport scores less than 8.5 in the 'satisfaction with Wi-Fi' measure in the Customer Service Monitor survey of Dublin Airport in 2024 for departing and arriving passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.}$

$AD_2 = \text{€}0.01 * \text{the number of quarters Dublin Airport scores at least 9.0 in the 'satisfaction with Wi-Fi' measure in the Customer Service Monitor survey of Dublin Airport in 2024 for departing and arriving passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.}$

W_{2024} allows for a pass through of Opex which is legislatively mandated or levied by a regulatory authority (LM OPEX) that comply with the conditions set out in Section 6 of the varied Determination published in July 2020. It is derived using the following formula:

$$W_{2024} = \frac{(LM\ OPEX_{CAR\ approved\ outturn2023} - LM\ OPEX_{CAR\ Forecast2023})}{PAX_{2024f}}$$

Where:

$LM\ OPEX_{CAR\ approved\ outturn\ t}$ is the outturn of Opex which is legislatively mandated or levied by a regulatory authority in year t, justified by Dublin Airport with supporting evidence set out in Section 6 of the varied Determination published in July 2020 and approved by the Commission

$LM\ OPEX_{CAR\ forecast\ t}$ is the forecast of Opex which is legislatively mandated or levied by a regulatory authority for year t allowed for in the base Price Cap in year t

PAX_t is the outturn of total annual passengers at Dublin Airport in year t

PAX_{tf} is the latest available forecast of passenger numbers in t

K_{2024} is a correction per passenger to be made in the regulatory year 2024 on account of any under collection of airport charges accrued by Dublin Airport in the regulatory year 2022 relative to the price cap. It is derived using the following formula:

$$k_{2024} = \text{Minimum} \left(\text{Maximum}(0, (P_{2022} - P_{2022\text{outturn}})), (0.05 * P_{2022}) \right) * (1 + I_{2022}) * (1 + I_{2023}) * (PAX_{2022}/PAX_{2024})$$

Where:

$P_{t, outturn}$ is the outturn yield per passenger in year t

PAX_t is the outturn of total annual passengers at Dublin Airport in year t

I_t is the average daily three-month interest rate between 1 November in year t-1 and 1 November in year t using the Euribor rate or some other suitable measure.

Regulatory Period 1 January 2025 to 31 December 2025

2.12 The maximum permitted yield per passenger for the regulatory period 1 January 2025 to 31 December 2025 shall be equal to:

$$P_{2025} = (\text{€}7.48 + \text{Trigger}_{2025} - \text{QS}_{2025}) * (1 + \text{CPI}_{\text{HISTORIC}}) * (1 + \text{CPI}_{\text{FORECAST}}) \\ + W_{2025} + Y_{2025} + k_{2025} + Z_{2025}$$

Where:

$$\text{Trigger}_{2025} = M2 + M3 + \text{Sum}(\text{Type A}) + \text{Sum}(\text{Type B})$$

Where:

Triggers 2025	Description	Amount	Enters the formula if:
M2	North Runway	€0.30	North Runway fully operational and Dublin Airport provides CAR with evidence of accomplishment as set out in CP4/2017 ¹² by 31 December 2024
M3	North Runway	€0.02	House buyout is complete, and Dublin Airport provides CAR with evidence of accomplishment as set out in CP4/2017 by 31 December 2024
Type A ₁	Terminal 1 Central Search – Relocation to Mezz Level	€0.10	2025 B ₁ trigger is not active Full planning permission received, and project is on-site by 31 December 2024
Type A ₂	Terminal 1 Departure Lounge (IDL) Reorientation & Rehabilitation	€0.07	2025 B ₂ trigger is not active Full planning permission received, and project is on-site by 31 December 2024
Type A ₃	New Pier 5 (T2 & CBP Enabled)	€0.42	2025 B ₃ trigger is not active Full planning permission received, and project is on-site by 31 December 2024
Type A ₄	Expansion of US Pre-Clearance Facilities	€0.11	2025 B ₄ trigger is not active Full planning permission received, and project is on-site by 31 December 2024
Type A ₅	South Apron Expansion	€0.26	2025 B ₅ trigger is not active Full planning permission received, and project is on-site by 31 December 2024
Type A ₆	North Apron Developments – Pier 1 extension and Apron 5H PBZ	€0.28	2025 B ₆ trigger is not active Full planning permission received, and project is on-site by 31 December 2024
Type A ₇	West Apron Vehicle Underpass- Pier 3 Option	€0.27	2025 B ₇ trigger is not active Full planning permission received, and project is on-site by 31 December 2024
Type A ₈	South Apron Airside Support Centre	€0.02	2025 B ₈ trigger is not active Full planning permission received, and project is on-site by 31 December 2024
Type B ₁	Terminal 1 Central Search – Relocation to Mezz Level	€0.12	Operational by 31 December 2024
Type B ₂	Terminal 1 Departure Lounge (IDL) Reorientation & Rehabilitation	€0.09	Operational by 31 December 2024
Type B ₃	New Pier 5 (T2 & CBP Enabled)	€0.53	Operational by 31 December 2024
Type B ₄	Expansion of US Pre-Clearance Facilities	€0.14	Operational by 31 December 2024
Type B ₅	South Apron Expansion	€0.32	Operational by 31 December 2024

¹² www.aviationreg.ie/_fileupload/Decision%20MASTERCOPY%202017-04-28.pdf

Type B ₆	North Apron Developments – Pier 1 extension and Apron 5H PBZ	€0.35	Operational by 31 December 2024
Type B ₇	West Apron Vehicle Underpass- Pier 3 Option	€0.34	Operational by 31 December 2024
Type B ₈	South Apron Airside Support Centre	€0.02	Operational by 31 December 2024

Where:

$CPI_{HISTORIC}$ is the percentage change (whether positive or negative) in the consumer price index between February 2022 and October 2024.

$CPI_{FORECAST}$ is the projected percentage change (whether positive or negative) in the consumer price index from 2024 full-year to 2025 full-year based on the most recent projection produced by the International Monetary Fund¹³.

Where:

$$QS_{2025} = (QS_{REBATE, 2025}) - (QS_{BONUS, 2025})$$

Where:

$$QS_{REBATE, 2025} = \text{Minimum} ((A + B + C + D + E + F + G + H + I + J + K + L + M + N + O + P), \text{€}0.21) + \text{Minimum} ((Q_1 + R_1 + S_1 + T_1 + U_1 + V_1 + W_1 + X_1), \text{€}0.07) + \text{Minimum} ((Y_1 + Z_1 + AA_1), \text{€}0.04) + \text{Minimum} ((AB_1 + AC_1 + AD_1), \text{€}0.04)$$

$$QS_{BONUS, 2025} = \text{Minimum} ((Q_2 + R_2 + S_2 + T_2 + U_2 + V_2 + W_2 + X_2), \text{€}0.07) + \text{Minimum} ((Y_2 + Z_2 + AA_2), \text{€}0.04) + \text{Minimum} ((AB_2 + AC_2 + AD_2), \text{€}0.04)$$

Where:

$A = \text{€}0.005$ * the number of days that the time passengers spend in security queue was less than 20 minutes 0 seconds less than 70% of the time but the maximum time passengers spend in security queue was less than 30 minutes 0 seconds.

$B = \text{€}0.01$ * the number of days that the maximum time passengers spend in security queue was more than or equal to 30 minutes and 0 seconds but less than 45 minutes and 0 seconds.

$C = \text{€}0.02$ * the number of days that the maximum time passengers spend in security queue was more than or equal to 45 minutes 0 seconds.

$D = \text{€}0.01$ if, in total for the year, less than 98% of pre-notified departing passengers with reduced mobility or disabilities were assisted from an external point within the airport campus within 10 minutes and at least 0.1% of PRMs used the "assistance from external point" service; or if less than 98% of non-pre-notified departing passengers with reduced mobility or disabilities were assisted from an external point within the airport campus within 20 minutes and at least 0.1% of PRMs used the "assistance from external point" service; or if less than 95% (but at least 90%) of pre-notified departing

¹³ <https://www.imf.org/en/Publications/WEO>

passengers with reduced mobility or disabilities were assisted from the terminal reception point within 15 minutes; or if less than 98% (but at least 91%) of pre-notified departing passengers with reduced mobility or disabilities were assisted from the terminal reception point within 20 minutes; or if less than 95% of non-pre-notified departing passengers with reduced mobility or disabilities were assisted from the terminal reception point within 20 minutes; or if less than 98% of non-pre-notified departing passengers with reduced mobility or disabilities were assisted from the terminal reception point within 30 minutes.

$E = €0.02$ if, in total for the year, less than 90% of pre-notified departing passengers with reduced mobility or disabilities were assisted from the terminal reception point within 15 minutes; or if less than 91% of pre-notified departing passengers with reduced mobility or disabilities were assisted from the terminal reception point within 20 minutes.

$F = €0.01$ if, in total for the year, less than 93% of pre-notified arriving passengers with reduced mobility or disabilities were assisted from aircraft to terminal holding point within 10 minutes; or if less than 98% of pre-notified arriving passengers with reduced mobility or disabilities were assisted from aircraft to terminal holding point within 15 minutes; or less than 93% of non-pre-notified arriving passengers with reduced mobility or disabilities were assisted from the terminal reception point within 15 minutes; or if less than 98% of non-pre-notified arriving passengers with reduced mobility or disabilities were assisted from the terminal reception point within 20 minutes.

$G = €0.01$ * the number of times where access to the outbound baggage belt system, in a terminal that has not fully implemented hold baggage screening standard 3 (HBS3), is denied to an airline or airlines more than 30 minutes after the request due to a single event system failure; or when the outcome of delivering departing bags through the outbound baggage system, in a terminal that has fully implemented HBS3, is denied to an airline or airlines for more than 30 minutes after the request due to a single event system failure.

$H = €0.01$ * the number of times where access to the inbound baggage belt system, in a terminal that has not fully implemented hold baggage screening standard 3 (HBS3), is denied to an airline or airlines more than 30 minutes after the request due to a single event system failure; or when the outcome of delivering arriving bags through the inbound baggage system, in a terminal that has fully implemented HBS3, is denied to an airline or airlines more than 30 minutes after the request due to a single event system failure.

$I = €0.01$ * the number of months when Fixed Electric Ground Power (FEGP) is available, for new units, on average less than 93.5% of operational time, and, for old units, on average less than 98% of operational time.

$J = €0.005$ * the number of months when Fixed Electric Ground Power (FEGP) is available, for old units, on average less than 99% but greater than or equal to 98% of operational time.

$K = \text{€}0.01$ * the number of months when the Advanced Visual Docking Guidance System (AVDGS) is available, for new units, on average less than 93.5% of operational time and, for old units, on average less than 98% of operational time.

$L = \text{€}0.005$ * the number of months when the Advanced Visual Docking Guidance System (AVDGS) is available, for old units, on average less than 99% but greater than or equal to 98% of operational time.

$M = \text{€}0.01$ * the number of quarters where passenger-facing escalators, lifts and travellers in Terminal 2 are available, on average less than 98% of the time.

$N = \text{€}0.005$ * the number of quarters where passenger-facing escalators, lifts and travellers in Terminal 2 are available, on average less than 99% but greater or equal to 98% of the time.

$O = \text{€}0.01$ * the number of quarters where self-service check-in kiosks and bag drop machines are available, on average less than 98% of the time.

$P = \text{€}0.005$ * the number of quarters where self-service check-in kiosks and bag drop machines are available, on average less than 99% but greater or equal to 98% of the time.

$Q_1 = \text{€}0.01$ in a year where Dublin Airport scores less than 9.0 in the 'satisfaction with assistance for mobility or sensory impairment' measure of the Customer Service Monitor survey of Dublin Airport in 2025.

$Q_2 = \text{€}0.01$ in a year where Dublin Airport scores at least 9.5 in the 'satisfaction with assistance for mobility or sensory impairment' measure of the Customer Service Monitor survey of Dublin Airport in 2025.

$R_1 = \text{€}0.01$ * the number of quarters where Dublin Airport scores less than 8.5 in the 'courtesy and helpfulness of security staff' measure on the Customer Service Monitor survey of Dublin Airport in 2025 for departing passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

$R_2 = \text{€}0.01$ * the number of quarters where Dublin Airport scores at least 9.3 in the 'courtesy and helpfulness of security staff' measure on the Customer Service Monitor survey of Dublin Airport in 2025 for departing passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

$S_1 = \text{€}0.01$ * the number of quarters where Dublin Airport scores less than 8.5 in the 'courtesy and helpfulness of airport staff' measure on the Customer Service Monitor survey of Dublin Airport in 2025 for departing passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

$S_2 = \text{€}0.01$ * the number of quarters where Dublin Airport scores at least 9.3 in the 'courtesy and helpfulness of airport staff' measure on the Customer Service Monitor survey of Dublin Airport in 2025 for departing passengers or in a year for departing passengers who used assistance for mobility or sensory impairment

$T_1 = \text{€}0.01$ * the number of quarters Dublin Airport scores less than 8.5 in the 'overall cleanliness of the airport terminal' measure of the Customer Service Monitor survey of Dublin Airport in 2025 for departing and arriving passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

$T_2 = \text{€}0.01$ * the number of quarters Dublin Airport scores at least 9.2 in the 'overall cleanliness of the airport terminal' measure of the Customer Service Monitor survey of Dublin Airport in 2025 for departing and arriving passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

$U_1 = \text{€}0.01$ * the number of quarters Dublin Airport scores less than 8.5 in the 'overall satisfaction with the departure (arrival) experience' measure of the Customer Service Monitor survey of Dublin Airport in 2025 for departing (arriving) passengers or in a year for transfer passengers or departing passengers who used assistance for mobility or sensory impairment.

$U_2 = \text{€}0.01$ * the number of quarters Dublin Airport scores at least 9.3 in the 'overall satisfaction with the departure (arrival) experience' measure of the Customer Service Monitor survey of Dublin Airport in 2025 for departing (arriving) passengers or in a year for transfer passengers or departing passengers who used assistance for mobility or sensory impairment.

$V_1 = \text{€}0.01$ * the number of quarters Dublin Airport scores less than 8.5 in the 'cleanliness of toilets' measure of the Customer Service Monitor survey of Dublin Airport in 2025 for departing and arriving passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

$V_2 = \text{€}0.01$ * the number of quarters Dublin Airport scores at least 9.2 in the 'cleanliness of toilets' measure of the Customer Service Monitor survey of Dublin Airport in 2025 for departing and arriving passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

$W_1 = \text{€}0.01$ * the number of quarters Dublin Airport scores less than 8.0 in the 'satisfaction with the departure lounges (gates)' measure of the Customer Service Monitor survey of Dublin Airport in 2025 for departing passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

$W_2 = \text{€}0.01$ * the number of quarters Dublin Airport scores at least 9.0 in the 'satisfaction with the departure lounges (gates)' measure of the Customer Service Monitor survey of Dublin Airport in 2025 for departing passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

$X_1 = \text{€}0.01$ * the number of quarters Dublin Airport scores less than 8.0 in the 'Ease of Movement' measure of the Customer Service Monitor survey of Dublin Airport in 2025 for departing and arriving passengers or in a year for transfer passengers or departing passengers who used assistance for mobility or sensory impairment.

$X_2 = \text{€}0.01$ * the number of quarters Dublin Airport scores at least 9.0 in the 'Ease of Movement' measure of the Customer Service Monitor survey of Dublin Airport in 2025 for departing and arriving passengers or in a year for transfer passengers or departing passengers who used assistance for mobility or sensory impairment.

$Y_1 = \text{€}0.01$ * the number of quarters Dublin Airport scores less than 8.5 in the 'finding your way around' ('ease of finding the baggage carousel for your flight') measure of the Customer Service Monitor survey of Dublin Airport in 2025 for departing (arriving) passengers or in a year for transfer passengers or departing passengers who used assistance for mobility or sensory impairment.

$Y_2 = \text{€}0.01$ * the number of quarters Dublin Airport scores at least 9.0 in the 'finding your way around' ('ease of finding the baggage carousel for your flight') measure of the Customer Service Monitor survey of Dublin Airport in 2025 for departing (arriving) passengers or in a year for transfer passengers or departing passengers who used assistance for mobility or sensory impairment.

$Z_1 = \text{€}0.01$ * the number of quarters that Dublin Airport scores less than 8.5 in the 'flight information screens' measure in the Customer Service Monitor survey of Dublin Airport in 2025 for departing passengers or in a year for transfer passengers or departing passengers who used assistance for mobility or sensory impairment.

$Z_2 = \text{€}0.01$ * the number of quarters that Dublin Airport scores at least 9.0 in the 'flight information screens' measure in the Customer Service Monitor survey of Dublin Airport in 2025 for departing passengers or in a year for transfer passengers or departing passengers who used assistance for mobility or sensory impairment.

$AA_1 = \text{€}0.01$ * the number of quarters Dublin Airport scores less than 8.5 in the 'satisfaction with ground transportation information on arrival' measure of new ground transport survey of Dublin Airport in 2025 for arriving passengers in 2025.

$AA_2 = \text{€}0.01$ * the number of quarters Dublin Airport scores at least 9.0 in the 'satisfaction with ground transportation information on arrival' measure of new ground transport survey of Dublin Airport in 2025 for arriving passengers in 2025.

$AB_1 = \text{€}0.01$ * the number of quarters Dublin Airport scores less than 9.0 in the 'satisfaction with facilities for passengers with reduced mobility' measure in the Customer Service Monitor survey of Dublin Airport in 2025.

$AB_2 = \text{€}0.01$ * the number of quarters Dublin Airport scores at least 9.5 in the 'satisfaction with facilities for passengers with reduced mobility' measure in the Customer Service Monitor survey of Dublin Airport in 2025.

$AC_1 = \text{€}0.01$ * the number of quarters Dublin Airport scores less than 8.5 in the 'Availability of trolleys' ('Ease of finding a trolley') measure in the Customer Service Monitor survey of Dublin Airport in 2025 for departing (arriving) passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

$AC_2 = \text{€}0.01$ * the number of quarters Dublin Airport scores at least 9.0 in the 'Availability of trolleys' ('Ease of finding a trolley') measure in the Customer Service Monitor survey of Dublin Airport in 2025 for departing (arriving) passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

$AD_1 = \text{€}0.01$ * the number of quarters Dublin Airport scores less than 8.5 in the 'satisfaction with Wi-Fi' measure in the Customer Service Monitor survey of Dublin Airport in 2025 for departing and arriving passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

$AD_2 = \text{€}0.01$ * the number of quarters Dublin Airport scores at least 9.0 in the 'satisfaction with Wi-Fi' measure in the Customer Service Monitor survey of Dublin Airport in 2025 for departing and arriving passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

W_{2025} allows for a pass through of Opex which is legislatively mandated or levied by a regulatory authority (LM OPEX) that comply with the conditions set out in Section 6 of the varied Determination published in July 2020. Y_{2025} adjusts for forecasting error in passenger numbers and/or qualifying costs. The W and Y factors are derived using the following formulae:

$$w_{2025} = \frac{(LM\ OPEX_{CAR\ approved\ outturn2024} - LM\ OPEX_{CAR\ Forecast2024})}{PAX_{2025f}}$$

$$y_{2025} = \frac{(LM\ OPEX_{CAR\ approved\ outturn2023} - LM\ OPEX_{CAR\ Forecast2023})}{PAX_{2025f}} - w_{2024} * \left(\frac{PAX_{2024}}{PAX_{2025f}} \right)$$

Where:

$LM\ OPEX_{CAR\ approved\ outturn\ t}$ is the outturn of Opex which is legislatively mandated or levied by a regulatory authority costs in year t , justified by Dublin Airport with supporting evidence set out in Section 6 of the varied Determination published in July 2020 and approved by the Commission

$LM\ OPEX_{CAR\ forecast\ t}$ is the forecast of Opex which is legislatively mandated or levied by a regulatory authority for year t allowed for in the base Price Cap in year t

PAX_t is the outturn of total annual passengers at Dublin Airport in year t

PAX_{tf} is the latest available forecast of passenger numbers in year t

K_{2025} is a correction per passenger to be made in the regulatory year 2025 on account of any under collection of airport charges accrued by Dublin Airport in the regulatory year 2023 relative to the price cap. It is derived using the following formula:

$$k_{2025} = \text{Minimum} \left(\text{Maximum} (0, (P_{2023} - P_{2023\text{outturn}})), (0.05 * P_{2023}) \right) * (1 + I_{2023}) * (1 + I_{2024}) * (PAX_{2023}/PAX_{2025})$$

Where:

$P_{t, outturn}$ is the outturn yield per passenger in t

PAX_t is the outturn of total annual passengers at Dublin Airport in year t

I_t is the average daily three-month interest rate between 1 November in year t-1 and 1 November in year t using the Euribor rate or some other suitable measure.

Z_{2025} is a correction per passenger to be made in the regulatory year 2025 on account of any under collection of airport charges accrued by Dublin Airport in the regulatory year 2023 due to differences in outturn and forecast inflation. It is derived using the following formula:

$$Z_{2025} = (P_{2023}) * ((CPI_{2023outturn} - CPI_{2023}) + (CPI_{historic outturn} - CPI_{historic})) \\ * (1 + I_{2023}) * (1 + I_{2024}) * (PAX_{2023}/PAX_{2025})$$

Where:

P_t is the yield per passenger based on the final price cap set in year t

CPI_{2023} is the forecast percentage change (whether positive or negative) in the consumer price index in 2023 used for the 2023 price cap

$CPI_{2023outturn}$ is the outturn percentage change (whether positive or negative) in the consumer price index in 2023

$CPI_{historic}$ is the outturn percentage change (whether positive or negative) in the consumer price index between February 2022 to October 2022 used for the 2023 price cap

$CPI_{historic outturn}$ is the outturn percentage change (whether positive or negative) in the consumer price index between February 2022 and the 2022 full year index

PAX_t is the outturn of total annual passengers at Dublin Airport in year t

I_t is the average daily three-month interest rate between 1 November in year t-1 and 1 November in year t using the Euribor rate or some other suitable measure.

Regulatory Period 1 January 2026 to 31 December 2026

2.13 The maximum permitted yield per passenger for the regulatory period 1 January 2026 to 31 December 2026 shall be equal to:

$$P_{2026} = (\text{€}7.77 + \text{Trigger}_{2026} - \text{QS}_{2026}) * (1 + \text{CPI}_{\text{HISTORIC}}) * (1 + \text{CPI}_{\text{FORECAST}}) \\ + W_{2026} + Y_{2026} + k_{2026} + Z_{2026}$$

Where:

$$\text{Trigger}_{2026} = M2 + M3 + \text{Sum}(\text{Type A}) + \text{Sum}(\text{Type B})$$

Where:

Triggers 2026	Description	Amount	Enters the formula if:
M2	North Runway	€0.29	North Runway fully operational and Dublin Airport provides CAR with evidence of accomplishment as set out in CP4/2017 ¹⁴ by 31 December 2025
M3	North Runway	€0.02	House buyout is complete, and Dublin Airport provides CAR with evidence of accomplishment as set out in CP4/2017 by 31 December 2025
Type A ₁	Terminal 1 Central Search – Relocation to Mezz Level	€0.09	2026 B ₁ trigger is not active Full planning permission received, and project is on-site by 31 December 2025
Type A ₂	Terminal 1 Departure Lounge (IDL) Reorientation & Rehabilitation	€0.07	2026 B ₂ trigger is not active Full planning permission received, and project is on-site by 31 December 2025
Type A ₃	New Pier 5 (T2 & CBP Enabled)	€0.41	2026 B ₃ trigger is not active Full planning permission received, and project is on-site by 31 December 2025
Type A ₄	Expansion of US Pre-Clearance Facilities	€0.11	2026 B ₄ trigger is not active Full planning permission received, and project is on-site by 31 December 2025
Type A ₅	South Apron Expansion	€0.25	2026 B ₅ trigger is not active Full planning permission received, and project is on-site by 31 December 2025
Type A ₆	North Apron Developments – Pier 1 extension and Apron 5H PBZ	€0.27	2026 B ₆ trigger is not active Full planning permission received, and project is on-site by 31 December 2025
Type A ₇	West Apron Vehicle Underpass-Pier 3 Option	€0.26	2026 B ₇ trigger is not active Full planning permission received, and project is on-site by 31 December 2025
Type A ₈	South Apron Airside Support Centre	€0.02	2026 B ₈ trigger is not active Full planning permission received, and project is on-site by 31 December 2025
Type B ₁	Terminal 1 Central Search – Relocation to Mezz Level	€0.12	Operational by 31 December 2025
Type B ₂	Terminal 1 Departure Lounge (IDL) Reorientation & Rehabilitation	€0.09	Operational by 31 December 2025
Type B ₃	New Pier 5 (T2 & CBP Enabled)	€0.51	Operational by 31 December 2025
Type B ₄	Expansion of US Pre-Clearance Facilities	€0.14	Operational by 31 December 2025
Type B ₅	South Apron Expansion	€0.31	Operational by 31 December 2025

¹⁴ www.aviationreg.ie/_fileupload/Decision%20MASTERCOPY%202017-04-28.pdf

Type B ₆	North Apron Developments – Pier 1 extension and Apron 5H PBZ	€0.34	Operational by 31 December 2025
Type B ₇	West Apron Vehicle Underpass-Pier 3 Option	€0.33	Operational by 31 December 2025
Type B ₈	South Apron Airside Support Centre	€0.02	Operational by 31 December 2025

Where:

$CPI_{HISTORIC}$ is the percentage change (whether positive or negative) in the consumer price index between February 2022 and October 2025.

$CPI_{FORECAST}$ is the projected percentage change (whether positive or negative) in the consumer price index from 2025 full-year to 2026 full-year based on the most recent projection produced by the International Monetary Fund¹⁵.

Where:

$$QS_{2026} = (QS_{REBATE, 2026}) - (QS_{BONUS, 2026})$$

Where:

$$QS_{REBATE, 2026} = \text{Minimum} ((A + B + C + D + E + F + G + H + I + J + K + L + M + N + O + P), \text{€}0.21) + \text{Minimum} ((Q_1 + R_1 + S_1 + T_1 + U_1 + V_1 + W_1 + X_1), \text{€}0.07) + \text{Minimum} ((Y_1 + Z_1 + AA_1), \text{€}0.04) + \text{Minimum} ((AB_1 + AC_1 + AD_1), \text{€}0.04)$$

$$QS_{BONUS, 2026} = \text{Minimum} ((Q_2 + R_2 + S_2 + T_2 + U_2 + V_2 + W_2 + X_2), \text{€}0.07) + \text{Minimum} ((Y_2 + Z_2 + AA_2), \text{€}0.04) + \text{Minimum} ((AB_2 + AC_2 + AD_2), \text{€}0.04)$$

Where:

$A = \text{€}0.005$ * the number of days that the time passengers spend in security queue was less than 20 minutes 0 seconds less than 70% of the time but the maximum time passengers spend in security queue was less than 30 minutes 0 seconds

$B = \text{€}0.01$ * the number of days that the maximum time passengers spend in security queue was more than or equal to 30 minutes and 0 seconds but less than 45 minutes and 0 seconds

$C = \text{€}0.02$ * the number of days that the maximum time passengers spend in security queue was more than or equal to 45 minutes 0 seconds

$D = \text{€}0.01$ if, in total for the year, less than 98% of pre-notified departing passengers with reduced mobility or disabilities were assisted from an external point within the airport campus within 10 minutes and at least 0.1% of PRMs used the "assistance from external point" service; or if less than 98% of non-pre-notified departing passengers with reduced mobility or disabilities were assisted from an external point within the airport campus within 20 minutes and at least 0.1% of PRMs used the "assistance from external point" service; or if less than 95% (but at least 90%) of pre-notified departing

¹⁵ <https://www.imf.org/en/Publications/WEO>

passengers with reduced mobility or disabilities were assisted from the terminal reception point within 15 minutes; or if less than 98% (but at least 91%) of pre-notified departing passengers with reduced mobility or disabilities were assisted from the terminal reception point within 20 minutes; or if less than 95% of non-pre-notified departing passengers with reduced mobility or disabilities were assisted from the terminal reception point within 20 minutes; or if less than 98% of non-pre-notified departing passengers with reduced mobility or disabilities were assisted from the terminal reception point within 30 minutes.

$E = €0.02$ if, in total for the year, less than 90% of pre-notified departing passengers with reduced mobility or disabilities were assisted from the terminal reception point within 15 minutes; or if less than 91% of pre-notified departing passengers with reduced mobility or disabilities were assisted from the terminal reception point within 20 minutes.

$F = €0.01$ if, in total for the year, less than 93% of pre-notified arriving passengers with reduced mobility or disabilities were assisted from aircraft to terminal holding point within 10 minutes; or if less than 98% of pre-notified arriving passengers with reduced mobility or disabilities were assisted from aircraft to terminal holding point within 15 minutes; or less than 93% of non-pre-notified arriving passengers with reduced mobility or disabilities were assisted from the terminal reception point within 15 minutes; or if less than 98% of non-pre-notified arriving passengers with reduced mobility or disabilities were assisted from the terminal reception point within 20 minutes.

$G = €0.01$ * the number of times where access to the outbound baggage belt system, in a terminal that has not fully implemented hold baggage screening standard 3 (HBS3), is denied to an airline or airlines more than 30 minutes after the request due to a single event system failure; or when the outcome of delivering departing bags through the outbound baggage system, in a terminal that has fully implemented HBS3, is denied to an airline or airlines for more than 30 minutes after the request due to a single event system failure.

$H = €0.01$ * the number of times where access to the inbound baggage belt system, in a terminal that has not fully implemented hold baggage screening standard 3 (HBS3), is denied to an airline or airlines more than 30 minutes after the request due to a single event system failure; or when the outcome of delivering arriving bags through the inbound baggage system, in a terminal that has fully implemented HBS3, is denied to an airline or airlines more than 30 minutes after the request due to a single event system failure.

$I = €0.01$ * the number of months when Fixed Electric Ground Power (FEGP) is available, for new units, on average less than 93.5% of operational time, and, for old units, on average less than 98% of operational time.

$J = €0.005$ * the number of months when Fixed Electric Ground Power (FEGP) is available, for old units, on average less than 99% but greater than or equal to 98% of operational time.

$K = \text{€}0.01$ * the number of months when the Advanced Visual Docking Guidance System (AVDGS) is available, for new units, on average less than 93.5% of operational time and, for old units, on average less than 98% of operational time.

$L = \text{€}0.005$ * the number of months when the Advanced Visual Docking Guidance System (AVDGS) is available, for old units, on average less than 99% but greater than or equal to 98% of operational time.

$M = \text{€}0.01$ * the number of quarters where passenger-facing escalators, lifts and travellers in Terminal 2 are available, on average less than 98% of the time.

$N = \text{€}0.005$ * the number of quarters where passenger-facing escalators, lifts and travellers in Terminal 2 are available, on average less than 99% but greater or equal to 98% of the time.

$O = \text{€}0.01$ * the number of quarters where self-service check-in kiosks and bag drop machines are available, on average less than 98% of the time.

$P = \text{€}0.005$ * the number of quarters where self-service check-in kiosks and bag drop machines are available, on average less than 99% but greater or equal to 98% of the time.

$Q_1 = \text{€}0.01$ in a year where Dublin Airport scores less than 9.0 in the 'satisfaction with assistance for mobility or sensory impairment' measure of the Customer Service Monitor survey of Dublin Airport in 2026

$Q_2 = \text{€}0.01$ in a year where Dublin Airport scores at least 9.5 in the 'satisfaction with assistance for mobility or sensory impairment' measure of the Customer Service Monitor survey of Dublin Airport in 2026.

$R_1 = \text{€}0.01$ * the number of quarters where Dublin Airport scores less than 8.5 in the 'courtesy and helpfulness of security staff' measure on the Customer Service Monitor survey of Dublin Airport in 2026 for departing passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

$R_2 = \text{€}0.01$ * the number of quarters where Dublin Airport scores at least 9.3 in the 'courtesy and helpfulness of security staff' measure on the Customer Service Monitor survey of Dublin Airport in 2026 for departing passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

$S_1 = \text{€}0.01$ * the number of quarters where Dublin Airport scores less than 8.5 in the 'courtesy and helpfulness of airport staff' measure on the Customer Service Monitor survey of Dublin Airport in 2026 for departing passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

$S_2 = \text{€}0.01$ * the number of quarters where Dublin Airport scores at least 9.3 in the 'courtesy and helpfulness of airport staff' measure on the Customer Service Monitor survey of Dublin Airport in 2026 for departing passengers or in a year for departing passengers who used assistance for mobility or sensory impairment

$T_1 = \text{€}0.01$ * the number of quarters Dublin airport scores less than 8.5 in the 'overall cleanliness of the airport terminal' measure of the Customer Service Monitor survey of Dublin Airport in 2026 for departing and arriving passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

$T_2 = \text{€}0.01$ * the number of quarters Dublin airport scores at least 9.2 in the 'overall cleanliness of the airport terminal' measure of the Customer Service Monitor survey of Dublin Airport in 2026 for departing and arriving passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

$U_1 = \text{€}0.01$ * the number of quarters Dublin Airport scores less than 8.5 in the 'overall satisfaction with the departure (arrival) experience' measure of the Customer Service Monitor survey of Dublin Airport in 2026 for departing (arriving) passengers or in a year for transfer passengers or departing passengers who used assistance for mobility or sensory impairment.

$U_2 = \text{€}0.01$ * the number of quarters Dublin Airport scores at least 9.3 in the 'overall satisfaction with the departure (arrival) experience' measure of the Customer Service Monitor survey of Dublin Airport in 2026 for departing (arriving) passengers or in a year for transfer passengers or departing passengers who used assistance for mobility or sensory impairment.

$V_1 = \text{€}0.01$ * the number of quarters Dublin Airport scores less than 8.5 in the 'cleanliness of toilets' measure of the Customer Service Monitor survey of Dublin Airport in 2026 for departing and arriving passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

$V_2 = \text{€}0.01$ * the number of quarters Dublin Airport scores at least 9.2 in the 'cleanliness of toilets' measure of the Customer Service Monitor survey of Dublin Airport in 2026 for departing and arriving passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

$W_1 = \text{€}0.01$ * the number of quarters Dublin Airport scores less than 8.0 in the 'satisfaction with the departure lounges (gates)' measure of the Customer Service Monitor survey of Dublin Airport in 2026 for departing passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

$W_2 = \text{€}0.01$ * the number of quarters Dublin Airport scores at least 9.0 in the 'satisfaction with the departure lounges (gates)' measure of the Customer Service Monitor survey of Dublin Airport in 2026 for departing passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

$X_1 = \text{€}0.01$ * the number of quarters Dublin Airport scores less than 8.0 in the 'Ease of Movement' measure of the Customer Service Monitor survey of Dublin Airport in 2026 for departing and arriving passengers or in a year for transfer passengers or departing passengers who used assistance for mobility or sensory impairment.

$X_2 = \text{€}0.01$ * the number of quarters Dublin Airport scores at least 9.0 in the 'Ease of Movement' measure of the Customer Service Monitor survey of Dublin Airport in 2026 for departing and arriving passengers or in a year for transfer passengers or departing passengers who used assistance for mobility or sensory impairment.

$Y_1 = \text{€}0.01$ * the number of quarters Dublin Airport scores less than 8.5 in the 'finding your way around' ('ease of finding the baggage carousel for your flight') measure of the Customer Service Monitor survey of Dublin Airport in 2026 for departing (arriving) passengers or in a year for transfer passengers or departing passengers who used assistance for mobility or sensory impairment.

$Y_2 = \text{€}0.01$ * the number of quarters Dublin Airport scores at least 9.0 in the 'finding your way around' ('ease of finding the baggage carousel for your flight') measure of the Customer Service Monitor survey of Dublin Airport in 2026 for departing (arriving) passengers or in a year for transfer passengers or departing passengers who used assistance for mobility or sensory impairment.

$Z_1 = \text{€}0.01$ * the number of quarters that Dublin Airport scores less than 8.5 in the 'flight information screens' measure in the Customer Service Monitor survey of Dublin Airport in 2026 for departing passengers or in a year for transfer passengers or departing passengers who used assistance for mobility or sensory impairment.

$Z_2 = \text{€}0.01$ * the number of quarters that Dublin Airport scores at least 9.0 in the 'flight information screens' measure in the Customer Service Monitor survey of Dublin Airport in 2026 for departing passengers or in a year for transfer passengers or departing passengers who used assistance for mobility or sensory impairment.

$AA_1 = \text{€}0.01$ * the number of quarters Dublin Airport scores less than 8.5 in the 'satisfaction with ground transportation information on arrival' measure of new ground transport survey of Dublin Airport in 2026 for arriving passengers in 2026.

$AA_2 = \text{€}0.01$ * the number of quarters Dublin Airport scores at least 9.0 in the 'satisfaction with ground transportation information on arrival' measure of new ground transport survey of Dublin Airport in 2026 for arriving passengers in 2026.

$AB_1 = \text{€}0.01$ * the number of quarters Dublin Airport scores less than 9.0 in the 'satisfaction with facilities for passengers with reduced mobility' measure in the Customer Service Monitor survey of Dublin Airport in 2026.

$AB_2 = \text{€}0.01$ * the number of quarters Dublin Airport at least 9.5 in the 'satisfaction with facilities for passengers with reduced mobility' measure in the Customer Service Monitor survey of Dublin Airport in 2026.

$AC_1 = \text{€}0.01$ * the number of quarters Dublin Airport scores less than 8.5 in the 'Availability of trolleys' ('Ease of finding a trolley') measure in the Customer Service Monitor survey of Dublin Airport in 2026 for departing (arriving) passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

$AC_2 = \text{€}0.01$ * the number of quarters Dublin Airport scores at least 9.0 in the 'Availability of trolleys' ('Ease of finding a trolley') measure in the Customer Service Monitor survey of Dublin Airport in 2026 for departing (arriving) passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

$AD_1 = \text{€}0.01$ * the number of quarters Dublin Airport scores less than 8.5 in the 'satisfaction with Wi-Fi' measure in the Customer Service Monitor survey of Dublin Airport in 2026 for departing and arriving passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

$AD_2 = \text{€}0.01$ * the number of quarters Dublin Airport scores at least 9.0 in the 'satisfaction with Wi-Fi' measure in the Customer Service Monitor survey of Dublin Airport in 2026 for departing and arriving passengers or in a year for departing passengers who used assistance for mobility or sensory impairment.

W_{2026} allows for a pass through of Opex which is legislatively mandated or levied by a regulatory authority (LM OPEX) costs that comply with the conditions set out in Section 6 of the varied Determination published in July 2020. Y_{2026} adjusts for forecasting error in passenger numbers and/or qualifying costs. The W and Y factors are derived using the following formule:

$$w_{2026} = \frac{(LM\ OPEX_{CAR\ approved\ outturn2025} - LM\ OPEX_{CAR\ Forecast2025})}{PAX_{2026f}}$$

$$y_{2026} = \frac{(LM\ OPEX_{CAR\ approved\ outturn2024} - LM\ OPEX_{CAR\ Forecast2024})}{PAX_{2026f}} - w_{2025} * \left(\frac{PAX_{2025}}{PAX_{2026f}} \right)$$

Where:

$LM\ OPEX_{CAR\ approved\ outturn\ t}$ is the outturn of Opex which is legislatively mandated or levied by a regulatory authority in year t , justified by Dublin Airport with supporting evidence set out in Section 6 of the varied Determination published in July 2020 and approved by the Commission

$LM\ OPEX_{CAR\ forecast\ t}$ is the forecast of Opex which is legislatively mandated or levied by a regulatory authority for year t allowed for in the base Price Cap in year t

PAX_t is the outturn of total annual passengers at Dublin Airport in year t

PAX_{tf} is the latest available forecast of passenger numbers in year t

K_{2026} is a correction per passenger to be made in the regulatory year 2026 on account of any under collection of airport charges accrued by Dublin Airport in the regulatory year 2024 relative to the price cap. It is derived using the following formula:

$$k_{2026} = \text{Minimum} \left(\text{Maximum}(0, (P_{2024} - P_{2024\text{outturn}})), (0.05 * P_{2024}) \right) * (1 + I_{2024}) * (1 + I_{2025}) * (PAX_{2024}/PAX_{2026})$$

Where:

$P_{t, outturn}$ is the outturn yield per passenger in t

PAX_t is the outturn of total annual passengers at Dublin Airport in year t

I_t is the average daily three-month interest rate between 1 November in year t-1 and 1 November in year t using the Euribor rate or some other suitable measure.

Z_{2026} is a correction per passenger to be made in the regulatory year 2026 on account of any under collection of airport charges accrued by Dublin Airport in the regulatory year 2024 due to differences in outturn and forecast inflation. It is derived using the following formula:

$$Z_{2026} = (P_{2024}) * ((CPI_{2024outturn} - CPI_{2024}) + (CPI_{historic outturn} - CPI_{historic})) * (1 + I_{2024}) * (1 + I_{2025}) * (PAX_{2024}/PAX_{2026})$$

Where:

P_t is the yield per passenger based on the final price cap set in year t

CPI_{2024} is the forecast percentage change (whether positive or negative) in the consumer price index in 2023

$CPI_{2024outturn}$ is the outturn percentage change (whether positive or negative) in the consumer price index in 2023

$CPI_{historic}$ is the outturn percentage change (whether positive or negative) in the consumer price index between February 2022 to October 2023 used for the 2024 price cap

$CPI_{historic outturn}$ is the outturn percentage change (whether positive or negative) in the consumer price index between February 2022 and the 2023 full year index

PAX_t is the outturn of total annual passengers at Dublin Airport in year t

I_t is the average daily three-month interest rate between 1 November in year t-1 and 1 November in year t using the Euribor rate or some other suitable measure.

Explanatory Memorandum

Purpose of the Formulae

- 2.14 We have structured the formulae and determined the key values of key terms in the formulae to affect the following policies:
- Provide a reasonable prospect for daa to make a reasonable rate of return on the regulatory value of assets employed in providing services at Dublin Airport
 - Reflect the levels of costs involved in operating Dublin Airport that we believe it is reasonable to assume, considering the scope for daa to be cost effective
 - Specify the formulae for determining allowed yields, thereby securing the economic incentives for daa to be cost effective
 - Provide for increases (decreases) in yield allowances should certain milestones (not) occur that warrant increases (decreases) in the levels of capital expenditure by daa
 - Provide for decreases in yield allowances should daa fail to provide suitable quality of service for users at Dublin Airport
 - Provide for daa to carry forward under-recovery of allowed yields accrued in a year into subsequent regulatory periods provided the amount is relatively small,
 - Provide for increases in legislatively mandated Opex.
 - Provide for the automatic correction of allowed yields for the effects of inflation or deflation

Forecast Revenues Arising from the Formulae

- 2.15 We have specified the terms of the formulae to provide a reasonable prospect for daa to make a reasonable rate of return on the regulatory value of the asset base employed in providing services at Dublin Airport. The forecast outcome is set out in the yield table in Section 3, which is based on the scenario of none of the triggers occurring.
- 2.16 The applicable maximum level of Airport Charges resulting from the terms of the formulae shall be rounded to the nearest 1c.

Triggers

- 2.17 In the formulae, we have included two runway triggers (M2 and M3) that will increase the maximum levels of airport charges if Dublin Airport meets the conditions set out in CP4/2017.¹⁶
- 2.18 There are also a set of 'A' and 'B' triggers, which are added to the price cap formula, where the A trigger for a specific capital project is active when the project has received full planning permission and is on-site, and the B trigger for the same project is activated when the capital project is complete and the asset is operational (once the B trigger for a specific project is active, the A trigger is deactivated; that is, only one of

¹⁶ www.aviationreg.ie/_fileupload/Decision%20MASTERCOPY%202017-04-28.pdf

A or B or neither can be in the price cap in any given year).

2.19 For the purposes of the triggers, the following definitions apply:

- *Received full planning permission* means that the project has received planning permission from the relevant planning authority and that either a) the deadline for all possible appeals has past, or b) all possible appeals have completed with a grant of planning permission.
- *On-site* is achieved when tendering is complete for the main construction contractor package and that the contract is signed and work has commenced at the airport to construct the new infrastructure or make the intended changes to existing infrastructure.
- *Complete* means Dublin Airport has issued the Taking Over Certificate to the contractor(s) indicating satisfactory completion of the works.
- *Operational* means is being used for the project's intended purpose, as defined in the Capital Investment Programme.

2.20 In the event of a potential dispute among stakeholders as to whether these condition(s) have been fulfilled, CAR will make the final decision.

2.21 There is further discussion on triggers in Section 11.

Conditions for Opex Uncertainty Mechanism

2.22 We have included in the formulae a factor for cost passthrough of legislatively mandated Opex. It will apply to items for which the cost is largely outside the control of Dublin Airport (e.g. rates and regulatory charges). These costs will be recoverable after they have been incurred.

Quality of Service

2.23 We include in the formulae a Quality of Service term that increases (through bonuses) or decreases (through rebates) the maximum level of per passenger Airport Charges that Dublin Airport may levy should it be unable to achieve targets for various metrics (rebates) or should it achieve exceptionally good performance in certain metrics (bonuses). The Quality of Service term will not reduce the allowed level of Airport Charges through rebates by more than €0.36 in a year, and will not increase the allowed level of airport charges through bonuses by more than €0.15 in a year. The metrics are classified into 4 outcomes, each with a maximum possible reduction in the allowed level of airport charges.

Outcome 1

2.24 On a per passenger yield basis, only rebates apply and measures in outcome 1 will never reduce the allowed level of airport charges by more than €0.21 a year. The measures in outcome 1 are the following:

- 1) maximum time passengers spend in security queue times,
- 2) maximum time passengers wait for assistance for mobility or sensory

impairment,

- 3) availability of outbound baggage belts (before HBS3) and availability of outbound baggage system or a comparable alternative (after HBS3)
- 4) availability of inbound baggage belts (before HBS3) and availability of inbound baggage system or a comparable alternative (after HBS3)
- 5) availability of Fixed Electric Ground Power (FEGP),
- 6) availability of Advanced Visual Docking Guidance System (AVDGS),
- 7) availability of passenger-facing lifts, escalators and travellers, and
- 8) availability of self-service check-in kiosks and bag drop machines.

Outcome 2

- 2.25 On a per passenger yield basis, both rebates and bonuses apply, and measures in outcome 2 will never increase or decrease the allowed level of airport charges by more than €0.07 a year. The measures in outcome 2 are passenger satisfaction with 1) Additional assistance, 2) helpfulness of security staff, 3) helpfulness of airport staff, 4) cleanliness of terminal, 5) overall satisfaction, 6) cleanliness of toilets 7) departure gates and 8) ease of movement.

Outcome 3

- 2.26 On a per passenger yield basis, both rebates and bonuses apply, measures in outcome 3 will never increase or decrease the allowed level of airport charges by more than €0.04 a year. The measures in outcome 3 are passenger satisfaction with 1) finding your way around, 2) flight information screens, and 3) ground transport information on arrival.

Outcome 4

- 2.27 On a per passenger yield basis, both rebates and bonuses apply, measures in outcome 4 will never increase or decrease the allowed level of airport charges by more than €0.04 a year. The measures in outcome 4 are passenger satisfaction with 1) PRM facilities, 2) availability of trolleys and 3) Wi-fi.

Size of Price Cap Adjustments

- 2.28 The size of the Quality of Service adjustment depends on which targets, if any, Dublin Airport is not able to achieve. They are not all assigned the same weight or measured in the same manner. These differences reflect judgments by us in relation to the appropriate weight to attach to the different measures. Measures may entail daily, monthly, quarterly or annual adjustments to the price cap if Dublin Airport is not able to meet a required target:

Daily targets:

- 1) maximum security queue times,
- 2) availability of outbound baggage belts (before HBS3) and availability of outbound baggage system or a comparable alternative (after HBS3) and

- 3) availability of inbound baggage belts (before HBS3) and availability of inbound baggage system or a comparable alternative (after HBS3)

Monthly targets:

- 1) availability of Fixed Electric Ground Power (FEGP),
- 2) availability of Advanced Visual Docking Guidance System (AVDGS), and

Quarterly targets:

- 1) passenger satisfaction measures for arriving and departing passengers
- 2) availability of passenger-facing lifts, escalators and travellers.
- 3) availability of self-service check-in kiosks and bag drop machines.

Yearly targets:

- 1) maximum wait times for PRM assistance,
- 2) passenger satisfaction assistance measure for departing PRM passengers and transfer passengers.

Reporting Frequency

2.29 Dublin Airport will report quarterly on the performance of measures with daily, monthly and quarterly price cap adjustments, and annually, in the last quarter of the year, on the performance of measures with annual price cap adjustments. Dublin Airport will be responsible for arranging to have the necessary data collected for the service quality monitoring scheme. If Dublin Airport fails to provide necessary data for the scheme, it will be assumed to have failed to satisfy those targets for which necessary data are unavailable. Should Dublin Airport advise that it is unable to collect the data in a suitable format, for example in electronic format, we may waive the affected targets or substitute in an alternative means for measuring the target. Dublin Airport should notify us of any such changes.

Passenger Security Queue Time

2.30 We use the same measure of passenger security queue time as defined in the 2014 Determination. The queue start position is where the passenger joins the start of the queue (which may or may not be inside the security queue area). The queue end position is where the passenger reaches the walk-through metal detector.

2.31 Security queue time is measured with an automated system (currently Blip Track). In case of system failure or any other disruption, Dublin Airport should report it to the Commission and take manual measures of the queue every 15 minutes until the problem is resolved.

Formula for First Target: Security Queue Below 20 minutes at least 70% of time

2.32 Dublin Airport should calculate its performance for each terminal using the formula given below. We will compare the result of this formula to the target of minimum 70% of time equal to or less than 20 minutes. The denominator of the formula deducts the 15-minute windows, within operational hours, when the security queue time equals

zero.

$$\% = \frac{\sum 15\text{minute windows in a day when the queue is equal to or less than 20 minutes 0 seconds}}{\sum 15\text{minute windows in a day when the queue was more than 0 seconds}}$$

2.33 The operational hours for the security queue measure are currently the following, but they may change during the regulatory period:

- 03:15 – 00:00 in Terminal 1
- 04:00 – 00:00 in Terminal 2

Outbound and Inbound Baggage Systems

2.34 We monitor the availability of belts before the completion of Hold Baggage Screening (HBS) Standard 3 projects. After the completion of HBS3 scheduled in 2021 in Terminal 2 and 2023 for Terminal 1, we monitor the availability of the baggage system or a comparable alternative.

Availability of Belts Before HBS3: 2020 in T2 and 2020-2022 in T1

2.35 Before HBS3 is delivered, we use the 2014 Determination target for outbound baggage belts and extend it to inbound baggage belts. We expect Dublin Airport to avoid any delays of more than 30 consecutive minutes in providing groundhandlers at check-in desks or at make-up positions with access to functioning belts. Dublin Airport will have missed these targets if a baggage belt connecting to a check-in area (or from the make-up area to the arrivals carousel) is unavailable for more than 30 minutes and Dublin Airport is unable to provide an affected airline or ground handler access to an alternative baggage belt within 30 minutes of the party notifying Dublin Airport that it requires access to an alternative baggage belt.

Availability of Baggage System or a Comparable Alternative

2.36 After HBS3 is delivered, Dublin Airport will be expected to avoid any delays of more than 30 minutes in providing ground handlers at check-in desks with access to a functioning outbound baggage system or a comparable alternative that achieves the outcome of delivering departing bags to the make-up position. Similarly, for the inbound baggage system, Dublin Airport will be expected to avoid any delays of more than 30 minutes in providing ground handlers at make-up positions with access to a functioning inbound baggage system or a comparable alternative that achieves the outcome of delivering bags to the arrivals hall carousels.

2.37 Dublin Airport will have not met the outbound (inbound) baggage system target if the delivery of bags from the check-in area to the make-up position (from the make-up position to the arrivals hall carousel) is unavailable for more than 30 minutes and Dublin Airport is unable to provide an affected ground handler access to an alternative system within 30 minutes of the party notifying Dublin Airport that it requires access to the outbound baggage system.

2.38 The operational hours are currently 24/7 for outbound baggage and 07.00 to 00.00 for inbound baggage but may change during the regulatory period.

Fixed Electric Ground Power (FEGP) and Advanced Visual Docking Guidance System (AVDGS)

2.39 We set a specific target for “old” units, defined as 1-year old or more, and a separate target for “new” units, defined as less than 1-year old. Every quarter, Dublin Airport should report the number of new and old units existing at the airport. Dublin Airport will calculate the performance of FEGP units and AVDGS units using the formulas given below.

Availability of old units

$$\% = 100\% \times \left(1 - \frac{\sum \text{unavailable time per OLD unit in a month}}{\text{Number of OLD units} \times \text{Total operational time in a month}} \right)$$

Availability of new units

$$\% = 100\% \times \left(1 - \frac{\sum \text{unavailable time per NEW unit in a month}}{\text{Number of NEW units} \times \text{Total operational time in a month}} \right)$$

2.40 The operational hours of AVDGS and FEGP will be agreed by Dublin Airport in consultation with the airlines. They may differ across terminals according to airline operating models.

Passenger-Facing Lifts, Escalators and Travellators in T2

2.41 Dublin Airport should calculate the performance using the formula below.

$$\% = 100\% \times \left(1 - \frac{\sum \text{unavailable time per passengerfacing unit in T2 in a quarter}}{\text{Number of passengerfacing units in T2} \times \text{Total operational time in a quarter}} \right)$$

2.42 The operational hours of passenger-facing lifts, escalators and travellators are currently 04.00 to 00.00 daily, but may change during the regulatory period.

Self-service check-in kiosks and bag drop machines

2.43 Dublin Airport should calculate the performance per terminal using the formula below.

$$\% = 100\% \times \left(1 - \frac{\sum \text{unavailable time per unit in a quarter}}{\text{Number of units} \times \text{Total operational time in a quarter}} \right)$$

2.44 The operational hours of self-service check-in and bag drop are currently 04.00 to 00.00 daily, but may change during the regulatory period.

Passenger Satisfaction Measures from the Customer Service Monitor (CSM)

2.45 daa, as managing body of Dublin Airport, will conduct survey interviews with not less than 5,800 departing passengers and 2,700 arriving passengers per year. The interviews obtained shall reflect the expected profile of passengers travelling through

the airport. Dublin Airport will design sampling on a quarterly basis to include a spread across month, day of week and time of day. Departing passengers shall be interviewed at the gate or gate area immediately prior to boarding the aircraft, and/or other locations as agreed with the Commission. Arriving passengers shall be interviewed on the arrivals hall just before leaving the terminal building, and/or other locations as agreed with the Commission. Dublin Airport shall consult the airlines and the Commission if it intends to change the wording of any questions monitored in this Determination.

- 2.46 Dublin Airport will use the performance results of satisfaction measures up to two decimal places and will round them as appropriately to compare them to the targets. For example, if 9.0 is the target, an actual score of 8.94 or less will be rounded to 8.9 and will constitute a breach. If the actual score is 8.95 or more, Dublin Airport will round it to 9.0 and it will be deemed a pass.

Exemptions

- 2.47 Generally, if Dublin Airport does not meet a target, we will consider any evidence of extenuating circumstances which Dublin Airport may provide. The burden of proof will lie with Dublin Airport in such instances, i.e. the presumption is that, where a target is not met, the rebate will apply, unless the existence of extenuating circumstances can be demonstrated. In such a case, the Commission will publish an overview of the circumstances and the rationale as to why the circumstances are considered extenuating.

All Airport Assets

- 2.48 Airport assets are: baggage handling systems, FEGP, AVDGS, passenger-facing lifts, escalators, travellators, self-service check-in kiosks and bag drop machines.
- 2.49 Exceptions apply if Dublin Airport consults with users on the following types of work and specifies the duration of the works in advance:
- Planned and preventative maintenance where it does not impact on operations.
 - Mandatory inspections.
 - Equipment taken out of service while a major investment project is undertaken in the vicinity.
 - Equipment taken out of service for replacement or major refurbishment work.
- 2.50 The above works may relate to both fixed equipment or relevant IT systems provided either by Dublin Airport or a third party. If works extend beyond the consulted period, without reasonable justification, then the additional downtime will count against the target. Dublin Airport will not be required to notify users of urgent issues that require immediate intervention to prevent worse damage or disruption. For IT systems, we consider that security threats might be an example of urgent issues that require immediate action.
- 2.51 Other exceptions are:

- for the inbound-baggage system, if there are delays in passenger processing through immigration.
- For baggage systems, any delays to baggage processing due to a third-party issue. Examples are bag tag quality issues or bag messaging and connectivity system failures caused by airlines.
- Closure of passenger-facing escalators, travellers and lifts in T2 immediately adjacent to security queues and immigration where it is considered by the relevant managers that their continued use is likely to lead to unacceptable health and safety risks due to increased congestion.
- In the event of fire-alarm activation, sprinkler activation, terminal evacuations, emergency-stop activations or maintenance to address pressing safety concerns. In the case of false alarms, the exception for each occurrence should be limited to an agreed time with users during which the assets should become available again;
- Equipment downtime due to damage, or misuse likely to have been caused by airlines or their agents or where an airline or agent has accepted responsibility or where the users agree with Dublin Airport in writing that the likelihood is that the damage has been caused by an airline or its agent;
- If any fault or stoppage occurs as a result of any resource issue or industrial action by a ground handler or airline;
- Downtime where a fault has been reported by airlines or their agents, but, when the engineers attend the site, no fault is found, and the equipment is working;
- In the event of serious disruption caused by weather.

3. Introduction of Explanatory Memorandum and Background

3.1 This section introduces the reasoning underlying the amended Determination on the maximum level of Airport Charges that daa may levy at Dublin Airport for the period starting 1 January 2023 (inclusive) and ending on 31 December 2026 (inclusive). It also provides an overview of the previous interim reviews of the 2019 Determination.

Final Decision

3.2 Table 3.1 is the yield table. It shows the inputs, under each building block, which we use to arrive at the price cap. It shows the base price caps, and the price cap increases conditional on the progression/delivery of triggered projects.

Table 3.1: Yield Table

	2023	2024	2025	2026
Operating Costs (€m)	304.6	317.7	323.5	328.2
Commercial Revenues (€m)	276.2	297.1	315.5	329.6
Opening RAB (€m)	2289.6	2498.5	2686.8	2890.2
Closing RAB (€m)	2181.5	2369.8	2546.8	2730.7
Standard Depreciation (€m)	108.1	126.5	140.0	159.5
Accelerated Depreciation	0.00	2.2	0.00	0.00
Return on capital (Cost of Capital (€m))	95.2	103.6	111.4	119.6
Total capital costs (€m)	203.3	232.3	251.4	279.1
Adjustments	8.6			
Required revenue (€m)	240.4	252.9	259.4	277.7
Passengers (m)	31.7	33.6	34.7	35.7
Base price cap (€)	7.59	7.53	7.48	7.77
North Runway Forecast Triggers	0.00	0.31	0.30	0.30
CIP 2023-2026 Forecast Triggers	0.00	0.00	0.79	1.49
Forecast Triggered Price cap (€)	7.59	7.83	8.57	9.57

Source: CAR. The 2023 required revenues includes adjustment for ATI fees, undercollection in 2021 (k factor), and the difference between forecast and outturn CAR costs for 2022.

3.3 The annual price cap is the maximum level of revenue which may be collected from Airport Charges accrued in that year, expressed as a per passenger yield. Airport Charges for the purposes of a determination are defined as per the Airport Charges Directive.¹⁷ They cover, non-exhaustively, charges for taking off, landing and parking aircraft, using airbridges, passenger charges, and relating to transportation of cargo.

3.4 We have decided to set the annual per passenger price cap included in Table 3.1. Apart from triggers, adjustments to the price cap will be made if:

- Dublin Airport does not meet the targets for Quality of Service as set out in Section 11. A total of €0.36 is at risk, while a bonus of up to €0.15c is available.
- An operating expenditure passthrough charge is applied to allow the recovery of

¹⁷ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32009L0012>

costs largely outside the control of Dublin Airport as set out in Section 8.

- 3.5 Table 3.1 shows the price caps in real February 2022 prices. Based on IMF inflation forecasts, which show high inflation for 2023 and 2024 before moderating in 2025 and 2026, the nominal price caps are forecast as set out in Table 3.2. If inflation were to be higher than our forecasts, the nominal price caps actually charged would be higher, and vice versa.

Table 3.2: Forecast Nominal Price Caps, and 2022 Actual Price Cap

	2022A	2023	2024F	2025F	2026F
Forecast Base Price Cap	€8.11	€8.68	€8.87	€9.00	€9.53
Forecast Price Cap including Triggers	€8.11	€8.68	€9.23	€10.30	€11.73

Source: CAR

Supporting Evidence

- 3.6 We commissioned several reports to inform certain aspects of this decision. These reports, published alongside this document, relate to:
- Efficient operating costs forecasts, by CEPA/Taylor Airey.
 - Advice on the efficient Cost of Capital, by Swiss Economics.
 - An efficiency assessment of the proposed Capital Investment Programme conducted by Steer, in its role as Independent Fund Surveyor (IFS).
 - A review of the financeability of the draft regulatory settlements, by Centrus.
 - An assessment of the deliverability of the Capital Investment Programme, also conducted by Steer, to assist us in considering responses we received to the Draft Decision.
- 3.7 Draft versions of the first four reports were published alongside our Draft Decision. These reports were then finalised having regard to the submissions received from stakeholders in response to the content of the reports.
- 3.8 In 2019, we commissioned Helios to carry out fast time simulations of the planned future airfield and terminal buildings, to assess whether the proposed investment programme would allow for 40 million passengers per year to be handled, as intended by Dublin Airport. Given that many of the planned projects are the same or similar to those originally planned in 2019, we continue to refer to this analysis where relevant.
- 3.9 The financial model showing the calculation of the price caps is also published. We would encourage stakeholders to make use of this model, to better understand this decision. Interested parties may wish to use this model to compare outturns against our forecasts over 2023-2026, and/or to assess the potential future trajectory of the price cap (i.e. after 2026) under different scenarios.

Structure of Report

- 3.10 The subsequent chapters in this document explain in more detail how we arrived at our final decision.

- 3.11 Section 4 sets out the substantial grounds and the objective of this review. Section 5 considers our statutory objectives and how we give effect to these, as well as the various statutory factors to which we must have regard. Section 6 describes the general approach to regulation that we have followed.
- 3.12 Sections 7, 8, 9, 10, and 11 address the standard regulatory building blocks, namely passenger forecasts, operating expenditures, commercial revenues, cost of capital and capital costs. In each case, we set out the values we have allowed for the next four years and how we arrived at these numbers.
- 3.13 Section 12 considers the ability of Dublin Airport to finance the regulatory settlements and to invest in the facility. Section 13 discusses our conclusions in relation to service quality. Section 14 deals with other issues that do not fit in the above sections.
- 3.14 There is also an appendix to this report which lays out our response to stakeholder comments on our Draft Decision in relation to individual Capex projects. For easy reference, we have included a summary table detailing our treatment of allowed capital projects.

Background

- 3.15 The 2019 Determination, published in October 2019 and generally referred to in this document as the original 2019 Determination, set the price caps at Dublin Airport for 2020-2024. Following publication in October 2019, the determination was appealed by Dublin Airport and Ryanair on a range of grounds. The Commission made some relatively small reductions to the price caps for 2022 and 2023 in response to the findings of the appeals panel in relation to one of the grounds of appeal brought by Ryanair.
- 3.16 Subsequent to the publication of the determination in October 2019, in early 2020, it became clear that the Covid-19 pandemic would have a substantial impact on the assumptions and forecasts underpinning the determination. Thus, it was necessary to carry out an Interim Review of the determination.

First Interim Review

- 3.17 A decision on the first interim review was published in December 2020. The main aim was to implement solutions to avoid or resolve any unintended consequences that had arisen from the large reduction in passenger numbers. All triggers and adjustments to the price cap were removed for these years, including the operating cost passthrough mechanism and downward price cap adjustments associated with the Capex reprofiling triggers. The review further stipulated that there would be no clawback of capital costs associated with unspent Capex in 2020 or 2021. This RAB adjustment will benefit Dublin Airport over the period 2023-2026, rather than 2020-2022.
- 3.18 The downside risk which had materialised was exceptional and unprecedented. We concluded, where proportionate, that this warranted a degree of regulatory relief for Dublin Airport. We also had regard to our obligations to protect the interests of airport users who were themselves suffering from a severe downside shock.

3.19 For 2020, the Interim Review replaced the per passenger price cap with a set of individual caps that reflected Dublin Airport's menu of charges applicable during 2020. This had the effect of waiving the ex-ante price cap compliance requirement. The first Interim Review ultimately allowed an effective price cap of €9.94 per passenger for 2020, and €7.50 per passenger for 2021, in nominal prices.

Second Interim Review

3.20 In 2021, we carried out a second Interim Review which broadly carried forward this approach into 2022. In our decision on the second review, we also committed to carrying out this full review in 2022.

3.21 Combined with the impact of the review already undertaken in relation to 2020 and 2021, we previously forecast that the value of our regulatory interventions for Dublin Airport over 2020-2022 would be in the region of €200m to €220m over the period 2020-2026. Given that passenger numbers in 2022 are now higher than expected when we estimated that range, the value to Dublin Airport will be higher, given that the 2022 price cap will be recovered from a higher volume of passengers.

Third Interim Review

3.22 In late 2021, we started our process of engagement with stakeholders in preparation for the 2022 building block review. In February we began the process of public consultation on the issues and methodologies, with the publication of the 2022 Issues paper.

3.23 In March, Dublin Airport issued a draft Capital Investment Programme to airport users for consultation. Following those meetings, in May of this year we received a Regulatory Proposition for the regulatory period 2023-2026 from Dublin Airport. In June, Dublin Airport provided an updated proposition. These documents are available on our website.

3.24 In July, we published the Draft Decision on this interim Review which provided a detailed consultation on our draft proposals. The two month public consultation exceeded the one month requirement of Section 32 of the Aviation Regulation Act 2001. In October, we published the submissions we received from 13 stakeholders in relation to the draft proposals.

3.25 In October we published a contingency consultation on Options for the Timeline for the third review in the event the Air Navigation and Transport Act, 2022 was not commenced by the end of 2022. However, the relevant sections of the act were commenced by the Minister of Transport with effect from 22 December 2022.

3.26 With this document, we therefore now publish the Final Decision as of 23 December 2022, following a detailed review of all submissions received as well as ongoing discussions with stakeholders.

4. Substantial Grounds, Scope and Objective

- 4.1 Pursuant to Section 32(14) of the Aviation Regulation Act 2001, as amended by the State Airports Act, 2004, the Commission may carry out an interim review of the prevailing determination if it considers that there are substantial grounds for doing so.¹⁸ If it sees fit, it may amend the determination.
- 4.2 The Commission has previously used the following test to establish whether substantial grounds exist for conducting an interim review:¹⁹
- Are the circumstances exceptional?
 - Are the circumstances generally outside the control of the regulated company?
 - Are the effects of those circumstances liable to be significant enough to compromise the objectives of the original decision without a review (taking into account the incentive and any other detriments that would in general also arise from a review)?
- 4.3 Establishing substantial grounds should be done in a manner consistent with the Statutory Objectives of the Commission, as should any decision to amend the prevailing determination. We have previously established that the impact of Covid-19 constituted substantial grounds to review the 2019 Determination in relation to 2020-2022.
- 4.4 As stated in the Draft Decision for this review, we similarly consider that the profound impact of the Covid-19 pandemic on the assumptions and business plans underpinning the 2019 Determination building blocks clearly constitutes substantial grounds to carry out a review of the 2019 Determination in relation to 2023 and 2024. The circumstances arising from the Covid-19 pandemic are exceptional by any reasonable metric, and outside the control of Dublin Airport. If left unamended, certain aspects of the regulatory settlements for 2023 and 2024 are likely to run contrary to our Statutory Objectives and contrary to the objectives of the original 2019 Determination.

Scope and Objective

- 4.5 As proposed in the Draft Decision, the scope of this review is a full reassessment of each of the building blocks, leading to revised price caps for 2023 and 2024. The building block inputs for these years have been revised to take account of changes since the original 2019 Determination. Other aspects of the regulatory settlements, such as the timing of capital project triggers, have also been realigned with updated project delivery timelines. As the original timelines were impacted by Covid-19, this gives effect to the objective of the original decision.
- 4.6 As set out in Section 6, we extend the period of the 2019 Determination to also cover 2025 and 2026. This aligns with the objectives of the original 2019 Determination in providing to stakeholders a short- and medium-term view on Airport Charges, over a

¹⁸ This section was amended by the State Airports Act 2004, removing the 2-year time limit and now an interim review can be conducted at any time.

¹⁹ https://www.aviationreg.ie/fileupload/Image/PR_AC2_PUB8_CP6_2006.pdf

time horizon similar to that of a standard full determination.

- 4.7 The objective is to update each building block, to take account of the significant changes which have occurred since 2019. In doing so, we base our decisions on the revised objectives as set out in the ANTA.

Submissions Received

- 4.8 Dublin Airport supports this Interim Review, stating that the circumstances surrounding the pandemic and volatility faced by the aviation industry necessitate an update to the 2019 Determination.
- 4.9 Ryanair is of the opinion that a review is not required or justified at this time. It states that the previous Interim Reviews have resulted in a significant transfer of pandemic related losses to airport users, and that to continue to place this burden on users, given the current fragile state of the aviation market, is unacceptable.

Decision

- 4.10 We consider that the events surrounding Covid-19 constitute substantial grounds to conduct this review. As a result of these events, there are several elements of the regulatory settlements established in the original 2019 Determination that are no longer fit for purpose and would run contrary to our statutory objectives. This is discussed further in Section 5 and in subsequent sections.
- 4.11 The requirement for this review is not driven by a need to transfer risk, but rather to update the determination to take account of changes to prevailing assumptions in 2019. We agree with Ryanair that our approach does, however, imply an element of risk sharing, similar to the reviews undertaken in relation to 2020-2022. In the circumstances, we consider that to be justified and proportionate, having regard to the issues which would arise were we to decide to not carry out an Interim Review. For example, all of the Capex reprofiling triggers would be misaligned with a more realistic timeline to deliver the respective projects. Where relevant, such as in relation to Dublin Airport's risk profile, we take account of our own actions to date in carrying out Interim Reviews of the 2019 Determination.
- 4.12 We have not made any changes to the overall purpose or scope of this review. It remains in line with what was proposed in the Draft Decision.

5. Statutory Objectives and Policy

- 5.1 This section sets out the statutory requirements, previous Ministerial Directions, and Government Policy which we take account of.
- 5.2 As set out in the Draft Decision, our Statutory Objectives changed in 2022, with the enactment of the Air Navigation and Transport Act, 2022 (ANTA) and commencement of sections which amend the Aviation Regulation Act, 2001.²⁰ The ANTA provides for the merger of the aviation regulatory functions of the Irish Aviation Authority (IAA) with the aviation regulatory functions of the Commission for Aviation Regulation, into a new IAA as a single consolidated aviation regulator. There are also a number of amendments related to the economic regulation of Airport Charges.
- 5.3 The amendment to Section 32 of the Aviation Regulation Act, 2001, is particularly important for this review, as it allows us to extend the regulatory period of a determination by up to 2 years when conducting a review of a previous determination. As noted above, we make use of this to extend the current period to include 2025 and 2026.
- 5.4 The ANTA lays out new objectives for us when making a determination on the maximum level of Airport Charges. While this Interim Review is an amendment to an existing determination, rather than making a determination, it is still a full building blocks review of the 2019 Determination. We have had due regard to the updated objectives in arriving at our positions in this decision.

Statutory Requirements

- 5.5 Section 33 of the Aviation Regulation Act, 2001, as amended by Section 22 (4) of the State Airports Act, 2004, sets out our Statutory Objectives and factors to which we must pay due regard. These have been further amended by Section 98 of the Air Navigation and Transport Act, 2022 (ANTA).
- 5.6 This section sets out our interpretation of the objectives and factors as described in the ANTA. Our Statutory Objectives now require the regulation of Airport Charges at Dublin Airport with primary reference to the reasonable interests of current and prospective users of Dublin Airport.

Statutory Objectives

- 5.7 *"In making a determination, the principal objectives of the Commission shall be to protect and promote the reasonable interests of current and prospective users of Dublin Airport and the Commission shall seek to—*
- a) *promote safety and security at Dublin Airport,*
 - b) *facilitate the efficient and economic development and operation of Dublin Airport,*
 - c) *promote high-quality and cost-effective airport services at Dublin Airport,*

²⁰ Previously referred to as the 'ANTB' prior to enactment.

and

- d) *take account of the policies of the Government on aviation, climate change and sustainable development."*

Protecting and promoting the reasonable interests of current and prospective users

- 5.8 Our primary goal of protecting and promoting the interests of users is best served by making a pricing decision which seeks to promote economic efficiency by Dublin Airport. This involves incentivising the provision of services which match the quality expected by passengers, at efficient cost, which further allows airlines to offer passengers enhanced value and choice. The various components of the regulatory model, as described in this document, are designed to achieve this outcome.
- 5.9 We have consulted with users throughout this process (both airlines and passenger representatives) to ensure we understand their requirements. We have addressed the needs of future users by enabling the provision of sufficient future infrastructure, and by ensuring that future users are not now being committed to inefficient costs in the future.
- 5.10 We seek to protect the interest of current and prospective users by setting a price cap which will remunerate the estimated efficient Operating and Capital costs for Dublin Airport to provide the services that users require, at the quality desired. We do not intend to allow Airport Charges to exceed this level, as this would harm the interests of airport users by reducing the value being provided by the airport. We also protect users against the risk of paying for capital projects which are not being progressed by increasing the number of associated price cap triggers, relative to the Draft Decision.
- 5.11 It is no longer a primary Statutory Objective for us to enable daa to operate Dublin Airport in financially viable manner. However, as set out in the Draft Decision, we continue to assess financeability. Doing so is implicit in promoting the reasonable interests of current and prospective users. It would not be in the interests of users or in furtherance of any of our other objectives if we were to include remuneration for projects which are unlikely to be delivered in practice because Dublin Airport would be unable to finance them in the regulatory period. The financeability of the regulatory settlement does not conflict with the interests of users, but rather, these goals are complementary.

Promote safety and security at Dublin Airport

- 5.12 We meet this objective primarily by facilitating Dublin Airport in efficiently incurring safety and security related costs. Examples of this include Capex projects such as the introduction of Explosive Detection Systems for Cabin Baggage Standard 3 (EDSCB C3) and Hold Baggage Screening Standard 3 (HBS3). We also include operating expenditure for the security business unit, including costs associated with enhancements to this unit, and the airport fire and police services.
- 5.13 From the perspective of aerodrome safety, we include taxiway projects such as Dual Taxiways F and Taxiway R, which will enhance safety by allowing unrestricted north/south taxiing of Code E aircraft. We allow for the West Apron Underpass project,

which will enhance safety by replacing the vehicle level crossing of Runway 16/34.

- 5.14 Where a project is demonstrated to be required for compliance purposes, we include efficient costs associated with it. Promoting safety and security, particularly by including required costs associated with compliance in the forecasts which underpin the price caps, is also implicitly in the interests of airport users.

Facilitate the efficient and economic development and operation of Dublin Airport

- 5.15 We meet this statutory objective primarily by setting a price cap for Dublin Airport which remunerates the airport for forecast efficient Operating and Capital Costs, as described in Sections 8, 10, and 11. We have allowed for investment in projects which will increase capacity at Dublin Airport to meet anticipated requirements of future airport users.

Promote high-quality and cost-effective airport services at Dublin Airport

- 5.16 We have set comprehensive Quality of Service standards to promote the provision of high-quality airport services, while also providing for the recovery of efficient costs of providing the airport services. In our cost forecasts, we are seeking to balance challenge with achievability, thereby promoting cost-effective airport services.
- 5.17 For example, we continue to set targets for security queue wait times, while having regard to the duty of Dublin Airport to carry out a security inspection in line with regulatory requirements. We continue to set targets in relation to the assistance of passengers with disabilities or reduced mobility. We also include Quality of Service bonuses to incentivise exceptional performance in relation to passenger satisfaction.
- 5.18 These standards have been arrived at in consultation with the Passenger Advisory Group (PAG) and other stakeholders. We originally established this group in 2018 to improve our understanding of what is important for passengers at Dublin Airport. The standards applied in our original 2019 Determination were established with the assistance of the PAG. We met with the PAG ahead of both the draft and final decisions on this review. As set out in Section 13, we reintroduce the comprehensive suite of quality metrics from 2023, following the temporary Covid-19 related suspension in 2020 and 2021, and partial reintroduction in 2022.

Take account of the policies of the Government on aviation, climate change and sustainable development.

- 5.19 We have taken into account relevant policies and considered how the various business and investment planning elements of the Interim Review might strike an appropriate balance between these policies. We have further reviewed the project Ireland 2040 Policy since the Draft Decision, in light of consultation responses. This and all other relevant policies are outlined below.

Statutory Factors

- 5.20 In setting the maximum level of airport charges, we have due regard to the following statutory factors.

The restructuring including the modified functions of daa

5.21 As noted in the Draft Decision, since the original 2019 Determination, we are not aware of any such change in the structure or functions of daa which is relevant for the purpose of fulfilling our statutory function to set the maximum levels of Airport Charges.

The level of investment in airport facilities at Dublin Airport, in line with safety requirements and commercial operations in order to meet the needs of current and prospective users of Dublin Airport

5.22 We have allowed an efficient level of capital investment to meet the needs of current and prospective users, having regard to safety requirements, service level requirements, passenger traffic demand forecasts, and the commercial operations of Dublin Airport. Dublin Airport's Capital Investment Plan (CIP) has been formulated through consultation with airlines. Since the Draft Decision, we have updated our project cost estimates to account for increased construction inflation. We also allow for the cost of a Passenger Boarding Zone (PBZ) on the South Apron, as proposed by Dublin Airport in response to the Draft Decision in light of user support.

5.23 As in 2019, Dublin Airport's CIP is intended to enhance the capacity of the airport such that it could process 40 million passengers per annum (mppa) at an appropriate level of service quality. As outlined in the Draft Decision, our assessment of the CIP was informed by the views of current users and analysis of the level of capacity future users would require (such as passenger traffic forecasts). This was based on evidence provided by stakeholders, and also the airfield and terminal simulation modelling which we commissioned in 2019, which showed that Dublin Airport's investment programme would generally allow for the forecast 40mppa flight schedule to be facilitated at an appropriate level of service.

5.24 Information on the allowed investment projects, together with an overview of consultation responses, are set out in Section 11 and the Appendix.

The level of operational income of daa from Dublin Airport, and the level of income of daa from any arrangements entered into by it for the purposes of the restructuring under the State Airports Act 2004.

5.25 Operational income here refers to Aeronautical and Commercial Revenues associated with the operation of Dublin Airport.

5.26 We are not aware of any income arising from arrangements daa has entered into for the purposes of restructuring under the 2004 State Airports Act which is of relevance for this review.

5.27 As outlined in the Draft Decision, we continue to favour a RAB based building blocks approach with a single till when setting the price cap. For this reason, we continue to include Commercial Revenues and associated costs in our price cap calculations, such that Dublin Airport will be able to recover sufficient income from Airport Charges to meet efficiently incurred costs.

Costs or Liabilities for which daa is responsible

5.28 As set out below in sections 8, 10, and 11, we have regard to the Capital and Operating costs and liabilities of Dublin Airport.

Policy statements, published by or on behalf of the Government or Minister of the Government and notified to the Commission by the Minister, in relation to the economic and social development of the State

5.29 The manner in which we continue to have due regard to policy notified to us by the Minister is set out below.

The cost competitiveness of airport services at Dublin Airport

5.30 We continue to read this factor in light of our Statutory Objective to protect and promote the reasonable interests of current and prospective users of Dublin Airport. We set the price cap based on the costs that an achievably efficient operator at Dublin Airport would need to incur. An efficient price cap and high-quality airport infrastructure will be to the benefit of current and prospective users of Dublin Airport. We promote cost competitive airport services by setting the price cap at a level required to deliver services and infrastructure to a standard which is in the interests of current and future users, but no higher than that.

Imposing minimum restrictions on daa consistent with the functions of the Commission

5.31 As noted in the Draft Decision, we continue to afford Dublin Airport significant discretion in how it manages and runs the airport. Subject to complying with the price cap, it will continue to have discretion on its charging strategy (subject to the requirements of the Airport Charges Directive), and its actual expenditure.

5.32 As set out in Section 11, Dublin Airport is afforded flexibility on Capex to the extent that we consider proportionate, having regard to our other objectives, in particular protecting the interests of airport users. Since the Draft Decision, we have increased the flexibility afforded to Dublin Airport by combining all asset care projects into a single budgetary allowance.

5.33 We do not set any pricing sub-caps as we believe that doing so would not, at this time, be consistent with imposing the minimum required restrictions on daa consistent with the functions of the Commission.

Such national and international obligations as are relevant to the functions of the Commission and daa.

5.34 This decision is consistent with Directive 2009/12/EC on Airport Charges. We are the Independent Supervisory Authority (ISA) for the purposes of the Airport Charges Directive.²¹ The Directive does not change our role in determining the price cap under national legislation, within which Dublin Airport then sets individual Airport Charges through an annual consultation process. The material we publish ensures transparency

²¹ Regulation of the European Communities (Dublin Airport Charges) Regulations 2011, S.I. 116 of 2011

over the methodology used for setting the maximum level of Airport Charges. Where relevant, we also have regard to the recommendations of the Thessaloniki Forum of airport charges regulators of European Union Member States. This forum, which we are a member of and contribute to, produces policy papers aimed at better implementation of the Directive and the promotion of best practices in the economic regulation of airports.

- 5.35 Under national law, we have regard to the safety and compliance obligations of Dublin Airport. We have also had regard to the security, immigration and health and safety requirements to which airports are subject, as well as relevant national policy.

The need to encourage competition at Dublin Airport to—

- (i) improve capacity,
- (ii) provide choice on routes,
- (iii) provide choice between airlines, and
- (iv) improve international connectivity.

- 5.36 This is a new Statutory Factor which has been introduced by the ANTA.

5.37 We have allowed for capital projects which will increase the capacity of the airport, which will enable it to meet future demand, encourage and facilitate new entrants and thus facilitate competition and connectivity in the airline and ground handling markets. This benefits current and future users by providing for increased choice and value in airport and aviation services.

5.38 Competition and connectivity at Dublin Airport will also be encouraged through efficient Airport Charges which are sufficient to enable the delivery of required capacity and the provision of an appropriate level of service quality, but not higher than that.

Ministerial Directions

5.39 As set out above, we must have due regard to National Policy notified to us by the Minister for Transport. We have not received a Ministerial Policy Direction relating to the 2019 Determination.

5.40 In previous determinations on Airport Charges, we set out how the determination complied with Ministerial Policy Directions issued under Section 10 of the Aviation Regulation Act, 2001. Below we set out how we continue to comply with those policy directions, while also complying with our Statutory Objectives.

The 16 August 2001 Ministerial Direction

5.41 Having regard to the contents of the 2001 Direction, we concluded that, for Dublin Airport, this meant providing it with sufficient resources to provide for its continued infrastructure development. We stated that providing for continued infrastructure development at Dublin Airport was best met by providing Dublin Airport with a separate price cap (at that time the Commission also set limits on the maximum levels

of Airport Charges at Cork and Shannon airports).

- 5.42 This regulatory settlement continues to provide for infrastructure development at Dublin Airport and thus complies with that 2001 Direction.

The 18 August 2005 Ministerial Direction

- 5.43 In analysing the 2005 Direction, we concluded that its clear focus was to make a determination which enabled Dublin Airport to add additional capacity in an efficient and timely manner. We further considered the implications for sustainability and financial viability of the capital expenditure programme for Dublin Airport and satisfied ourselves that daa would be able to finance the programme.
- 5.44 We are satisfied that we continue to comply with the 2005 Direction and that the Interim Review will enable Dublin Airport to add required capacity in an efficient and timely manner. Our new principal Statutory Objective is to protect and promote the reasonable interests of current and prospective users of Dublin Airport; a sustainable and financially viable capital expenditure program is in line with the interests of airport users.

The 3 April 2007 Ministerial Direction

- 5.45 In complying with the 2007 Direction, we made a determination which provided for increases in infrastructural capacity in line with growth in air services at Dublin Airport, as sought by the National Development Plan 2007-2013. We also comprehensively reconsidered the sustainability and financial viability implications of the capital expenditure programme, and in particular the impact of providing a second terminal. The determination also considered the implications of the restructuring of the State Airports.
- 5.46 In this Interim Review, we continue to provide for infrastructure developments in line with requirements at Dublin Airport and also consider the sustainability and financial viability implications of Dublin Airport's capital expenditure programme.

The 27 October 2009 Ministerial Direction

- 5.47 In complying with the 2009 Direction, we believed that it was crucial that the airport would offer users a suitable Quality of Service at a cost-effective price, such that it would encourage and incentivise greater air access, greater investment and thereby contribute to the broader economic development of the State. Therefore, the 2009 Determination included a Quality of Service system for the first time. It provided a price cap sufficient to enable Dublin Airport, provided it was efficient, to fund what we considered to be an appropriate level of investment to provide users with a suitable Quality of Service into the future and to cover the operating costs necessary to provide such a Quality of Service today.
- 5.48 We were also mindful that general economic development would be hindered if access to Dublin Airport was restricted because of capacity constraints. The 2009 Determination addressed this, most specifically through its treatment of possible costs associated with adding new runway and terminal capacity, areas which were

separately identified in the 2009 Direction.

- 5.49 We continue to comply with that Direction through the manner in which we include the Quality of Service system, and by setting out revised regulatory settlements which are sufficient to facilitate the efficient and economic development of Dublin Airport. This will enable Dublin Airport to fund an appropriate level of investment to provide users with a suitable Quality of Service into the future and to cover the operating costs necessary to provide such a Quality of Service over 2023-2026. These actions serve to protect and promote the reasonable interests of current and prospective users of Dublin Airport.
- 5.50 Part of the 2009 Direction set out that it is Government policy for daa operate on a commercial basis without recourse to exchequer funding or an equity injection by the State. In that context, it noted the need to secure lender confidence and raise debt financing on a cost-efficient basis. We continue to assess the practical financeability of our proposed regulatory settlements and thus are mindful of the need for Dublin Airport to secure lender confidence and raise debt finance on a cost-efficient basis, without the availability of equity injection. This is discussed in Section 12.

The 15 September 2014 Ministerial Direction

- 5.51 The Minister sought to clarify policy as regards the financially sustainable development of Dublin Airport. In that regard, he directed us to “ensure that the Dublin Airport Authority’s financial viability is protected in order to implement Government policy on:
- The role of Dublin Airport as an international gateway for Ireland, including as a secondary hub for air traffic flows between Europe/Asia and the US, and its strategic role in relation to air access for the tourism sector, inward investment and general economic development;
 - The desirability that Dublin Airport should have the terminal and runway facilities to promote direct international air links to key world markets, including the new high growth emerging economies, and the importance of maximising the use of that infrastructure and planning for the future in that context;
 - The sustainable operation of Dublin Airport on a commercial basis without recourse to Exchequer funding or an equity injection by the State and in that context, the need to secure lender confidence and raise debt financing on a cost-efficient basis.”
- 5.52 In 2014 we stated that in making a Determination, one of our objectives is “...to enable daa to operate Dublin Airport in a sustainable and financially viable manner” (our emphasis). It is for Dublin Airport to ensure it operates and develops the airport in a sustainable and financially viable manner.
- 5.53 In 2014, we were satisfied that the Determination complied with the 2014 Direction by allowing Dublin Airport a price cap sufficient to enable daa, provided it was efficient, to fund a substantial investment programme which would allow it provide users with a suitable Quality of Service, while permitting it to cover operating costs necessary to provide current users with a suitable service. We take a similar approach in this review.

Policy Directions

5.54 In July 2018, we were notified by the Department of Transport, Tourism and Sport to pay due regard to the 2017 Policy Statement on Airport Charges Regulation and the 2015 National Aviation Policy (NAP) for the 2019 Determination.

2017 Policy Statement on Airport Charges Regulation

5.55 We pay due regard to this policy statement in this Interim Review.²² First, the Policy Statement identifies that we shall no longer be mandated to have specific regard to the financial viability of Dublin Airport in making a Determination. The Statement adds that this is intrinsic in the primary objective of protecting the interests of current and future users. As described above, that is now our principal Statutory Objective following the enactment of the ANTA.

5.56 Second, the Policy Statement proposed an explicit reference to competition in the revised legislation, which is now a statutory factor, as discussed above.

5.57 Third, the Policy proposed that we should have regard to Government policy on climate change and sustainability. This is now a Statutory Objective under the ANTA, as noted above.

2015 National Aviation Policy

5.58 The key goals of the 2015 National Aviation Policy are as follows:

- enhance Ireland's connectivity by ensuring safe, secure and competitive access responsive to the needs of business, tourism and consumers.
- foster the growth of aviation enterprise in Ireland to support job creation and position Ireland as a recognised global leader in aviation.
- maximise the contribution of the aviation sector to Ireland's economic growth and development.

5.59 The policy also places significant emphasis on the development of hub infrastructure at Dublin Airport.

5.60 These goals are consistent with our approach to this Interim Review. As set out above, our overall goal is to maximise the value which Dublin Airport provides to current and future airport users. This will maximise the contribution of Dublin Airport to the aviation sector, which will, in turn, maximise the contribution of the aviation sector to Ireland's economic growth and development. Where we consider that an element of the National Aviation Policy is of particular relevance to an aspect of the regulatory settlement, this is highlighted below.

5.61 The National Aviation Policy is particularly relevant to the capital investment allowances that support the development of Dublin Airport.²³ We have included nearly all of Dublin Airport's proposed capital investment programme into the regulatory

²² <https://assets.gov.ie/26680/9b68321ca33a4ed397f9b2094c7e6e33.pdf>

²³ <https://assets.gov.ie/14197/9b90e1b8a47d47c8950ead2492a54030.pdf>

asset base (provided the costs are efficient), including costs associated with the delivery of infrastructure to meet foreseeable demand and the development of Dublin Airport as a secondary hub.

Relevant Policies following enactment of the Air Navigation and Transport Act, 2022

5.62 This subsection sets out our review of relevant government policies, as referenced in the amended statutory objectives inserted in Section 33 of the Aviation Regulation Act, 2001, as amended by the ANTA. We have reviewed these policies as summarised below, in particular to identify aspects relevant for this review, and then set out how we take account of them.

The Climate Action Plan

5.63 The Climate Action and Low Carbon Development (Amendment) Act 2021²⁴ commits Ireland to reach a legally binding target of net-zero emissions no later than 2050, and to achieve a cut of 51% by 2030 (compared to 2018 levels). Under the 2021 Act, Ireland's national climate objective requires the state to pursue and achieve, by no later than the end of the year 2050, the transition to a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy.

5.64 The New Economy and Recovery Authority (NewERA) has been tasked with developing a framework for the commercial Semi-State sector to address climate action objectives. Dublin Airport will be required to follow these commitments, as outlined in the Climate Action Plan 2021 paper.²⁵

5.65 We enable Dublin Airport to meet its Climate Action Plan targets primarily by allowing for Dublin Airport's proposed Sustainability projects. This category includes a project to increase electric vehicle charging facilities, facilitating the electrification of Dublin Airport's fleet, and thereby reducing its reliance on fossil fuels. It also includes a sustainability upgrade to Terminal 2 which will replace the fossil fuel heating system with a renewable energy alternative, thereby lowering carbon emissions.

2018 EU directive on renewable energy

5.66 The Renewable Energy Directive, Directive (EU) 2018/2001, (REDII), transposed into Irish law through the European Union (Renewable Energy) Regulations 2020 (S.I. 365 of 2020)²⁶, established a common framework for the promotion of energy from renewable sources in the EU. It set a binding target of 32% for the overall share of energy from renewable sources in the EU's gross final consumption of energy in 2030. It also established sustainability and greenhouse gas emissions saving criteria for biofuels, bioliquids and biomass fuels and laid down rules on financial support to enhance the use of renewable energy usage. In January 2020, the European Green Deal was adopted by the European Parliament. This emphasised the need for more ambitious action to address climate change. The resolution called for the revision of the RED in line with the new climate ambitions by establishing new binding obligations

²⁴ <https://data.oireachtas.ie/ie/oireachtas/act/2021/32/eng/enacted/a3221.pdf>

²⁵ <https://www.gov.ie/en/publication/6223e-climate-action-plan-2021/>

²⁶ <https://www.irishstatutebook.ie/eli/2020/si/365/made/en/print>

for individual Member States. This directive is in the process of being updated.

- 5.67 As part of the update ‘Delivering on the European Green Deal’²⁷ (the Fit for 55 package), the European Commission is seeking to accelerate the take-up of renewables in the EU to make a decisive contribution to its ambition of reducing net greenhouse gas emissions by at least 55% by 2030 – and ultimately becoming climate neutral by 2050. These proposals are seeking to increase the current EU-level target of renewable energy sources in the overall energy mix from at least 32% to at least 40% by 2030.
- 5.68 In this context, in our price cap calculations we allow for investment in sustainability related projects, as set out in Section 11 and the Appendix. This includes projects such as the photovoltaic solar farm phase 2, an anaerobic digester, low-emissions fleet vehicles, and the enhancement of the energy efficiency of airport buildings.

Alternative Fuels Directive (AFIR), and ReFuel

- 5.69 The AFIR concerns the creation of a new Regulation for the deployment of alternative fuels infrastructure.²⁸ The new Regulation will repeal Directive 2014/94/EU of the European Parliament and of the Council on the deployment of alternative fuels infrastructure.
- 5.70 It will be complementary to the ReFuelEU aviation initiative and is supportive of the expansion of fixed electrical ground power (FEGP). We enable Dublin Airport to meet this objective by allowing for the rollout of Fixed Electrical Ground Power (FEGP) units. It provides that airport managing bodies of all Trans-European Transport Network (TEN-T) core and comprehensive network airports will ensure the provision of electricity supply to stationary aircraft by: (a) 1 January 2025, at all gates used for commercial air transport operations; (b) 1 January 2030, at all outfield posts used for commercial air transport operations. Furthermore, as of 1 January 2030 at the latest, Member States are required to take the necessary measures to ensure that the electricity comes from the electricity grid or is generated on site as renewable energy.
- 5.71 The Refuel Aviation initiative is part of the Fit for 55 package and will set obligations on the supply of, or demand for, renewable and low carbon transport fuels, including that starting in 2025, the aviation fuel made available to EU airports should contain 2% Sustainable Aviation Fuel (SAF), increasing to 5% by 2030, 32% by 2040 and 63% by 2050.
- 5.72 In this context, we allow for the Alternative Fuels project. This project is intended to create a transition and development plan for infrastructure to provide for Sustainable Aviation Fuel (SAF) at Dublin Airport and fund research into the enablement of alternative aviation fuels at the airport.

Renewable Fuels for Transport

- 5.73 This policy seeks to support Ireland’s commitment to reduce greenhouse gas emissions in the transport sector and contribute to meeting Ireland’s 2030 emission reduction

²⁷ https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal/delivering-european-green-deal_en

²⁸ https://ec.europa.eu/info/sites/default/files/revision_of_the_directive_on_deployment_of_the_alternative_fuels_infrastructure_with_annex_0.pdf

target of 51%²⁹. It encourages the introduction of renewable fuels in aviation once they are suitably developed and available, subject to enabling legislation. However, EU wide targets are now higher than 51%, so the encouragement of renewable fuels in aviation is still relevant but the targets have been superseded.

Clean Vehicles Directive

- 5.74 The Clean Vehicles Directive³⁰ obliges EU Member States to ensure that, as of August 2021, all public contracting authorities who are procuring road transport vehicles consider the operational lifetime energy and certain environmental impacts, including energy consumption, emissions of CO², and emissions of nitrous oxide (NO_x), non-methane hydrocarbons (NMHC) and Particulate Matter.
- 5.75 We have enabled the airport to meet its clean vehicles objectives by allowing for the Sustainable Fleet project. This project aims to introduce new LEV sustainable light and heavy fleet vehicles.

Project Ireland 2040

- 5.76 The National Development Plan (NDP)³¹, a cornerstone of Project Ireland 2040, includes plans to prioritize surface connectivity to ports and airports, with a particular focus on rail freight connectivity to the Ports of National Significance and improved sustainable mobility connections to the State Airports.
- 5.77 The plan is supportive of significant investment in Ireland's airports and ports, which, it states, will play a major role in safeguarding and enhancing Ireland's international connectivity which is fundamental to Ireland's international competitiveness, trading performance in both goods and services and enhancing its attractiveness to foreign direct investment. We understand '*significant investment*' to refer to the investment required to facilitate connectivity. This aligns with our Statutory Objectives to promote safety and security at Dublin Airport, and to facilitate the efficient and economic development and operation of the airport. The NDP also states that investment will facilitate the improvement and development of Ireland's ports and airports and will help the country recover from the impacts of Covid-19.
- 5.78 Under the plan, airports will be encouraged to develop measures to enhance sustainability and to meet regulatory requirements, including targets for cleaner infrastructure. Airports will be encouraged to move away from using fossil fuels, where possible, including a move from diesel to electric Ground Power Units (GPUs) in line with any new requirement under a revised Alternative Fuels Directive. As discussed above, in our price cap calculations we have allowed for capital projects which will enable Dublin Airport to meet these objectives.
- 5.79 The other key component of project Ireland 2040 is the National Planning Framework³², which identifies investment in high quality international connectivity as crucial for Ireland's overall international competitiveness, in line with the National

²⁹ <https://www.gov.ie/en/policy-information/168c6-renewable-fuels-for-transport-policy-statement/>

³⁰ <https://eur-lex.europa.eu/eli/dir/2019/1161/oj>

³¹ <https://www.gov.ie/en/publication/774e2-national-development-plan-2021-2030/>

³² [National Planning Framework](#)

Aviation Policy and cites signature projects such as the second runway for Dublin Airport. It also cites the development of the airport as key to achieving the continued performance of Dublin city. The policy also notes the importance of access to Dublin Airport in the form of road transport and rail.

National Strategy for Women and Girls

- 5.80 This policy is cited by the sustainable development goals.³³ It proposes that public bodies should assess the human rights of women and girls and any gender equality issues when complying with the public sector duty under section 42 of the Irish Human Rights and Equality Act 2014, which requires public bodies to have due regard to equality and human rights.
- 5.81 One key outcome of this policy is for gender equality to be formally addressed by public bodies, in their implementation of the public sector duty to eliminate discrimination, promote equality of opportunity and treatment, and protect human rights. The related action for this outcome is for all public bodies to assess and identify the human rights of women and girls and the gender equality issues that are relevant to their functions and address these in their strategic planning, policies and practices, and annual reports, in line with the public sector duty under section 42 of the Irish Human Rights and Equality Commission Act 2014.
- 5.82 A second key outcome is to achieve a public service that demonstrably values diversity, is inclusive and representative of the wider population, and promotes equality of opportunity and protects the human rights of its employees. The related action is for public sector bodies (bearing in mind the existing public sector duty to eliminate discrimination) to promote equality and protect human rights, to take measures to review gender equality outcomes in recruitment and promotion in the public service, and to identify barriers to equality and evaluate and prioritise actions which could address those barriers.
- 5.83 We assess that such goals are primarily for Dublin Airport in its role as the airport operator and employer, rather than coming within the scope of making or amending a determination on the maximum level of Airport Charges. However, we do not see any aspect of this decision which would be inconsistent with these goals.

Towards Responsible Business: Ireland's Second National Plan on Corporate Social Responsibility (CSR) 2017-2020

- 5.84 This policy is cited by the sustainable development goals.³⁴ It is designed to encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle. A relevant action for Dublin Airport would be to increase the recognition of the impact of business operations on the environment and to encourage businesses to mitigate their negative impacts. This would involve supporting and promoting environmental

³³ [https://www.justice.ie/en/JELR/National Strategy for Women and Girls 2017 - 2020.pdf/Files/National Strategy for Women and Girls 2017 - 2020.pdf](https://www.justice.ie/en/JELR/National%20Strategy%20for%20Women%20and%20Girls%202017%20-%202020.pdf/Files/National%20Strategy%20for%20Women%20and%20Girls%202017%20-%202020.pdf)

³⁴ <https://enterprise.gov.ie/en/Publications/Publication-files/Towards-Responsible-Business-Ireland%E2%80%99s-National-Plan-CSR-2017-2020.pdf>

policy and encouraging businesses it deals with to strive for resource efficiencies.

- 5.85 In this context, as set out above, we include allowances for various sustainability projects intended to enable Dublin Airport to mitigate its impact on the environment.

Submissions Received on the Draft Decision

- 5.86 Joseph Ryan believes that we should continue to prioritise the operation and development of Dublin Airport in a sustainable and financially viable manner.
- 5.87 Dublin Airport considers that our key objective should be to find an appropriate price path that not only provides an efficient level of Airport Charges, but that will also allow it to sustain operations and secure its financial viability, in the interests of both the airport and airport users.
- 5.88 Ryanair is concerned about how we interpret the Statutory Objectives. It argues that we assume that airlines can fully recover from passengers the '*significant cost increases*' inherent in the Draft Decision and this does not equate to offering passengers increased value and choice.
- 5.89 Ryanair believes that our interpretation of the reasonable interests of users reinforces the idea that the airport can deliver services that users are not willing to pay for but still be rewarded with higher charges. It believes that this is counter to user interests and would not be possible at an airport subject to competition.
- 5.90 Ryanair does not agree with the interpretation of 'due regard' factors relating to increasing competition at Dublin Airport in order to attract more routes and services from the airlines, in order to improve Ireland's connectivity in accordance with the National Aviation Policy. It acknowledges that having inadequate airport capacity would not align with these aims but notes that providing for excess capacity and consequent higher Airport Charges would damage connectivity.
- 5.91 Ryanair notes that the ANTA deletes the Statutory Objective '*to enable Dublin Airport Authority to operate and develop Dublin Airport in a sustainable and financially viable manner*'. It states that when we assert that it would not be in the interests of users if the airport could not finance the projects allowed in the period, we presuppose that we have correctly identified the projects required and valued by users to be delivered within the timescale.
- 5.92 Ryanair states that the revisions in the ANTA promote the objective '*to protect and promote the reasonable interests of current and prospective users of Dublin Airport*' to the principal objective. It also argues that the other objectives are relegated to secondary or subsidiary objectives which the Commission is not obliged to deliver but must simply seek to deliver, and clearly not at the expense of its primary objective. It believes that the Commission must consider this change in its Final Decision.
- 5.93 Limerick Chamber, Galway Chamber, and Shannon Airport believe that we should consider capacity availability at other State airports when evaluating investment plans. They argue that not doing so could result in existential concerns for Ireland's other airports, which would impact upon the 'Project Ireland 2040' policy aims of achieving balanced regional development.

- 5.94 Galway Chamber argues that Project Ireland 2040 is the foundation of current government policy and should be more thoroughly assessed. Galway and Limerick Chambers argue that capacity expansion will increase Dublin Airport's market power and be detrimental to customers. Shannon Airport, Limerick Chamber and Galway Chamber similarly consider that we should look at optimising the national airport network, in line with Project Ireland 2040. It believes that we should assess the impact of Airport Charges decisions not solely from the view of Dublin Airport but also for the country as a whole.
- 5.95 Limerick Chamber considers that Dublin Airport represents a '*store of embodied carbon*' at a time when the State is trying to decarbonise its infrastructure. Limerick Chamber, Galway Chamber, and Shannon Airport believe that developing and utilising Ireland's other airports instead of Dublin Airport would be more environmentally friendly and would align with the Governments plans to reach Net Zero emissions by 2050.
- 5.96 Limerick Chamber and Shannon Airport Group argue that prospective users of Dublin Airport are actually displaced users of other Irish airports, and it would be in their interests to use the other airports rather than Dublin Airport. Limerick Chamber believes that our seeking to maximise the value of Dublin Airport is at odds with the objective to protect and promote the reasonable interests of current and prospective users of Dublin Airport as it does not account for users of Ireland's other airports. It believes that this could hinder aspects of National Aviation Policy in relation to the role of other airports. Galway Chamber echoes Limerick chamber's view and asks us to consider how Dublin Airport's capacity expansion will impact on the market dominance of Dublin Airport and the goals of the National Aviation Policy.
- 5.97 Shannon Airport argues that allowing capacity enhancing projects to proceed at Dublin Airport regardless of the potential impact on the climate is incompatible with the Climate Action Plan. It references the Government's focus on developing a circular economy (as set out in 'The Whole of Government Circular Economy Strategy (2021)') and questions the sustainability of investing in new infrastructure rather than maximising the use of existing infrastructure.

Commission Response

- 5.98 We agree with Ryanair that the ANTA defines our primary objective as the protection and promotion of the reasonable interests of current and prospective users of Dublin Airport. We therefore seek to maximise the value which the airport will provide to current and future users, allowing for investment necessary for Dublin Airport to expand capacity to meet reasonably foreseeable demand, facilitating competition between airlines and more choice for passengers. We also provide for price caps set at a level that will enable Dublin Airport to operate the airport in a manner which is in the interests of users.
- 5.99 Applying the building blocks approach does require us to make an assessment of whether and in what manner to make allowances for proposed projects. We do this based on the evidence available to us, the views expressed by airport users, through public consultations, and the proposals we receive from Dublin Airport. We consider the merits of all arguments and, where they conflict, we must come to a conclusion

which, in our view, strikes the best balance between our objectives.

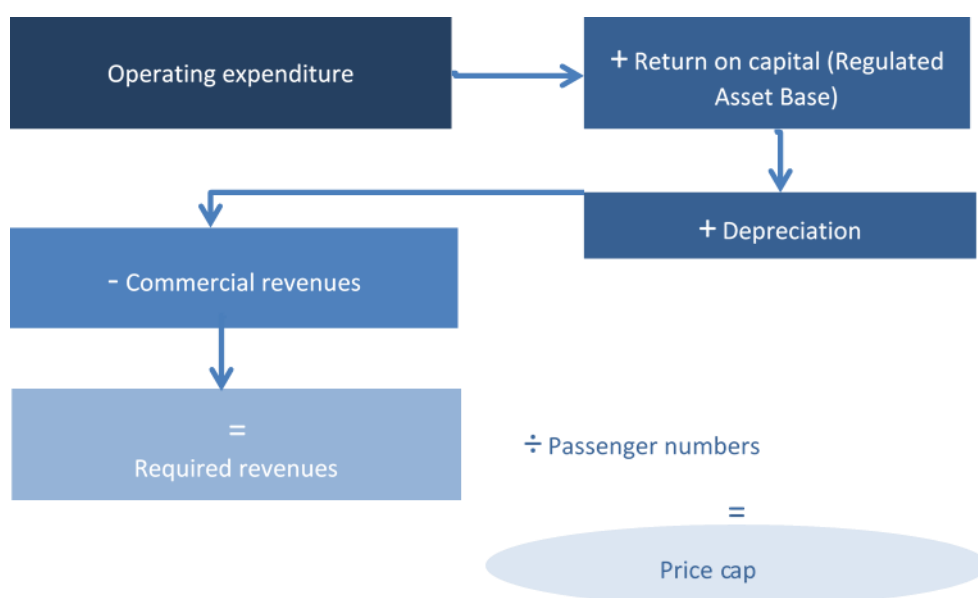
- 5.100 We understand that Ryanair, as a major airport user, has a particular set of views and priorities, and we have taken account of these, but we have also accounted for the views of other airport users and respondents to our consultations. Airport users are defined broadly and includes both passenger and cargo airlines.
- 5.101 We agree that the provision of excess capacity would not be in the interests of airport users, however we disagree that the proposed investment programme, given the associated timelines and our passenger traffic forecasts, provides for excess capacity. Further details on these points are set out in subsequent sections.
- 5.102 We agree with Joseph Ryan and Dublin Airport in relation to continuing to assess the practical financeability of our regulatory settlements. As explained above, this is implicit in the interests of users, both over the period 2023-2026, and beyond.
- 5.103 In relation to other airports in Ireland, we set out above that our primary Statutory Objective relates directly to Dublin Airport users. We do not find the argument that prospective users of Dublin Airport are actually '*displaced*' users of other Irish airports to be persuasive. We also have statutory obligations to facilitate the efficient and economic development and operation of Dublin Airport, and to promote high-quality and cost-effective airport services at Dublin Airport.
- 5.104 We note that Cork and Shannon airports were explicitly removed from our remit regarding the making of Airport Charges determinations in 2004 via the State Airports Act, when Shannon was also separated from daa group.
- 5.105 While we agree with the importance of developing and sustaining other Irish airports, as established in Government policy, we are not, either, convinced that a decision by us to constrain the delivery of capacity relative to demand at Dublin Airport would lead to that outcome. Firstly, it would lead to significantly lower Airport Charges at Dublin Airport relative to what we have determined in this decision. That would not be conducive to enhancing the attractiveness of other airports relative to Dublin Airport, and would offset or outweigh the potential enhanced attractiveness caused by the associated deterioration in service standards and slot capacity for users of Dublin Airport.
- 5.106 A 'network till' approach across airports, whereby costs and revenues are pooled (and often regional or smaller airports are subsidised by major airports) does occur in other countries and is permissible under EU law, however in 2004 the decision was made not to take the network approach.
- 5.107 Such an approach would also likely lead to capacity constraints at Dublin Airport, with lower service standards for Dublin Airport users. Finally, there is no guarantee that airlines who would have chosen to operate at Dublin Airport if slots and/or an acceptable service standard had been available would instead move significant capacity to other Irish airports. This is particularly the case in relation to the development of Dublin Airport as a secondary hub, as per Government policy. Thus, airlines might instead place capacity outside of Ireland completely, leading to an overall loss of connectivity, value, and choice.

- 5.108 The development of Dublin Airport as a secondary hub is directly set out in the 2014 Ministerial directive and in the 2015 National Aviation Policy which states that *‘An opportunity now exists to develop Dublin as a vibrant secondary hub, competing effectively with the UK and other European airports for the expanding global aviation services market’*.
- 5.109 Regarding the environmental impact of capacity expansion, we agree that there are potential trade-offs between our statutory obligations to *‘facilitate the efficient and economic development and operation of Dublin Airport’* and to *‘take account of the policies of the Government on aviation, climate change and sustainable development’*. There are also tradeoffs within the policy objectives themselves. We aim to find the optimal balance between these statutory obligations. We have chosen to address this by allowing for both capacity enhancing and sustainability enhancing projects, as outlined below.
- 5.110 Thus, our approach to interpreting our Statutory Obligations and policy objectives remains broadly in line with that set out in the Draft Decision. However, in relation to the specific application of our approach, we have made a number of adjustments within various building blocks where we consider that persuasive arguments and/or new evidence has been provided that would suggest that making a change would better align with our objectives.

6. Approach to Regulation

- 6.1 As proposed in the Draft Decision, we have decided to retain a general approach to regulation which is in line with the original 2019 Determination and with previous determinations. We have decided to use the building blocks approach with a single till, having regard to the regulatory asset base (RAB), to amend the maximum level of Airport Charges per passenger for 2023 and 2024 and to set the maximum level of charges for 2025 and 2026.
- 6.2 This approach involves calculating targets for future Operating Expenditures, Commercial Revenues, Passenger numbers, and Capital Costs (which in turn requires an assessment of proposed capital projects). The single till approach means that we include Commercial Revenues generated from activities such as retail, car parking and Food & Beverage at the airport, and also the capital and operating costs associated with providing these non-aeronautical services.

Figure 6.1: The building blocks approach



Source: CAR

- 6.3 We set quality standards to incentivise the airport to sustain and improve its performance in the areas which are important to airport users (passengers and airlines).
- 6.4 We then consider the question of financing and financial viability by checking that, when all the building blocks are taken together, Dublin Airport should be able to raise debt at an efficient cost to fund the development and operation of the airport, in the interests of current and future airport users.
- 6.5 We implement incentive-based regulation. Where Dublin Airport outperforms our targets, it keeps the gain and vice versa. For the most part, Dublin Airport holds the risk within the period, and it is transferred to users at the time of the subsequent determination. This creates incentives for Dublin Airport to act as a company in a competitive market would, in responding to circumstances as they unfold.

General Representations Received

- 6.6 Dublin Airport states that it supports the proposed regulatory framework.
- 6.7 Dublin Airport states that we should recognise the increasingly competitive nature of the airport sector, as reflected in the trend of reduced levels of economic regulation at a number of UK airports. Dublin Airport asserts that it would be contrary to its own interests to set prices which are not reflective of the efficient costs of service provision (i.e. at the competitive level). Dublin Airport states that its Airport Charges have been falling in real terms since 2010.
- 6.8 Dublin Airport considers that compared to other European airports, it has among the lowest levels of aeronautical charges. It presents a benchmarking analysis in support of this assertion. It believes that due to the pandemic and the planned development of the airport, there is a need for higher charges, but that even under Dublin Airport's proposed charging levels set out in the regulatory proposition, it would remain '*among the lowest in Europe*' in the next regulatory period.
- 6.9 Dublin Airport states that Airport Charges play a comparatively small role in airfares compared to other airline cost components such as fuel and labour. It estimates that Airport Charges made up, at most, 8-9% of Ryanair and Aer Lingus' costs in 2019. Thus, its proposed increase in Airport Charges over 2023-2026 would have an impact of just 4% to 4.5% on airline cost bases.
- 6.10 Dublin Airport states that its proposed increase in charges of €9.06 for a round trip, equates to a 6.2% increase in the price of an average short haul ticket, and 1.3% in the price of an average long-haul ticket. It thus asserts that it is unreasonable to single out increases in Airport Charges as driving negative outcomes in the sector, when other airline costs such as fuel are increasing more significantly, and Airport Charges are regulated by an independent regulator and designed to be cost-reflective. Dublin Airport states that all airlines pay the same charges, which means that Airport Charges are non-discriminatory and enables the airlines to pass the full increase to the passengers.
- 6.11 Emerald Airlines considers that Airport Charges should strike a balance between facilitating strategic investment in facilities/infrastructure upgrades, and maintaining cost competitiveness for passengers/airlines. It asserts that this is especially relevant for Dublin Airport due to it being a '*geographical monopoly*'.
- 6.12 Joseph Ryan compares the proposed Dublin Airport and Heathrow Airport price caps, stating that while the cap at Heathrow will be £26.31 (€31) in 2026, the cap at Dublin Airport will be just €8.48, or 27% of the Heathrow cap. Joseph Ryan considers the price cap set at Dublin Airport to be highly restrictive and points towards the airport's debt profile as a consequence of this '*low*' cap. He adds that Ryanair plans to increase its average airfare from €40 to €50 over the next five years while Dublin Airport's price cap only increases by 60c over the same period. He also adds that we do not know whether airlines pass on the '*lower charges*' to passengers.
- 6.13 Joseph Ryan states that if it is true that charges at Dublin Airport are 40% to 50% lower than other airports this is an '*exceptionally significant*' difference and calls for further

explanation. Joseph Ryan highlights the reduction in price cap at Dublin Airport over the past decade. He says that this decrease is predicated on passenger numbers increasing, airport debt growing and Commercial Revenues increasing. He thinks that the current approach to regulating the airport puts it in a precarious situation by forcing it to acquire debt.

Commission Response

Market Power

- 6.14 No updated Market Power Assessment (MPA) of Dublin Airport has been conducted as part of this Interim Review. We are therefore not in a position to comment on whether there has been a shift in the level of competitive constraints faced by Dublin Airport, or if it is still broadly a *'geographic monopoly with no competition'* as stated by Emerald Airlines.
- 6.15 The last MPA was carried out in 2016 and found that Dublin Airport should continue to be subject to price cap regulation due to Significant Market Power. The ANTA now allows us, at the request of the Minister for Transport, to periodically reassess the level of market power, and if warranted, changes may be made to the extent of economic regulation.

Comparisons with other Airports

- 6.16 In setting the price cap, we do not have specific regard for how charges at Dublin Airport compare to other airports. Rather, we look to arrive at a price per passenger that an achievable efficient operator of Dublin Airport, subject to effective competition, would charge. Thus, we use the building blocks approach based on Dublin Airport's own capital and operating cost base and consequent forecast revenue requirements. This is in line with ICAO principles and EU law regarding the setting of Airport Charges based on cost-relatedness. It is also broadly supported by stakeholders, with such support being restated by Dublin Airport in its response. We do not derive the price cap from the cost base or revenue requirements of other airports such as Heathrow.
- 6.17 Dublin Airport and Joseph Ryan state that Dublin Airport's charges are far lower than comparable airports. In our experience, it is challenging to draw such comparisons in a robust manner given the differing charging structures, scope, bundling, and categorisation of services provided at different airports. For example, at an airport which processes a higher proportion of cargo than Dublin Airport, Airport Charges per passenger will be higher, all else equal. Airport Charges may vary depending on incentive schemes, but this may not be reflected in the cost of operating a particular flight. If US Preclearance at Dublin Airport were to be categorised as an aeronautical rather than commercial charge, this would increase Airport Charges per passenger without any changes in the scope or cost of services being provided. Furthermore, at certain airports, some airlines do not actually pay the published charges, but rather have bilateral agreements in place with the airport operator.³⁵

³⁵ Including, for example, Gatwick and Stansted airports.

- 6.18 As noted by Joseph Ryan, Dublin Airport claims that it is cheaper/more efficient than ‘European peers’. Other benchmarking analysis previously provided by other stakeholders have suggested this not to be the case. Whether or not charges at Dublin Airport appear relatively low or high depends on which factors are taken into account and corrected for, or not, in such calculations, and the sample of airports deemed to be ‘comparable’. To be meaningful, such analysis must take account of the actual charges paid by airlines for the specific services delivered. It is difficult to answer this question, particularly where charges are agreed bilaterally and confidentially with airlines. As we have previously shown, these comparability issues can dramatically undermine the results of such high-level comparisons.³⁶
- 6.19 Within the Thessaloniki Forum of Airport Charges regulators, we have previously observed that stakeholders sometimes present benchmarks which appear to indicate relative efficiency/inefficiency at a high level, sometimes in contradiction of each other. Furthermore, EU and UK airports are subject to varying degrees of economic regulation; comparing Dublin Airport to other airports with market power may be more reflective of benchmarking regulatory models against each other.
- 6.20 We also note that no respondent suggested a specific alternative approach to the setting of the price caps other than the building blocks approach based on Dublin Airport’s own cost base. Unless we were to move away from the building blocks approach, the level of charges at other airports does not feed directly into the calculations. As recognised by Dublin Airport, Airport Charges are designed to be cost related as per Irish/EU Law, and ICAO principles.³⁷
- 6.21 In relation to Heathrow Airport, the price cap set by the CAA for 2026 is unlikely to be £26.31, as stated by Joseph Ryan. The CAA Final Proposals lay out a real price cap (unprofiled) proposal of £21.96³⁸, and this may evolve further when the CAA ultimately makes a final decision in the context of continued recovery in passenger traffic. Joseph Ryan is comparing a nominal figure (i.e., including inflation forecast to 2026) with our real price cap proposal, and furthermore excluding our forecast trigger allowances when doing so.
- 6.22 Nonetheless, Joseph Ryan is broadly correct that Heathrow’s Airport Charges per passenger are significantly higher than at Dublin Airport, and that is likely to still be the case in 2026. This is a feature of Heathrow’s cost base compared to Dublin Airport’s. Heathrow charges are similarly capped by the UK CAA based on a building blocks approach using a RAB and single till. However, Heathrow’s cost base is not relevant to Dublin Airport’s charges, nor vice versa. For example, we understand that the Heathrow Airport opening RAB for H7 is £17.5bn, or c€20bn. This is approximately 10 times larger than the opening RAB at Dublin Airport for 2023, which is €1.9bn. Remuneration of this asset base must be paid for by passengers at Heathrow Airport, of which there were only 2.5 times the number relative to Dublin Airport passengers in 2019. This means that capital costs per passenger will be much higher at Heathrow than Dublin Airport.

³⁶ See paragraph 6.29

<https://www.aviationreg.ie/fileupload/2019%20Determination/Final%20Determination/2020-2024%20Determination.pdf>

³⁷ https://www.icao.int/publications/Documents/9082_9ed_en.pdf

³⁸ <https://publicapps.caa.co.uk/docs/33/CAP2365A%20H7%20Summary.pdf>

Airport Charges and Financing

- 6.23 Given that Airport Charges must be cost related, and that Dublin Airport seeks to invest c€2bn over the period, and equity funding other than retained earnings is not available to Dublin Airport, this implies negative cash flow which must be funded through debt. Our model therefore allows for Dublin Airport to raise c€1bn in new debt over the period. Dublin Airport, in its model, also assumes that it will raise €1bn in new debt over the period, notwithstanding its proposed higher Airport Charges. Additional debt could be avoided, as advocated by Joseph Ryan, by reducing the level of investment in the facility by circa €1bn. This, in turn, will reduce the cost base for 2023-2026 and beyond, and reduce the level of Airport Charges.
- 6.24 Such an approach is supported by Ryanair, but not generally by other respondents or by Dublin Airport. For the reasons set out below, we do not believe that such an approach would be in furtherance of our Statutory Objectives. Instead, we believe that it is appropriate that our regulatory settlement would facilitate the financing of a significant investment programme. The ultimate decision on actual gearing, appropriate level of capital expenditure, and financing strategy, is a matter for Dublin Airport and/or its shareholder. This is discussed further in Section 12.
- 6.25 Our passenger number forecast, including the potential risks to it identified by Joseph Ryan, is discussed in Section 7.

Airport Charges and Airfares

- 6.26 In relation to whether airlines pass the value of efficient Airport Charges to passengers, we note that the EU Commission found strong evidence of competitive behaviour among airlines at Dublin Airport in 2013.³⁹ Since then, more routes have been added by Ryanair and Aer Lingus, as well as by other airlines. Where airlines are competing, there is an incentive for an airline to pass reductions in the cost base to passengers, in the form of reduced airfares. Otherwise, competitors will offer relatively lower fares and the airline will lose market share and/or suffer reduced load factors. Dublin Airport in its response, acknowledges that the airlines should be able to pass on the charge increase it proposes to passengers.
- 6.27 In a perfectly competitive market, any change in the cost base is immediately reflected in pricing, and there are no other side effects in relation to the decision making of market participants. It is apparent that the airline industry is not perfectly competitive as per the economic theory of a perfectly competitive market. Airlines also benefit from competitively set charges relative to the counterfactual scenario of higher charges. However, competitive charges at a given airport also have knock on effects on airline behaviours, which are generated by competitive imperfections in the airline industry. Airlines introduce new routes, add more frequencies, or enter new markets, leading to enhanced airline competition. Particularly given that other elements of the cost base such as fuel and labour are less affected by the route network decisions, efficient Airport Charges can make the difference between a marginal route being sustainable, or not. This increased connectivity benefits the Irish economy as a whole

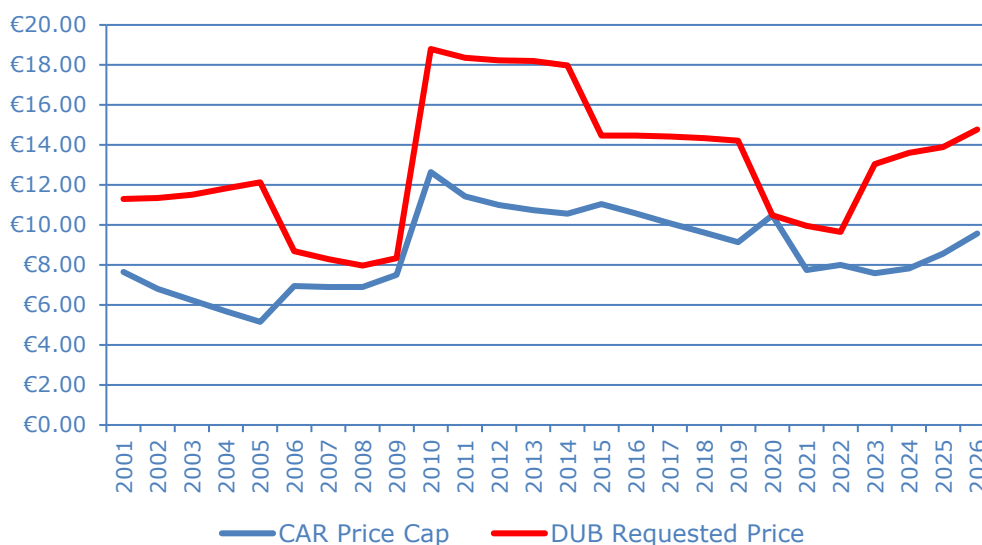
³⁹ https://ec.europa.eu/competition/mergers/cases/decisions/m6663_20130227_20610_3904642_EN.pdf

by increasing tourism and enterprise.

- 6.28 Thus, ultimately, if Airport Charges are unnecessarily high, this will both directly impact the value for passengers, as estimated by Dublin Airport, but also generate a knock-on impact in relation to factors which will further erode the value, choice, and connectivity available to passengers, and stifle the potential contribution which could be made by Dublin Airport.
- 6.29 In relation to the Ryanair comment on its average airfare increasing by 20% over the next five years, we note that Ryanair's actual airfares will continue to be driven by factors such as cost pressures and load factor targets, rather than through public statements. Joseph Ryan is comparing a potential nominal increase in airfares with a real increase in the price cap. As set out below, we expect inflation alone to increase the Dublin Airport price cap by 23% between February of this year, and 2026, before considering the real increases in the price caps.
- 6.30 We note that Dublin Airport also appears to be comparing nominal cost growth forecasts (e.g. fuel) with its own real cost increase forecasts, where it concludes that it will increase airline cost bases by just 4%. Thus, given inflation forecasts, the Dublin Airport figures are understated by approximately 23% by 2026. We also note that, in response to the Draft Decision, Dublin Airport provided updated (increased) cost proposals and also an updated traffic forecast, which overall would put upward pressure on its pricing proposal relative to the Regulatory Proposition.
- 6.31 Showing the breakdown of Airport Charges on the ticket, as Joseph Ryan suggests, is not straightforward. Airport Charges include various aeronautical charges such as runway charges, parking charges, the PRM charge, and incentive scheme rebates. The Passenger Service Charge (PSC) applies for departing flights only. It is therefore not possible that one airfare can be directly translated into Airport Charges, as the final amount paid by the airline will also vary with the load factor achieved for the flight, any incentive rebates generated by the airline for the year as a whole, and various other factors. At a global level, the level of Airport Charges paid collectively by passengers in a given year is the price cap.

Price Cap Trajectory over Time

- 6.32 In relation to the comments on the decreasing price cap trajectory over the past decade, Figure 6.2 below shows the price caps set since the first (2001) determination, all in real February 2022 prices. It also shows Dublin Airport's requested price caps.

Figure 6.2: Real Price caps 2001-2026

Source: CAR, Dublin Airport, Real February 2022 Prices. Excluding K Factor Adjustments.

Dublin Airport requested price caps for 2023-2026 are based on Dublin Airport's Regulatory Proposition, as amended in June 2022, rather than the higher price caps which would be implied by some of the revised forecasts and costings it provided in response to the Draft Decision.

Price caps for 2023-2026 include triggered allowances in line with Dublin Airport's timelines for delivering the respective projects.

- 6.33 There have been various upward and downward pressures over the years; most notably, a significant increase in the price cap in 2010 when the Terminal 2 (Box 1) trigger entered the price cap. This was followed by a decade of generally steadily reducing price caps, linked to factors such as a falling Cost of Capital, and the incremental passengers which T2 began to facilitate reducing costs per passenger. Notwithstanding Dublin Airport's requests for much higher pricing over this period, it significantly improved its service quality over the same period, while investing in T2 and other projects such as the PACE programme and the North Runway. It also attained a high level of profitability by 2019. Then, from 2019 to 2020, there was a temporary increase in the price cap as a result of our first Interim Review reversing the original (pre-Covid 19) decision to reduce the price cap for 2020.
- 6.34 Overall, we note that the price cap for next year is very close (at €0.05 less) to the first price cap set by the Commission in 2001, adjusted for inflation. Thus, to date, the overall trend across determinations has been for the price cap to move in line with inflation. It is apparent that, if Dublin Airport is delivering the investment programme to schedule, the real price cap will again increase by 2026 relative to this trend. If not, the price cap increase will continue to follow more closely in line with inflation.

Allocation of Risk

- 6.35 We continue to assign to Dublin Airport the risks, both upside and downside, of outturns differing from our forecast targets for Passenger numbers, Opex (with some exceptions), Commercial Revenues, and the Cost of Capital. We allocate these risks to Dublin Airport on the basis that it is the party best able to manage and/or control these risks. For Capital Expenditure, there is scope for adjustments to the allowances either through various mechanisms, including the StageGate process, or our approach to grouping allowances as described in Section 11.

- 6.36 While the airport carries these risks, it does so only for a time limited period. The level of risk exposure is limited to the next re-set of the building blocks.

Responses on Risk Allocation

- 6.37 There was relatively little commentary regarding any potential changes to risk allocation. IATA agrees with the non-implementation of a traffic risk sharing mechanism.

CAR Response

- 6.38 We note IATA's comment and confirm our approach to high-level risk allocation.

Dealing with Extreme Downsides

- 6.39 The impact of the pandemic on aviation has been unprecedented and was not in the range of downside scenarios under which the original 2019 Determination was intended to be robust, without requiring an interim review. We responded to this extreme downside by conducting a number of interim reviews (on completion of this review there will have been three in total).
- 6.40 To preserve the incentives in price cap regulation, interim reviews are used sparingly. However, the regulatory formulae generally, and 2019 Determination specifically, are not equipped to deal with an extreme downside such the Covid-19 pandemic in a mechanistic manner. In the Draft Decision, we noted that we do not seek to enable the formula to deal with such extreme downsides mechanistically, and instead believe they are best dealt with, should they occur in the future, by way of interim review taking into account the specific prevailing circumstances.

Responses on Dealing with Extreme Downsides

- 6.41 Ryanair agree with there being no risk sharing mechanism implemented. It believes that we have mechanisms to address exceptional risks such as an extreme downside.

CAR Response

- 6.42 We reassert our statement outlined above. We do not make changes to the formula to enable it to deal with exceptional risks such as an extreme downside. If needed in the future, we intend to carry out an interim review to deal with the situation appropriately. We note that our legislation provides us with the flexibility to do so.

Length of the Period

- 6.43 We extend the length of the regulatory period such that this full review covers the 4-year period from 2023 to 2026. This is the maximum extension to a Determination that is provided for by Section 32 of the Aviation Regulation Act, 2001, as amended by Section 98 of the ANTA.
- 6.44 In setting the length of the regulatory period, there is a trade-off between providing medium term clarity over pricing (which also strengthens efficiency incentives) and forecasting uncertainty which tends to increase further into the future. Previously, we

have set the building block inputs to apply over a four or five year period. The extension of the current regulatory period such that this building block review covers a four year period will provide short- and medium-term clarity over the price cap trajectory for stakeholders.

6.45 Given uncertainty over the timing of enactment of what was then the Air Navigation and Transport Bill (ANTB), we issued a supplementary consultation⁴⁰ in October on potential permutations regarding the timing of enactment. We outlined three options:

Option 1: Provided that the ANTB is enacted, and the relevant sections commenced prior to the 23 December, we will publish our decision by the 23 December. The decision would cover the period 1 January 2023 to 31 December 2026.

Option 2: Provided that the ANTB is enacted, and the relevant sections commenced prior to the 28 February, we will make our decision by the end of February 2023. The decision will cover the period 1 January 2023 to 31 December 2026.

Option 3: We make a decision covering the period 1 January 2023 to 31 December 2024 under the existing legislative framework. This could occur in two ways:

- **Option 3 (a):** following this consultation, Option 3 could be deemed preferable to Option 2, in a situation where the ANTB is not commenced before 23 December 2022, in this case the decision would be made by 23 December.
- **Option 3 (b):** if Option 2 is deemed preferable, but the ANTB is not commenced and enacted by the 28 February, Option 3 would then become necessary, and we would make the decision by the 28 February 2023.

6.46 We noted that Option 1 remained our preferred approach, followed by Option 2 if the ANTB is delayed beyond 23 December 2022 and with Option 3 only being used if the ANTB is delayed beyond 28 February 2023.

Responses

6.47 Ryanair express supports for Option 1 (if possible), or otherwise Option 3(a). It points to Article 6 (2) of Directive 2009/12/EC and states that Dublin Airport is obliged to consult on aeronautical charges no later than 4 months before they come into force. Ryanair does not consider the passing of ANTB to be an exception which would justify a shortening of the consultation timeline.

6.48 IATA supports Option 1, as it provides airlines and Dublin Airport with certainty. In case the ANTB delay goes beyond December (or even February), IATA asks us to wait until enactment and to make the final decision at that point and, in the meantime, provide

⁴⁰ <https://www.aviationreg.ie/fileupload/Timeline.pdf>

guidance to assist with the setting of aeronautical charges for 2023.

- 6.49 Aer Lingus expects the ANTB to be enacted in December and expresses a preference for Option 1. Like IATA, Aer Lingus questions why a deadline of February has been set for the decision under Option 2, and states that it can be made beyond that timeframe.
- 6.50 Joseph Ryan expresses a preference for Option 3.
- 6.51 Dublin Airport supports a 4 year decision, such that it is provided with associated medium-term certainty. It prefers Option 1, and then Option 2. Dublin Airport believes that Option 3 would increase its Cost of Capital and also negatively affect the airport's credit rating due to increased uncertainty over its regulatory treatment.

CAR Response

- 6.52 We note that all parties apart from Joseph Ryan express a view in line with ours, i.e. a preference for Option 1. We note that Joseph Ryan's view relates more to the substance of the proposed decision (as considered elsewhere in this document), rather than the timeline itself.
- 6.53 Given that the Air Navigation and Transport Act, 2022, was enacted in December and the sections amending the Aviation Regulation Act, 2001, were commenced, we have implemented Option 1, as set out in this decision.

7. Passenger Forecast

Summary

7.1 We project that annual passenger traffic will grow from 31.7 million in 2023 (equivalent to 96% of 2019 levels) to 35.7 million in 2026.

Table 7.1: Passenger Numbers Outturns and Forecast (2019-2026)

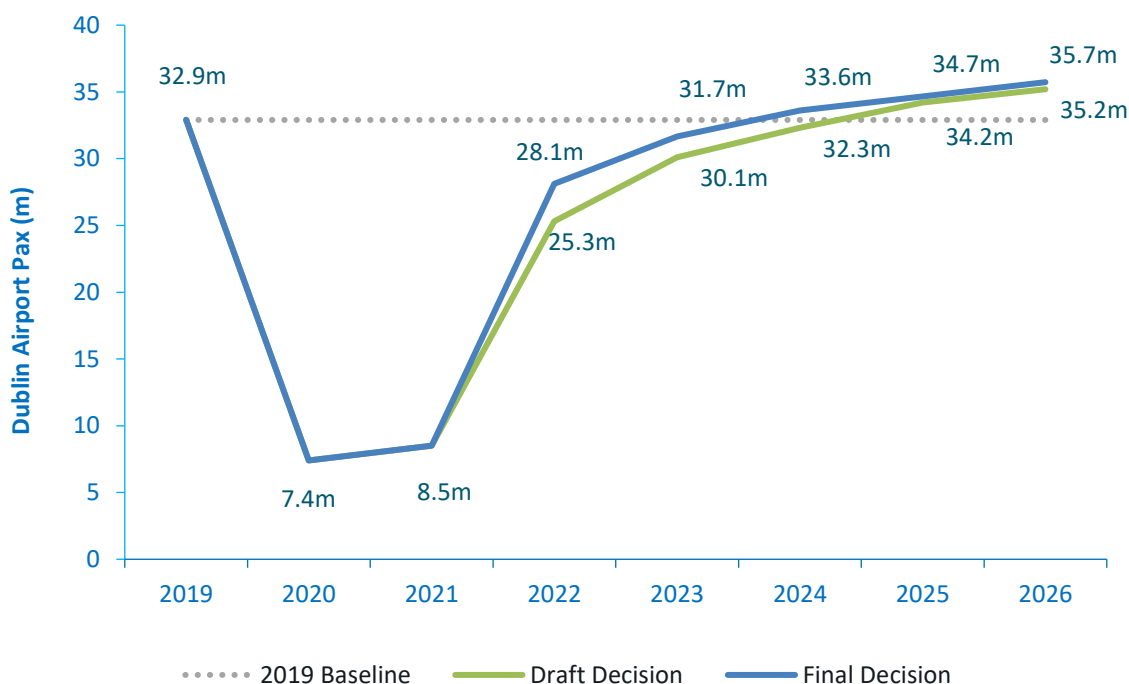
	2019	2020	2021	2022	2023	2024	2025	2026
Passengers, (m)	32.9	7.4	8.5	28.1	31.7	33.6	34.7	35.7
Annual Change %	+4%	-78%	+15%	+231	+13%	+6%	+3%	+3%
% recovery versus 2019	100%	22%	26%	85%	96%	102%	105%	109%

Source: Dublin Airport, CAR analysis

Note: 2022 is projected based on outturn passenger numbers to November and Dublin Airport projections for December

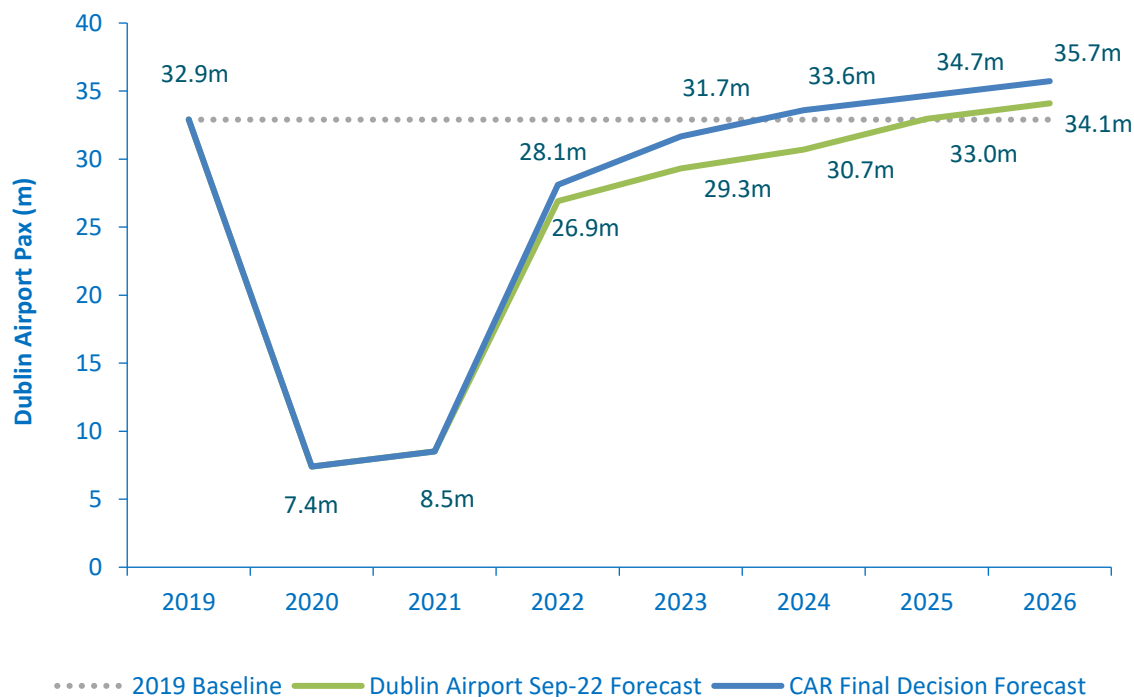
7.2 Following a stronger than previously anticipated recovery throughout 2022, these figures represent a more optimistic outlook for passenger traffic recovery in 2023 and 2024 than in our Draft Decision, with traffic recovering to above 2019 levels in 2024, and a reversion to a growth forecast linked to the rate of Irish GDP growth from 2025.

Figure 7.1: CAR Draft and Final Decision passenger traffic forecasts (2022-2026)



Source: CAR analysis

7.3 Our forecast is higher than the projections provided in Dublin Airport's September 2022 response to our Draft Decision. Dublin Airport projected that annual passenger traffic would grow from 26.9 million in 2022 to 34.1 million in 2026 and that traffic will not recover in full to 2019 levels until 2025.

Figure 7.2: CAR Final Decision and Dublin Airport September 2022 forecasts (2022-2026)

Source: Dublin Airport, CAR analysis

7.4 As in our Draft Decision, in recognition of the impacts of the Covid-19 pandemic on air traffic, and in particular the (assessed to be temporary) decoupling of the historical relationship between air traffic activity and macroeconomic growth, we have amended the passenger forecasting methodology relative to the original 2019 Determination:

- For 2023 and 2024 it relies on assessment of a mix of market information including submissions in response to our Draft Decision, insights provided by industry, short term traffic trend analysis, and comparison to other aviation industry forecasts on the pace of recovery from Covid-19. We have also taken into account data on the prevailing macroeconomic environment.
- We assess that the decoupling of GDP growth and passenger traffic will be temporary, and that the historical relationship will reassert itself once full recovery of traffic levels has been achieved. For 2025 and 2026, following the full recovery of passenger volumes to 2019 levels, the passenger forecast methodology reverts to the approach used in the original 2019 Determination, based on Irish GDP growth forecasts and the econometrically estimated elasticity of passenger traffic at Dublin Airport with respect to GDP growth.

7.5 Below we summarise relevant responses to our Draft Decision traffic forecast, updated industry forecasts and market intelligence, and we explain how we have incorporated these into our updated forecast.

Consultation Submissions received

7.6 Comments received focused mainly on the forecast methodology, particularly during the years in which traffic is anticipated to be still recovering to 2019 levels. While Aer

Lingus, IATA and Ryanair generally agree with the forecasting approach, they state that our forecasts (and those of Dublin Airport) are understated or too pessimistic and should be revised upward in light of a stronger than expected recovery in 2022. IATA also provided an updated Origin/Destination passenger forecast, which is discussed below.

- 7.7 Emerald Airlines supports our proposed forecast, believing that Dublin Airport has been deliberately conservative in its forecasting.
- 7.8 Aer Lingus notes that since the Draft Decision, the pace of traffic recovery throughout 2022 has been strong, with its seat capacity in August at 84% of 2019 levels and load factors in line with 2019 during the summer.
- 7.9 Aer Lingus also considers that the recovery in 2022 would have likely been stronger had it not been for a number of constraints, including staff shortages, aircraft shortages, ongoing Covid-19 controls in some markets and airport capacity restrictions. This implies that further recovery and growth should be expected from 2023 onwards, when the impact of the current constraints is reduced. Aer Lingus expects to exceed its 2019 capacity levels by 2024.
- 7.10 Ryanair notes that in the first seven months of 2022, passenger traffic was at 80% of 2019 levels. It considers that the recovery at Dublin Airport is more advanced than other airports in Europe and is accelerating, due in part to government incentives and pent-up demand.
- 7.11 Ryanair states that, from 2024, airlines should be able to meet underlying passenger demand and not be limited by specific Covid-19 related restrictions and other deterrents to travel. It expects passenger numbers to reach 2019 levels in 2024. Ryanair also states that our projections for 2025 and 2026 represent a reasonable balance between current faster recovery and potential economic headwinds, and that these projections should not be revised downwards.
- 7.12 Dublin Airport argues that the draft forecast is too optimistic, however, it considers that the methodology is rational if sufficient transparency is provided and the correct variables are used. Specifically, Dublin Airport considers that the forecast for the 2023 to 2025 recovery period is too optimistic, as it does not properly consider airline projections, nor that traffic was inflated in 2022 due to discounted Airport Charges funded by the Government (which will be discontinued in 2023).
- 7.13 Dublin Airport states that once traffic has fully returned to pre-Covid-19 levels, it is prudent to return to the GDP based approach. Dublin Airport considers that using a blended international GDP growth forecast (rather than solely Irish GDP growth) may be more appropriate.
- 7.14 Both ACI and Dublin Airport argue that the May 2022 ACI Europe forecast is not an appropriate comparator for us to consider, because its geographical scope includes a number of fast-growing emerging markets in Central and Eastern Europe and thus is not reflective of the situation at Dublin Airport.
- 7.15 Dublin Airport also identifies a number of factors which might negatively impact on

traffic and should be taken into consideration for the updated forecast, including:

- Inflation, which will increase the cost of living and negatively impact demand for non-essential goods and services, including air travel;
- Cost of fuel, which is high compared to recent years, and will increase costs for airlines (particularly where favourable fuel hedging policies are not in place), which will in turn reduce the viability and capacity of some routes;
- The potential risk to traffic to Eastern European markets arising from the war in Ukraine;
- Covid-19, which has the potential to reduce traffic in winter 2022/23 if travel restrictions are reintroduced as a result of a new outbreak or variant;
- Brexit, in particular the impact of ongoing reduced economic activity in the UK;
- Airport capacity issues, including stand capacity (in 2023) and aircraft movement restrictions (from 2024) at Dublin Airport, as well as operating restrictions at major destination airports;
- Business travel, which is not expected to recover to pre-Covid-19 levels for several years; and
- Supply chains, with implications for aircraft delivery and capacity for major airlines operating at Dublin.

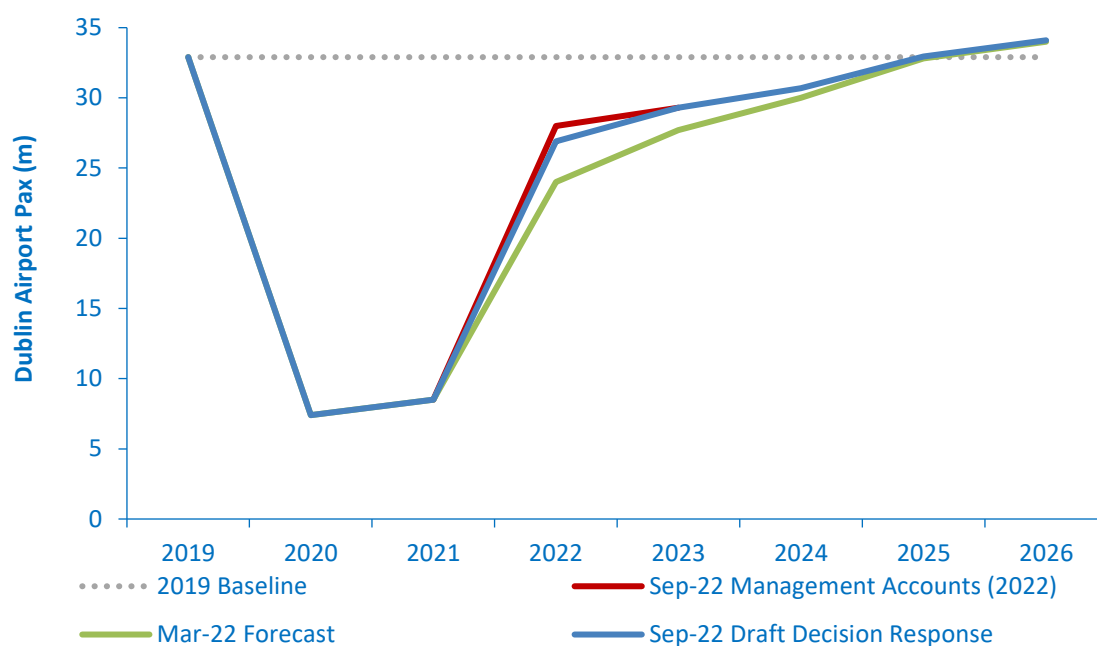
7.16 Dublin Airport's updated traffic forecast for the period, contained within its September 2022 response to our Draft Decision, is shown in the table below. Relative to its previous submission in March 2022, projected passenger numbers have increased throughout the period, though by a greater extent in the initial years, with passenger numbers converging to a similar level in 2026.

Table 7.2: Dublin Airport traffic forecasts (2022-2026)

Passengers (million)	2022	2023	2024	2025	2026
March 2022 forecast	24.0	27.7	30.3	32.8	34.0
September 2022 forecast	26.9	29.3	30.7	33.0	34.1
Increase	+2.9	+1.6	+0.4	+0.2	+0.1
% Increase	+12.1%	+5.8%	+1.3%	+0.5%	+0.3%

Source: Dublin Airport

7.17 Figure 7.3 below shows the Dublin Airport passenger projections relative to 2019, and also includes an updated figure of 28 million for 2022, which is comprised of outturn passenger numbers of 21 million for September 2022 year-to-date and Dublin Airport management accounts projections (provided in October) for the final quarter of 2022. The updated 2022 passenger projection would bring the total for the year to 85% of the 2019 outturn.

Figure 7.3: Dublin Airport traffic forecast (2022-2026)

Source: Dublin Airport

Commission Response

- 7.18 While stakeholders generally agree in principle with our forecasting approach, Aer Lingus, IATA, Ryanair, and Dublin Airport do not agree with the level of traffic it generates, particularly for the years in which traffic is still expected to be recovering to pre-Covid-19 levels. The airlines and IATA consider that our draft forecast was too conservative, especially for 2023 and 2024, whereas Dublin Airport considers that it was too aggressive.
- 7.19 We note the comments regarding expectations for traffic development over the coming years, and the industry dynamics and external factors likely to influence traffic; these are taken into account in our updated forecast as described below.
- 7.20 In relation to Dublin Airport's submission on the lack of transparency in our use of the airline forecasts which were provided to CAR and Dublin Airport earlier this year, we note that the commentary in the redacted version of Dublin Airport's response relates to a forecast which is significantly outdated (April 2022). As it is redacted and relates to a forecast provided confidentially, we cannot address it directly in this decision, other than to say that both Dublin Airport and CAR have access to more up-to-date information in relation to airline capacity plans at Dublin Airport. For our final forecast, as set out below, the components used are in the public domain and we only use confidential stakeholder data as a cross check rather than a direct input.
- 7.21 While we seek to publish as much information as possible, in some cases the relevant material may be commercially or operationally sensitive; in that case we may agree to redact or not publish it, instead including an overview of the contents. As well as updated forecasts from Dublin Airport, we have obtained up to date forecasts from major airlines in relation to forecasts for their own traffic and other information (such as forward booking data), and have used these to cross check our projections.

- 7.22 Dublin Airport initially used the ACI Europe October 2021 forecast in its Regulatory Proposition, but does not agree with using the updated forecast from May 2022. Nonetheless, we accept the submissions of Dublin Airport and ACI Europe itself that the ACI Europe forecast is not an appropriate comparator, given its geographic scope, and have not considered this forecast as part of our updated forecast.
- 7.23 Regarding the econometric approach used from 2025, it should be noted that while blended international GDP growth has been lower than Irish GDP growth, this will not necessarily result in a lower implied traffic growth rate, as the elasticity derived from the econometric analysis may be higher (as evidenced by the comparison of elasticities generated by using Irish GDP, Irish GNI and blended GDP within our original 2019 Determination).⁴¹
- 7.24 As noted in our Draft Decision, further research or evidence would be required to develop a historical blended GDP series in order to test the statistical robustness of the measure as an explanatory variable for traffic growth. For this review, we continue to use an approach based on Irish GDP.
- 7.25 With respect to the potential for capacity limitations at Dublin Airport to constrain our forecast from being achieved, we note that there were slot capacity constraints prior to and including 2019, related primarily to runway capacity. Thus, to the extent to which this may have impacted passenger growth, this effect will have been captured within the GDP elasticity calculated up to 2019.
- 7.26 We are responsible for determining the slot capacity parameters at Dublin Airport, under the EU Slot Regulation, for each scheduling season.⁴² Article 6(1) of the Slot Regulation requires that the determination be based on the '*possibilities of accommodating the air traffic*'. Ahead of each season, this involves an assessment of expected demand, and how capacity parameters should be set (relative to the previous corresponding season) to better accommodate demand.⁴³
- 7.27 The declared slot capacity is therefore not a static constraint on growth which will evolve only due to infrastructural or operational capacity enhancements. Instead, it is linked to detailed short-term demand forecasts. Thus, an assessment of the possibility for continued future growth in aircraft and/or passenger traffic with reference to the most recently declared Summer 2023 (S23) parameters overlooks this process, and would lead to an overly conservative view of the possibility of accommodating future growth. Where demand continues to grow, we expect to continue to set parameters with a view to accommodating it where possible.
- 7.28 Over the period 2023-2026, we have allowed for various projects intended to enhance capacity, as set out in Section 11 and the Appendix. These include significant additional stand capacity at Apron 5H, potentially in time for S23. The opening of the North Runway has already mitigated runway capacity constraints for 2023, and we expect that more runway capacity will be available for us to release from 2024 and beyond as well. All else equal, runway constraints are likely to be lesser than was observed over the previous regulatory period. We also anticipate investments by IAA ANSP at Dublin

⁴¹ Determination on the Maximum Level of Airport Charges at Dublin Airport 2020-2024 (CAR, October 2019), Pages 51-54

⁴² <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A31993R0095>

⁴³ See for example the S23 determination of parameters: [https://www.aviationreg.ie/fileupload/Final%20Decision\(2\).pdf](https://www.aviationreg.ie/fileupload/Final%20Decision(2).pdf)

Airport, which should allow for enhanced operational performance and/or resilience.⁴⁴

- 7.29 The new Operating Restriction proposed to be introduced through a Noise Quota Scheme (NQS) provides for an annual noise quota/budget of 16,260, where contributions to the quota are calculated based on the number of aircraft movements within the hours limited by the NQS and the noise classification of those aircraft. Based on our analysis of scheduled aircraft movements, Dublin Airport was well within this quota in 2019, which suggests that the NQS is unlikely to be a material constraint on capacity for the current Determination period.
- 7.30 The decision on the NQS is currently under appeal to An Bord Pleanála. However, we also note that the Operating Restriction may not be introduced until later in the period than suggested by Dublin Airport, and applies to aircraft movements in the night period only. Thus, overall, we conclude that the NQS is unlikely to materially constrain passenger numbers over 2023-2026.
- 7.31 In addition, we note that passenger traffic is projected to remain lower than the level projected within our original 2019 Determination (38m passengers by 2024). Overall, we do not consider that capacity limitations are likely to be a material constraint on traffic growth within this Determination period, unless our forecast is significantly exceeded, in which case Dublin Airport will benefit from the traffic risk upside rather than suffer from a traffic risk downside.
- 7.32 With respect to the traffic risks and potential economic headwinds listed by Dublin Airport, it should be noted that many of these issues have been present in 2022. Traffic has nonetheless continued to recover, and such factors will have been taken into account in the most recent macroeconomic and industry forecasts, such as Eurocontrol and Irish GDP forecasts. However, we agree that some of the issues listed have the potential to negatively impact traffic in coming years; how we have considered these risks in our updated traffic forecast is described below.
- 7.33 We agree with Ryanair and Aer Lingus that operational capacity issues experienced in 2022 are likely to have put downward pressure on passenger traffic in 2022, and that these issues are likely to be mostly resolved by 2023. On the other hand, we agree with Dublin Airport that Government funded incentives to reduce Airport Charges are likely to have put upward pressure on passenger numbers within 2022; such schemes are not expected to continue through 2023.

Updates to Draft Decision traffic forecast

- 7.34 The Draft Decision set out our proposed forecasting approach, provided an overview of industry forecasts at the time, and analysed the recovery to date in 2022. As part of this Final Decision, we have updated our original analysis where more up-to-date and relevant information is available.
- 7.35 Our high-level approach to forecasting for the 2022-2026 period remains in line with our Draft Decision; up to the point at which traffic levels reach full recovery versus

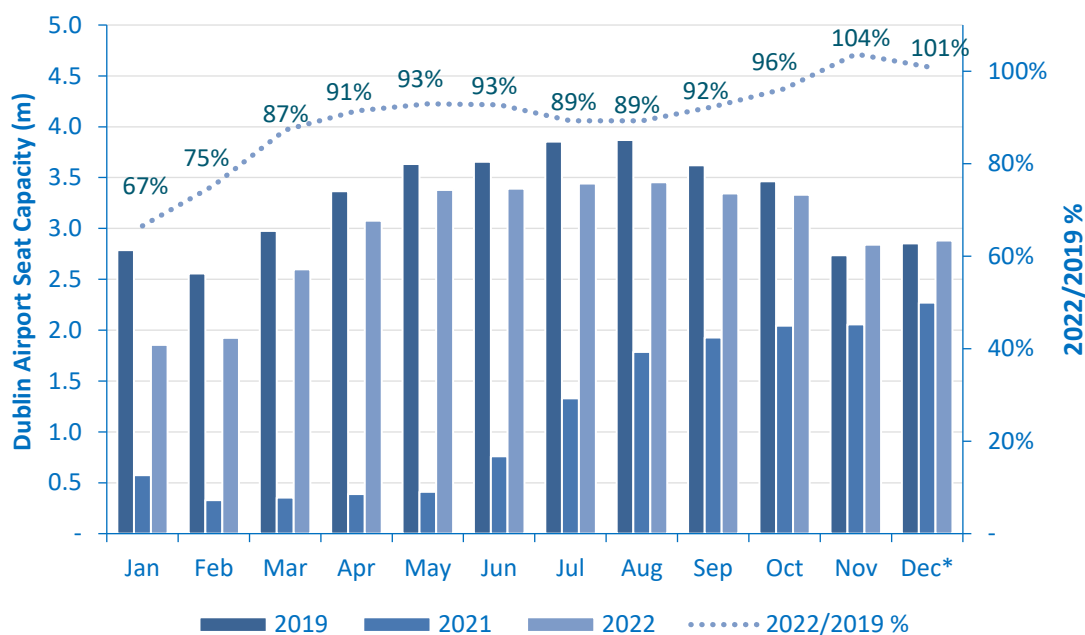
⁴⁴ See for example planned investments in COOPANS systems, ASMGCS Enhancements, and Dublin Radar replacements: [https://www.aviationreg.ie/fileupload/RP3%20PP%20Consultation/20210715%20IAA%20ANSP%20RP3%20Plan%20\(Non-Confidential\)\(1\).pdf](https://www.aviationreg.ie/fileupload/RP3%20PP%20Consultation/20210715%20IAA%20ANSP%20RP3%20Plan%20(Non-Confidential)(1).pdf)

2019 volumes, we consider a range of evidence, market intelligence and industry forecasts. Beyond the point of full recovery to 2019 volumes, we revert to the econometric approach used within our original 2019 Determination.

2022 Baseline

7.36 Total seat capacity at Dublin Airport in 2022 is shown in the figure below. Based on operated capacity to date and scheduled capacity for the remainder of December, total seat capacity for the year is projected to be 90% of 2019 levels.

Figure 7.4: Dublin Airport seat capacity (2022)



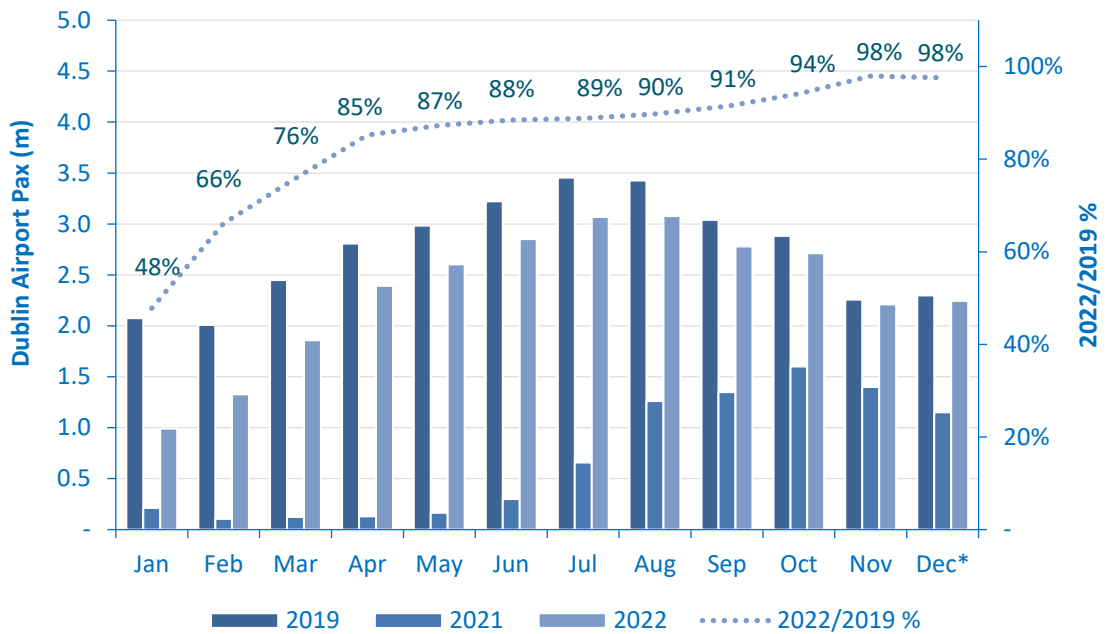
Source: OAG (extracted 7 December 2022), CAR analysis

*December projection

7.37 Total passengers at Dublin Airport in 2022 are shown in the figure below. The passenger figures include actual passenger numbers of 25.9 million in the first 11 months of the year and a projection of 2.2 million passengers for December, assuming the same load factor as November. This brings the total passengers forecast for the year to 28.1 million, equivalent to 85% of 2019 levels.

7.38 The 98% traffic recovery in the most recent month (November) implies traffic has almost recovered to 2019 levels, though we note that the October school mid-term break fell relatively more in November in 2022, and that November 2019 traffic performance was below trend, which may slightly overstate the general passenger traffic recovery.

Figure 7.5: Dublin Airport passengers (2022)

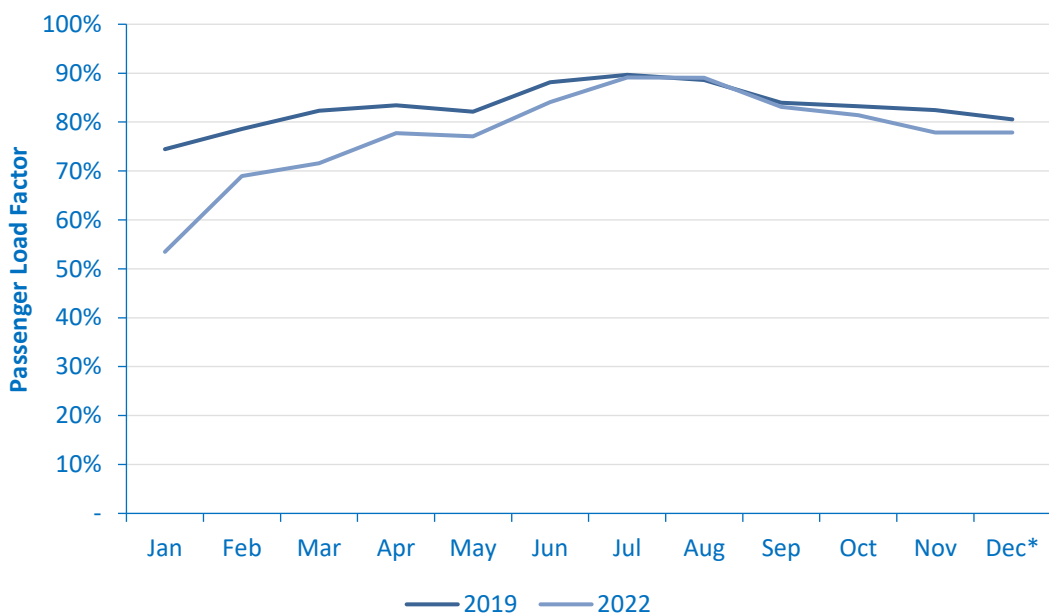


Source: Dublin Airport

*December projection

7.39 Passenger numbers for 2022 (including the December projection) combined with scheduled seat imply an average load factor of 79% for 2022, below the level of 84% achieved in 2019. However, since the first quarter of 2022, which was impacted by the Omicron Covid-19 variant, load factors have recovered strongly and were slightly above 2019 levels in August and September of 2022. An average load factor of 82% is projected for the last three quarters of 2022, close to the 85% achieved in the last three quarters of 2019.

Figure 7.6: Monthly Passenger Load Factors (2019 & 2022)

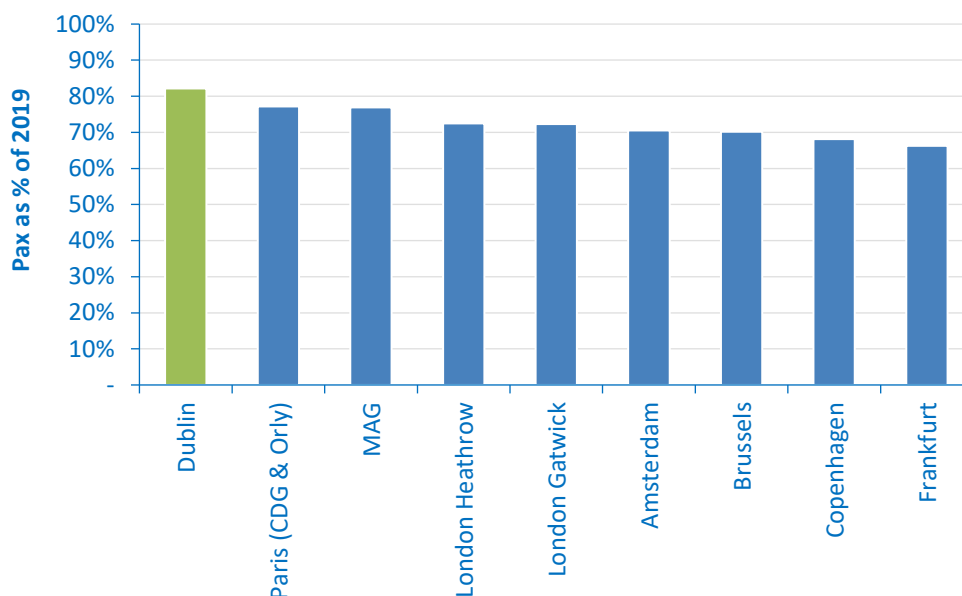


Source: OAG, Dublin Airport, CAR analysis

**December projection*

7.40 Dublin Airport's recovery also continues to be stronger than its North-western European peers, reflecting a slightly faster recovery of many its main markets. Dublin Airport's year-to-date passenger traffic at the end of the third quarter (Q3) had recovered to 82% of its 2019 level, compared to between 77% and 66% across the other airports. Q3 traffic was at 90% of 2019 levels, compared to between 87% and 74% across the other airports.

Figure 7.7: Passenger Traffic Recovery to 2019 levels (Jan-Sep 2022)



Source: Dublin Airport, UK CAA, selected airport websites

7.41 The growth in passenger numbers throughout 2022 demonstrates that the recovery has been stronger than we anticipated at the time of the Draft Decision (which was itself stronger than anticipated by Dublin Airport). The updated baseline passenger figure in 2022 implies that projections in subsequent years likely warrant upward revision to reflect the stronger recovery.

Economic projections

7.42 Irish GDP growth projections from the October 2022 IMF World Economic Outlook (WEO) are shown in the table below. Since the April 2022 WEO, the GDP growth outlook for 2022 has been revised upwards significantly, 2023 revised downwards slightly and the outlook for subsequent years left unchanged.

Table 7.3: Ireland GDP Forecast (2022-2026)

Real GDP Growth	2022	2023	2024	2025	2026
October 2022 WEO	9.0%	4.0%	4.0%	3.0%	3.0%
April 2022 WEO	5.2%	5.0%	4.0%	3.0%	3.0%
Change	3.8%	(1.0%)	-	-	-

Source: IMF WEO

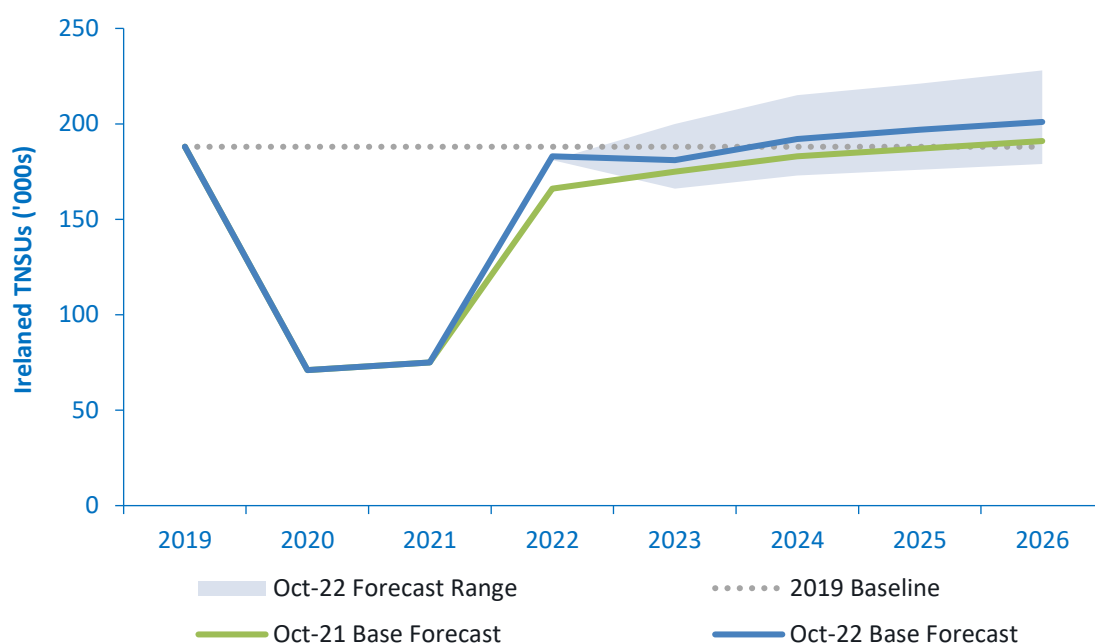
7.43 As with the passenger numbers at Dublin Airport, the revised figure for 2022 reflects

the better than anticipated economic performance throughout the year, and the revised figure for 2023 reflects a slightly slower outlook for next year. As described above, while the GDP forecasts are taken into account in the context of our projections for 2023 and 2024, we directly apply the GDP growth elasticity approach for 2025 and 2026 only.

Industry traffic projections

- 7.44 The October 2022 Eurocontrol STATFOR Terminal Navigation Service Unit (TNSU) forecast for Ireland is shown in the figure below. Eurocontrol is a pan-European organisation, which provides operational, coordination and project implementation support across the European air traffic management sector; STATFOR is Eurocontrol's forecasting service.
- 7.45 Eurocontrol's October 2022 forecast updates its previous October 2021 forecast and is based on:
- Recent European traffic trends;
 - The latest available economic forecasts;
 - A revision of the existing three scenarios accounting for Covid-19 impact and timing of recovery and the impact of Ukraine's invasion by Russia; and
 - No re-opening of the routes currently closed because of the conflict between Ukraine and Russia.
- 7.46 The Eurocontrol 'Base' scenario is generally used for 5-year Air Navigation Services Performance Plans established under the Single European Sky regulations. The current Performance Plan for Ireland, which was developed by us in 2021, used the Eurocontrol 'Base' scenario for the flight traffic and Service Unit forecast inputs.
- 7.47 As described by Eurocontrol, the 'Base' scenario is based on GDP being weak, inflation (including jet fuel prices) impacting demand, and lower passenger confidence/propensity to fly. Eurocontrol also forecast a 'High' Scenario and a 'Low' scenario, leading to the range shown in Figure 7.8. The scenario range reflects more optimistic and pessimistic outlooks, respectively, for these variables, and also considers a number of other risks including Covid-19, business travel, environmental concerns, and staffing/capacity issues at airlines/airports in 2023.
- 7.48 Relative to Eurocontrol's October 2021 forecast, TNSUs have been revised upwards in all years, although they are projected to remain relatively constant in 2023 relative to 2022, with Irish TNSU's projected to reach 96% of 2019 levels in 2023, and then 102% in 2024 under the 'Base' scenario.

Figure 7.8: Ireland TNSU forecast (2019-2026)

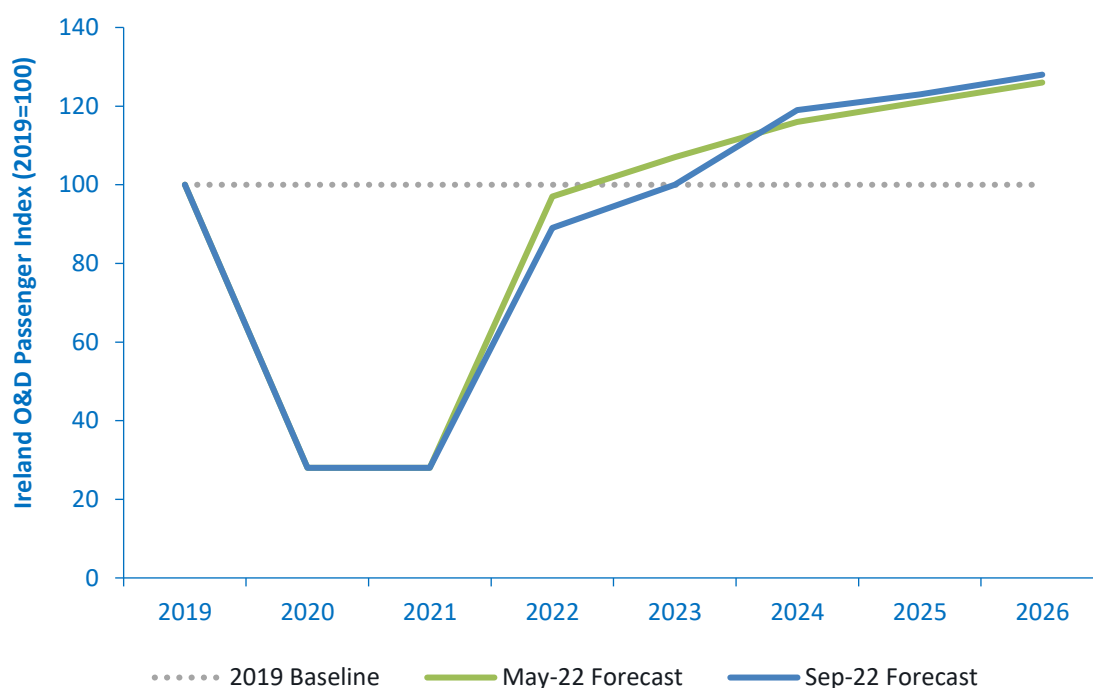


Source: Eurocontrol

- 7.49 While the Irish TNSU forecasts are not directly comparable to passengers at Dublin Airport, the projections are important as they provide a comparative projection of traffic levels and trends in Ireland. Furthermore, the TNSU range is used as the ‘capacity variable’ by Dublin Airport within its model as the upper and lower bound of potential flight movement growth at Dublin Airport over the Determination period.⁴⁵
- 7.50 IATA’s latest forecast for Irish Origin-Destination passenger traffic is shown in the figure below. Traffic in 2023 is now lower than its previous forecast, somewhat reflecting the reduced Irish GDP growth forecast, although it is still projected to recover to 2019 levels during 2023. Passenger traffic from 2024 onwards has been revised upwards.

⁴⁵ Ireland has a single Terminal Charging Zone (TCZ) inclusive of Dublin, Cork, and Shannon airports. Eurocontrol does not distinguish between these airports in its TNSU forecasts. Dublin Airport accounts for the vast majority of flights in the TCZ, thus is the main driver of the forecast. We have also checked whether there is evidence of any significant divergence in the recovery trajectory towards 2019 air traffic levels between Dublin Airport, on the one hand, and Shannon/Cork on the other, based on CSO data to the end of June 2022. We find no such evidence, with Dublin Airport accounting for 87.3% of flights in the TCZ in 2019, and 87.5% in 2022, and similar trajectories across the six month period. Therefore we assume that the TNSU forecast for the TCZ aligns proportionately with a Dublin Airport specific forecast.

Figure 7.9: IATA Ireland O&D traffic forecast (2019-2026)

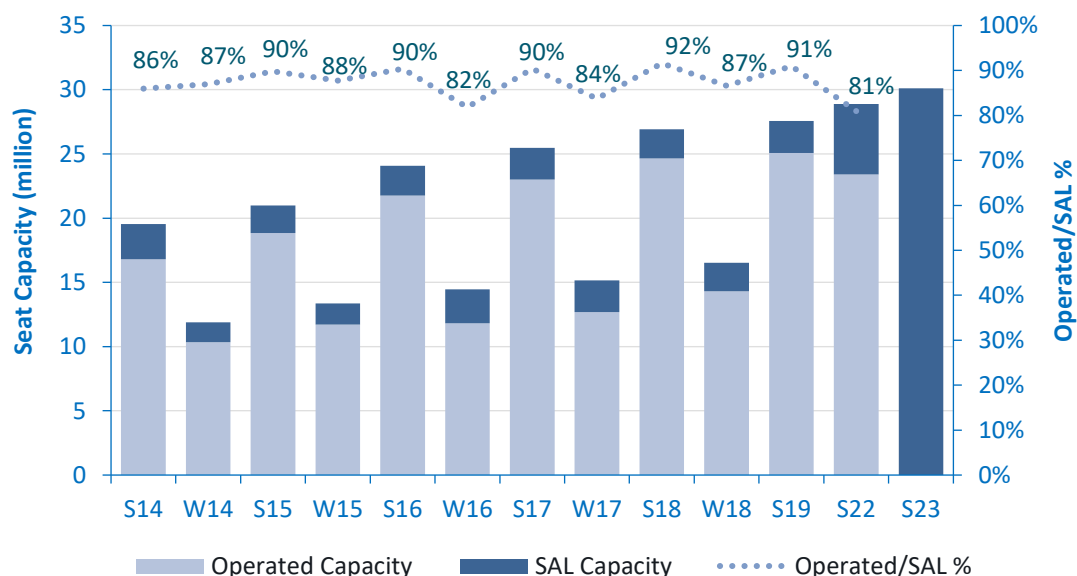


Source: IATA

7.51 As noted above, we accept that the May 2022 ACI Europe European regional forecast is not an appropriate or useful comparator. ACI Europe sets out the ACI World March 2022 forecast, in which Ireland was projected to be the second-slowest growing European aviation market. The ACI World forecast projected that Irish traffic would be 7% above the 2019 level in 2026. We understand that ACI World has not issued an updated traffic forecast since March 2022, so the forecast is now significantly outdated. However, regardless of how it compares to other aviation markets, the forecast for Irish traffic to be 7% above 2019 levels in 2026 still aligns relatively closely with our updated forecast of 9% above 2019 levels in 2026.

Market intelligence

7.52 We have derived a forecast for total operated seat capacity in 2023 at Dublin Airport from Figure 7.10 below, based on Airport Coordination Limited’s (ACL) initial slot allocation (SAL) reports for Summer 2014 (S14) to S19, together with S22 and S23. While the SALs overstate the total operated capacity due to overbidding and cancellations, they do provide an indication of relative expected capacity from year to year. We do not include 2020 and 2021 in this analysis, as these were outlier years where the relationship between the SAL and operated seat capacity was entirely broken.

Figure 7.10: Dublin Airport Seat Capacity: SAL Slot Report vs. Operated Capacity

Source: ACL, OAG

- 7.53 The 81% of SAL seat capacity which was operated in S22 is likely to have remained uncharacteristically low as, firstly, the EU's slot usage threshold for the 'use it or lose it' rule to obtain a historic slot series entitlement was set at 64% and, secondly, as there was a significant amount of disruption and uncertainty due to the operational issues within the aviation sector.⁴⁶
- 7.54 In S23, the slot usage threshold is set to return to 80% (as was the case pre-Covid-19) and the operational issues within the aviation sector are anticipated to have receded, which means that the proportion of S23 SAL seat capacity which will be operated is likely to be higher than in S22 and operated seat capacity as a proportion of SAL seat capacity will be closer to pre-Covid levels.
- 7.55 From S14 to S19, average operated capacity was 90% and 85% of SAL capacity in summer and winter seasons respectively. Based on the share of operated capacity in 2019 between summer and winter seasons, the S23 SAL seat capacity implies that operated capacity would be around 40 million seats, or 102% of total 2019 capacity. Assuming no significant shift in the ratio between TNSUs and seats between 2019 and 2023, this would be between the Eurocontrol 'Base' (96% of 2019 level) and 'High' (106% of 2019 level) scenarios for TNSUs in 2023.⁴⁷
- 7.56 In addition to the slot coordination reports, major airlines operating at Dublin airport note that the recovery of their capacity and load factors throughout 2022 have been strong and that they expect this to continue in subsequent years. Since S22, Ryanair has exceeded its 2019 passenger numbers in the corresponding seasons and based on a November 2022 forecast, it expects to significantly exceed its 2019 passenger numbers in each year from 2023 to 2026.

⁴⁶ The 2022 SAL was completed in November 2021.

⁴⁷ We also note that the change from Planned to Actual flight trajectories, since 2019, for the purposes of calculating Service Units, required a comparability correction factor of -0.74% for Ireland En Route Service Units but not for Terminal Service Units. Terminal Service Units are calculated with reference to the aircraft weight only.

7.57 Aer Lingus expects its seat capacity to remain below 2019 levels in 2023, but then exceed 2019 levels by 2024. In its response, Aer Lingus sets out that forward bookings for the coming Autumn and Winter show continued strong demand. It has provided data to us to back up this statement, and also data showing demand for S23 in line with 2019 levels notwithstanding its seat capacity being below 2019 levels.

Final Traffic Forecast

7.58 Since the date of our Draft Decision, the outlook for 2023 to 2026 has improved; wider industry forecasts have been revised upwards and traffic is now projected to recover to 2019 levels in 2024 at the latest. Major airlines at Dublin Airport are also more optimistic and expect traffic at the airport to recover to pre-Covid levels by 2024. Dublin Airport has also consistently revised its near-term forecasts upwards as the year has progressed.

7.59 Scheduled airline seat capacity levels for the remainder of Winter 2022/23 and the SAL for S23 suggest that the seat capacity offered by airlines at Dublin Airport in 2023 could be at or slightly above 2019 levels. If that is the case, then air traffic may trend between the Eurocontrol 'High' and 'Base' scenarios set out in the Eurocontrol October 2022 forecast.

7.60 Based on responses received, information provided by airlines as described above, and analysis of load factors in 2022 set out above, we consider that load factors are likely to recover to 2019 levels far earlier than 2026 as projected by Dublin Airport. The average projected load factor in the last three quarters of 2022, which were less affected by the Omicron Covid-19 variant than the first quarter, is 98% of 2019 levels.

7.61 We expect that airlines will manage yields to achieve load factor targets, which would likely absorb some of the risk identified by Dublin Airport, were it to materialise. We also note that Dublin Airport is likely to be able to influence the level of passenger traffic through its charging strategy with, for example, peak pricing and funding traffic growth incentive rebate schemes. Such schemes are cost/revenue neutral for Dublin Airport, as the net aeronautical revenue figure is used for the purposes of price cap compliance.

7.62 We considered whether these elements provide sufficiently strong evidence for a 2023 forecast based on seat capacity above the level implied by the Eurocontrol 'Base' forecast and/or an overall passenger forecast at or slightly above the 2019 level. This would be supported by the IATA forecast as well. However, while the recovery in 2022 has been stronger than previously anticipated, and this is expected to continue in subsequent years, there are a number of reasonably foreseeable uncertainties and economic headwinds. These have the potential to slow the rate of passenger traffic recovery in the short-term. In particular, they include ongoing uncertainty around the effects of the Russian invasion of Ukraine, European energy supply and the lingering Covid-19 pandemic, and the implications for economic growth and inflation/cost of living and disposable income.

7.63 A number of these potential economic headwinds have been noted by Dublin Airport. Based on the reduced IMF Irish GDP growth outlook for 2023 with no changes to subsequent years, though projected growth is still higher, the outlook for 2023 has

worsened relative to subsequent years.

7.64 We also consider it plausible that the S23 SAL may still contain an element of overbidding/speculation in excess of pre-Covid-19 levels, such that actual operated capacity may not fully return to the average 90% level observed pre-Covid-19. The traffic recovery to date may also be slightly less advanced than implied by the November 2022 passenger figures due to the timing of the 2022 mid-terms and traffic performance in November 2019.

7.65 Therefore, during the recovery phase of the forecast:

- In 2023, in order to balance the more optimistic outlook for the ongoing recovery with the risk of economic headwinds, we are projecting that passenger traffic will recover to 96% of 2019 levels, based on seat capacity at 96% of 2019 levels (consistent with Eurocontrol's 'Base' TNSU forecast as the capacity variable), and load factors recovered to 2019 levels. This is consistent with the level projected (relative to 2019) by Dublin Airport for November and December 2022.
- In 2024, we are projecting passenger traffic at 102% of 2019 levels, based on seat capacity at 102% of 2019 levels (consistent, as for 2023, with Eurocontrol's 'Base' TNSU forecast) and load factors remaining at 2019 levels.

7.66 This leads to a forecast for 2024 which is 2% higher than 2019. Following this recovery to pre-Covid-19 traffic levels, passenger traffic is projected to grow throughout the remainder of the period based on the methodology set out in our Draft Decision. Thus, the forecast is based on Irish GDP growth, using an elasticity of 1.03 and the GDP forecast as per Table 7.3. Using the same approach as 2023 and 2024 (using Eurocontrol's 'Base' TNSU forecast and 2019 load factors) produces a similar result to the econometric approach for these years.

7.67 Overall, we consider that this approach provides for an appropriate centreline forecast, with a reasonable prospect of both upside and downside risk materialising. We note that, assuming a continued long-term real GDP growth rate of 3.0%, our forecast would bring total annual passengers at the airport to slightly over 40 million by 2030, in line with Dublin Airport's projections contained within its recent planning application for the West Apron Underpass project.

7.68 Our updated passenger traffic forecast is shown in the table below.

Table 7.4: Passenger Numbers Outturns and Forecast (2019-2026)

	2019	2020	2021	2022	2023	2024	2025	2026
Passengers, (m)	32.9	7.4	8.5	28.1	31.7	33.6	34.7	35.7
Annual Change %	+4%	-78%	+15%	+231	+13%	+6%	+3%	+3%
% recovery versus 2019	100%	22%	26%	85%	96%	102%	105%	109%

Source: Dublin Airport, CAR analysis

Final US passenger traffic forecast

7.69 In the Draft Decision, we set out our proposed US departing passenger traffic forecast. This is used for our US Preclearance revenue forecasts as set out in Section 9.

- 7.70 We assessed that the rate of passenger growth in the Dublin/USA market would likely continue its historical trend of exceeding the average for the airport as a whole. We forecast a CAGR of +7.8% for the 2023-2026 period (equivalent to about 2.4 million departing passengers on flights between Dublin and the USA in 2026). The projection took account of submissions from airlines operating between Dublin and the USA, historical rates of traffic growth relative to Irish and US GDP (in the period 2015-2019), along with the macroeconomic outlook to 2026. This forecast is set out in Table 7.5.

Table 7.5: US Departing Passenger Forecast

Year	2023f	2024f	2025f	2026f
US Departing Pax	1.91	2.1	2.29	2.4

Source: CAR

- 7.71 We did not receive any submission specifically on this forecast. Where any airline directly provided an updated view on their expectations for their US traffic over 2023-2026, it was broadly unchanged from the view provided ahead of the Draft Decision. For this Final Decision, we note that the recovery in the North American market from Dublin looks set to be faster in 2022 than our initial assessment for the Draft Decision. Balancing this against the risks of economic headwinds in 2023, while noting the strengthening in airline sentiment about capacity prospects, we have made no changes to our forecast for the Dublin/USA market.

8. Operating Expenditure

Summary

Table 8.1: Operating Expenditure Outturns and Forecasts, 2019 -2026

	2019	2020	2021	2022f*	2023f	2024f	2025f	2026f
Opex Outturn / Target, (€m)	303.7	190.9	160.2	284.0	304.6	317.7	323.5	328.2
YoY Change		-37.2%	-16.1%	77.3%	7.3%	4.3%	1.8%	1.5%
Per passenger, (€)	9.23	25.83	18.94	10.10	9.61	9.45	9.33	9.18
YoY Change		179.9%	-26.7%	-46.7%	-4.8%	-1.7%	-1.3%	-1.6%

Source: CEPA/TA, Dublin Airport, CAR

*Based on Dublin Airport updated forecast, stated in February 2022 prices.

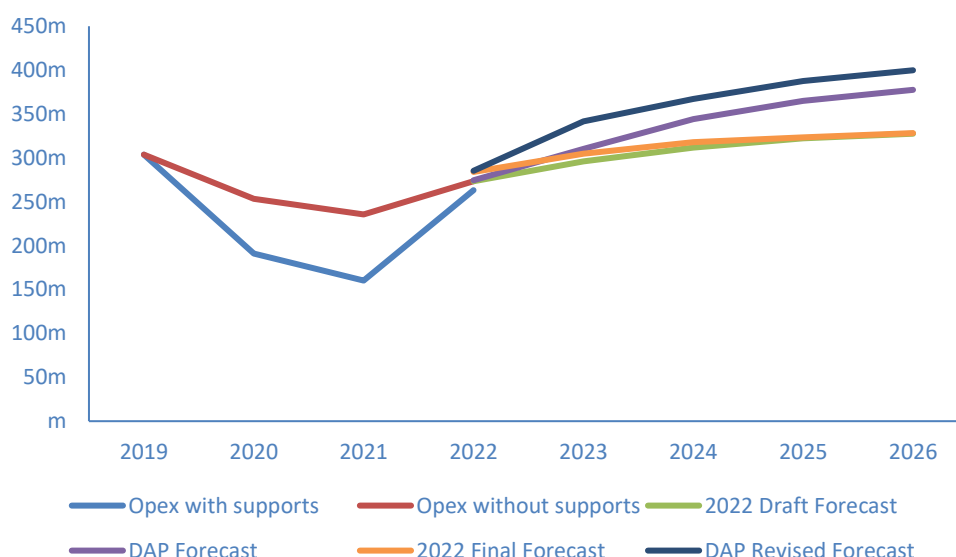
- 8.1 The allowance for Operating Expenditure (Opex) is €304.6m in 2023, increasing to €328.2m by 2026. In nominal terms, and given the IMF inflation forecast from October, the Opex allowance therefore increases from Dublin Airport's latest forecast of €305m for this year to €349m next year, and then to €402m by 2026. These figures represent an assessment of efficient operating costs and, in the context of incentive based economic regulation, may be regarded as a target for efficient expenditure to be incurred by the regulated entity.
- 8.2 Figure 8.1 shows that outturn Opex was €303.7m in 2019. Opex reduced significantly during the Covid-19 pandemic, to €160.2m in 2021. Government support was provided through the general wage subsidy and rate waiver schemes. In 2021, outturn Opex was 49% below the target we set in the original 2019 Determination.
- 8.3 As we noted in the Draft Decision, this reduced level of Opex cannot be sustained if Dublin Airport is to return to the high levels of service it provided to 33m passengers in 2019. CEPA/Taylor Airey ('CEPA/TA') assess that Dublin Airport's expenditure this year has been insufficient, which is reflected in the poor service standards over the first half of the year.
- 8.4 We assess the need for significant Full Time Equivalent (FTE) staffing increases for next year in certain business units. For example, in relation to security staffing, we assess that Dublin Airport required more than 200 additional FTEs, on average, compared to the number actually in place in 2022. Next year, we anticipate Dublin Airport needing 866 security FTEs, compared to an actual average of approximately 700 this year.
- 8.5 Total FTEs were reduced to 1,943 in 2021. This decrease was primarily due to actions taken by Dublin Airport in response to the pandemic. As traffic is now recovering, we expect that this will increase over the regulatory period. We have estimated that a total of 2,611 FTEs will be required in 2023, increasing over the period to reach a requirement of 2,720 by 2026.
- 8.6 Our forecast is somewhat higher than the Draft Decision, primarily because of the higher traffic forecast for 2023 and 2024. Our forecasts continue to rely on the bottom-

up assessment carried out by CEPA/TA who have finalised their analysis taking account of detailed submissions received in response to their draft report. The final report is published alongside this document.

8.7 Figure 8.1 also shows our forecasts compared to Dublin Airport’s, as per the regulatory proposition and then as revised upwards in response to our Draft Decision. In the regulatory proposition, Dublin Airport suggested that real Opex would increase from €310m in 2023 to €377m by 2026. In response to the Draft Decision, Dublin Airport then provided revised forecasts of €342m for 2023, increasing to €400m in 2026. This compares to real Opex in 2019 of €304m.

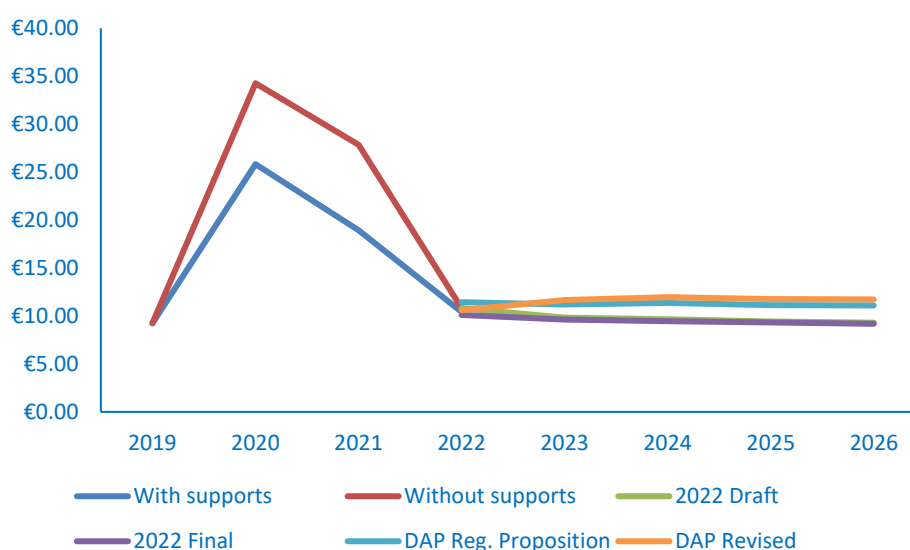
8.8 Therefore, in nominal terms (including inflation), Dublin Airport is suggesting that Opex will increase from €288m in 2019 (with 33m passengers) to €391m in 2023 (with 29m passengers) and then to €490m in 2026 (with 34m passengers).

Figure 8.1: Total Opex Outturns and Forecasts



Source: CAR, CEPA, Dublin Airport

8.9 Figure 8.2 shows Opex per passenger outturns from 2019 to 2021, and forecasts from 2023-2026. The impact of the pandemic is apparent over 2020 and 2021, as, while Dublin Airport made significant savings as outlined above, the fall in passenger numbers remained proportionally greater.

Figure 8.2: Opex per Passenger Outturns and Forecasts

Source: CAR, CEPA, Dublin Airport

- 8.10 On a per passenger basis, real Opex was €9.23 in 2019. As passenger numbers grow back to 2019 levels and beyond, we forecast that Opex per passenger will trend steadily back towards that level in real terms, going from €9.61 in 2023, to €9.18 in 2026. On the other hand, in its regulatory proposition, Dublin Airport suggested that Opex per passenger, in real terms, would stay broadly constant above €11 in each year 2023-2026. In its updated forecast, Dublin Airport suggests that this figure will be closer to €12.
- 8.11 In nominal terms (including inflation), we forecast Opex per passenger to stay flat at approximately €11 over the period 2023-2026, as the downward trend in real Opex per passenger is offset by inflation. In nominal terms, Dublin Airport's updated forecast suggests that Opex per passenger would be above €13 next year, and increase to over €14 by 2026.

Background and Forecasting Approach

- 8.12 CEPA/TA assessed costs separately within each category, and determined an efficient cost trajectory using a combination of quantitative methods, expert judgement, and benchmarking. In line with our approach to the other building blocks, the brief was to develop a centreline forecast which balances reasonable challenge with achievability, while ensuring consistency with our service quality targets. Having established a baseline for 2022, expenditure over the period was forecast using elasticities and volume/price drivers. Finally, step changes were applied to reflect bespoke cost pressures, or opportunities for efficiencies through, for example, the anticipated impact of allowed Capex projects.
- 8.13 A number of submissions provided detailed responses on various aspects of the CEPA/TA analysis. CEPA/TA has considered these submissions, as set out in full in its report, providing further analysis where appropriate before concluding on whether any adjustment to the forecast is warranted. In this section, we consider more general responses received, and then provide an overview of the cost areas subject to most

commentary and/or of larger scale, which are addressed in more detail in the CEPA/TA report.

- 8.14 CEPA/TA have also forecast (backcast) required costs for 2022, independently of the actual outturn costs which have been incurred by Dublin Airport this year. The actual costs reflect significant understaffing this year, and then various managed solutions to attempt to address the consequent service quality issues. The CEPA/TA estimate suggests that the former outweighs the latter, i.e. the efficient level of expenditure for this year would be c€15m higher than Dublin Airport's latest estimate. We use Dublin Airport's latest estimate for 2022; this is solely used to estimate the opening net debt position for 2023, thus it is appropriate to use the estimate of incurred rather than efficient expenditure.

Submissions and Responses on Operating Costs- General Approach

- 8.15 ACI references a statement in the Draft Decision where we noted that the airport is not required to achieve the individual building block targets precisely as we set out. It claims that we reveal an implicit recognition that Dublin Airport will be unable to achieve the targets set out. It considers that our approach should be to set each individual building block target as accurately as possible. It considers that our approach appears to be motivated by the belief that information asymmetries are preventing us from truly measuring efficiency.
- 8.16 ACI states that as the draft forecast is based on historical data, it does not appropriately account for the cost of airport operations post-Covid-19. It states that our forecast cannot match the understanding and experience of the airport, and that our forecast is the '*bare minimum*' required to provide a minimum standard of service.
- 8.17 In its Appendix 1, Dublin Airport considers that in the Draft Decision, we failed to make an allowance for the magnitude of change that has occurred in the industry and at Dublin Airport since March 2020, which represents a '*clear and manifest error in regulatory decision making.*' Among these changes, Dublin Airport identifies volatility in passenger and staffing levels, high inflation, and a different passenger profile with increased leisure travel, earlier presentation profiles and thus increased dwell time. It also references a changed operating model for cleaning in T1 and similar ramp-up challenges for third parties operating at the airport.
- 8.18 Referring to our amended objectives under the ANTA, Dublin Airport states that an efficient outcome does not imply the lowest charges possible but also considers the speed of recovery, resilience of the operation, and service quality. Dublin Airport states that it is important that we do not define the '*notionally efficient airport*' operating in a '*steady state*' environment, which, Dublin Airport claims, has been the case in previous determinations. It considers that our primary objective provides significant latitude to assess efficiency while also taking into account what has occurred over the past 30 months.
- 8.19 Dublin Airport further claims that we have not followed '*best regulatory practice*' in setting the Opex allowance, outlining an approach attributed to '*UK regulators*'. This includes:

- An assessment of base year efficient costs, i.e. seeking to establish whether the company is operating at the efficiency frontier at the start of the determination period.
- An assessment of any catch-up efficiency challenge.
- An assessment of ongoing efficiency, relating to the general productivity improvements of the economy. This is described as a top-down efficiency challenge which is quantified by econometric analysis.
- Scrutiny of the regulated entity's forecast.
- Consistency checks, to ensure that the forecast is achievable.

8.20 Dublin Airport states that we have not considered whether the efficiency frontier has shifted since 2019 or how the airport will meet the CEPA/TA forecast. It also claims there is limited evidence that a detailed review of the airport's forecasts was undertaken by us or by CEPA/TA, and that the granularity of the CEPA/TA approach means that there are a large number of decisions which err on the side of being too stringent, which leads to a substantial challenge overall. It references a statement from the UK CAA, for which CEPA/TA is conducting a similar piece of analysis in relation to Heathrow, to the effect that a further top-down cross check on such analysis is appropriate. It also states that the Opex forecasts are inconsistent with the Commercial Revenue forecasts and service quality targets.

8.21 Dublin Airport states that the €150m difference for the period between its forecast and ours would have a significant impact on financeability resulting in delayed capital investment. The Irish Congress of Trade Unions similarly notes the difference between ours and Dublin Airport's forecasts.

8.22 Dublin Airport provides a comparison of Opex per passenger across several airports, stating that Dublin Airport's average operating cost per passenger of €8.66 from 2017 to 2019 is 20% lower than the average across airports.

8.23 IATA is supportive of the use of a bottom-up analysis. Similarly, Ryanair is in favour of a bottom-up approach in principle, but objects to what it terms as our proposal for an '*excessive and inefficient*' Opex allowance.

8.24 The Irish Congress of Trade Unions highlights the need for an Opex allowance that enables the airport to hire sufficient staff for operations to function normally, and that we should use a realistic wage growth forecast. It considers that our approach should not impede the collective bargaining process at Dublin Airport.

Commission Response

8.25 For the avoidance of doubt, our approach is to set each individual building block target as accurately and reasonably as possible, seeking to balance challenge with achievability in each case. ACI misinterprets what was described as an example to explain the mechanics of the regulatory model. While we seek to forecast each individual target as accurately as possible, the individual targets themselves are not binding on Dublin Airport, and it is likely that outturns will diverge from these to a

certain extent. Such divergences tend to be linked and somewhat offsetting in terms of overall financial performance; for example, passenger numbers higher than our forecast would likely lead to increased Opex and also Commercial Revenues, and vice versa.

- 8.26 Our approach is motivated by seeking to set a reasonable centreline target, rather being related to potential information asymmetries. In our experience, regulated entities can be relatively poor at forecasting their own cost and/or revenue requirements, even in the short term. There is also an incentive for the regulated entity to overestimate these requirements. The Opex targets are not based on providing a minimum standard of service but providing a standard of service in line with the Quality of Service targets set out in Section 13.
- 8.27 We agree that there is a large gap between our forecast and that of Dublin Airport, particularly the most recent forecast, as described above. However, the extent of the gap between our forecast and the Regulated Entity's forecast is not necessarily a reliable indicator of the reasonability of our forecast. The single biggest driver of the difference between our payroll forecasts and Dublin Airport's is that Dublin Airport has made an apparent error in its use of wage growth forecasts. We do not have Dublin Airport's full model but using the CEPA/TA model, correcting this issue reduces the total payroll forecast by approximately €109m in total over 2023-2026, and we note that Dublin Airport's forecast has more FTEs to which this would apply. Using Dublin Airport's source, but correcting the application of it, in fact leads to slightly lower payroll costs than using the final CEPA/TA wage growth assumptions. Addressing this would reduce the gap significantly, but that would not make our forecasts any more or less reasonable. A less reasonable or accurate forecast from the regulated entity, all else equal, increases the gap between it and the regulator but does not make the regulator's forecast any more or less reasonable.
- 8.28 We reject the suggestion that we failed to consider changes since 2020. Our consideration of specific changes, identified by us and/or in responses to the Draft Decision, can be objectively observed in the CEPA/TA analysis. It can also be observed elsewhere in this document and in our Draft Decision. To give some examples on the specific topics raised by Dublin Airport:
- Higher inflation is directly accounted for in the regulatory model, and we have adjusted our approach to this in the manner suggested by Dublin Airport as discussed in Section 14.
 - Unlike 2019, CEPA/TA explicitly do not make an adjustment for security rostering inefficiency which they have identified. This is to allow for the airport to have staff in place prior to passenger volumes materialising, given training lead-times, and less predictable passenger show-up profiles. Furthermore, we have not adjusted our retail revenue forecast to account for increased dwell times, so if Dublin Airport is correct that this feature will continue in the coming years, this can be expected to provide upside relative to our revenue forecast.
 - CEPA/TA take account of the changed operating model for cleaning in T1 in both its draft and final forecasts.

- 8.29 We thus agree with Dublin Airport's updated position in relation to carrying out a revised bottom-up assessment rather than relying on the 2019 analysis. However, we note that in its issues paper response, Dublin Airport's preferred approach was to 'reuse' the CEPA/TA analysis completed in 2019, while reflecting the expected passenger levels for 2023-2026 and adjusting for the known changes to the cost base. It suggested referring to the Opex allowances set out in the 2019 Determination, updated for actual 2019 cost outturns. Dublin Airport stated that while it did not agree with all of the CEPA/TA findings from 2019, it accepted that significant analysis was undertaken to establish an efficient baseline. It explained that such an approach would be based on the airport's actual cost structure, and a base year that would be considered 'normal', (i.e. 2019). In its response to the Draft Decision, Dublin Airport does not explain why an approach it advocated in March would now constitute a '*clear and manifest error*' in regulatory decision making.
- 8.30 Our approach contains many of the aspects referenced by Dublin Airport as constituting '*best regulatory practice*'. CEPA/TA established an efficient baseline for 2022, which we note is higher than Dublin Airport's expected expenditure for 2022. Efficient expenditure was then projected forward using elasticities and volume/price drivers. Finally, any necessary step changes were added, which were based on features such as new cost pressures, and the effect of new Capex projects on Opex. As part of this process, both CEPA/TA and CAR have carefully reviewed Dublin Airport's own forecasts and forecasting assumptions. In some cases, we adopted the suggested assumptions and/or the forecast itself and, in other places we did not.
- 8.31 The primary difference in the approach described as '*best regulatory practice*' appears to be the use of econometric analysis to set a top-down efficiency challenge. This is not an approach which Dublin Airport has used in its own forecasts. In its response to the Issues Paper, Dublin Airport agreed with us that a top-down approach may overlook firm-specific factors which are difficult to capture. It does not explain why this approach would now be preferable. We note that there is no such thing as a single '*best practice*' approach to assessing operating costs across regulated sectors either in the UK or elsewhere. We do not believe that a top down analysis would be a sufficiently robust way to establish Opex allowances for Dublin Airport. We expect that this may be more suited to regulated industries with more similar firms which are thus more benchmarkable than airports. Airports are relatively diverse in their business structures, scope of services provided, and indeed their regulatory environments.
- 8.32 In a bottom-up analysis, the efficiency frontier is considered in relation to each cost line separately. For example, since 2019, we assess that the efficiency frontier for security has shifted inward, as described above. That is, we expect that Dublin Airport will now need to incur more cost, all else equal, in relation to security than was the case in our 2019 assessment. In 2019, we forecast 803 security FTEs for 2024 (including CIP impacts) with 38m passengers. We now forecast 893 security FTEs for 2024, with just 33.6m passengers. On the other hand, the frontier for energy consumption has shifted outwards, all else equal, as we have allowed for additional Photovoltaic Farms, and the major capacity projects to expand the building footprint (and require utilities services) are not now expected to be delivered until after 2026.
- 8.33 We agree with Dublin Airport that our approach, in seeking to give effect to our Statutory Objectives, should not just drive the lowest possible costs/charges, but also

consider the speed of recovery, resilience of the operation, and service quality. As described above, and in more detail in the CEPA/TA reports, this is what we have done. In the context of service quality, CEPA/TA have ensured that Opex is consistent with our intended service quality targets; in particular the security modelling continues to be based on a passenger queue time of 10 minutes, significantly lower than the level which would incur a financial adjustment in our Quality of Service targets. We also consider interactions with Commercial Revenues, as described below and in the CEPA/TA report. Efficiency does not mean just minimising cost, but rather maximising value. We seek to allow for costs which are sufficient to fund the safe and secure operation of the airport, at a service level in line with the requirements of airport users, but not higher than that.

- 8.34 Our approach is not based on a '*notionally efficient airport*' operating in a '*steady state*' environment, nor has this been the case in previous determinations as stated by Dublin Airport. We take account of the actual factors which we expect to constrain Dublin Airport from being a notionally efficient operator. For example, if we were forecasting the costs of a notionally efficient operator, we would not take account of the impact of staff on pre-2010 contract terms on the cost base.
- 8.35 In relation to the CAA comment on a top-down sense check referenced by Dublin Airport, in its draft report CEPA/TA calculated that the overall elasticity of its forecast with respect to passenger numbers was 0.43, or 0.36 if CIP impacts are excluded, over 2022-2026. It stated that this was close to (or within, if excluding CIP impacts) the generally accepted benchmark of 0.3 to 0.4 in terms of airport cost sensitivity to passenger traffic growth. This means that, if passenger numbers are 10% higher, all else equal, Opex is just 4.3% higher, through economies of scale.
- 8.36 We note that, in its final forecasts, the CEPA/TA total implied elasticity over 2022-2026 (including CIP impacts) is 0.36, within the benchmark range. By contrast, the Dublin Airport revised forecast now implies an elasticity of 1.5. Even if 2022 is excluded as an outlier (given that Dublin Airport was significantly understaffed and then had to incur expenditure on a range of managed solutions), the overall elasticity remains above 1 between 2023-2026. We are not aware of any evidence to suggest that such an outcome is credible and consider that it fails a high level sense check. We consider that this is partly related to the wage growth assumption issue described above.
- 8.37 In relation to the use of total Opex per passenger as a metric to compare airport operating costs, there are flaws in such analysis which are very difficult to fully eradicate.⁴⁸ As Dublin Airport states, there are issues with comparability due to differences in operations. For example, some airports may process a higher level of cargo or include additional services such as groundhandling, while Dublin Airport incurs US Preclearance costs and has a relatively high proportion of insourced retail.
- 8.38 In response to ICTU, we do not determine actual staffing or wage levels at Dublin Airport. Our forecasting analysis is solely used as an input to our overall price control. Thus, this process should not interfere with the normal functioning of collective bargaining at Dublin Airport.

⁴⁸ For further discussion on this, see Section 6 of the original 2019 Final Determination.

- 8.39 In general terms, we do not accept the submission from Dublin Airport that the CEPA/TA assumptions and methodologies err on the side of being too stringent. As set out in the report, they have sought to take a centreline approach, including in some cases forecasting costs higher than those proposed by Dublin Airport. Similarly, we reject Ryanair's submission that our forecast leads to '*excessive and inefficient*' Opex allowances.
- 8.40 We consider that breaking Opex down into a large number of more granular decisions is a strength rather than a weakness, i.e. the risk of forecasting error leading to an imbalanced result is higher in the case of a smaller number of highly impactful decisions as opposed to a larger number of less impactful decisions.

Bottom Up Efficiency Assessment

- 8.41 CEPA/TA began by estimating an efficient 2022 baseline, using a category-by-category assessment. CEPA/TA drew from its forecast of efficient Opex in 2019 to 2022, taking account of the impacts of the Covid-19 pandemic, new activities and cost pressures since 2019, and further efficiencies Dublin Airport has been able to achieve beyond those assumed within the 2019 assessment. In particular, they assessed whether cost savings achieved by the airport in 2020 and 2021 would likely be permanent or transitory.
- 8.42 CEPA/TA projected their efficient 2022 baseline forward to 2023-2026 using category specific cost drivers, such as passenger volumes and wage rates, and elasticities, which quantify the responsiveness of costs to a change in a cost driver (usually passenger numbers). In some cases, CEPA/TA refined the 2019 elasticity assumptions to account for the likelihood that costs may be less responsive to changes in cost drivers under substantial increases in demand as passenger volumes recover from the Covid-19 pandemic. They assume lower elasticities until passenger volumes recover to 2019 levels. Thereafter, the elasticities derived in its 2019 assessment are applied.
- 8.43 CEPA/TA then adjusted the forecasts to account for step changes in Dublin Airport's future cost base, e.g. the introduction of new scanning technology, or due to impacts from the airport's Capital Investment Programme (CIP).
- 8.44 Following the publication of the draft report, CEPA/TA have considered the submissions from stakeholders, and updated the forecast to reflect any changes warranted based on these submissions.
- 8.45 The adjustments in the final report have resulted in a lower level of payroll costs and higher non-payroll costs. There are a range of adjustments which have driven change, both increases and decreases. The Central Bank of Ireland's updated real wage growth forecast is much lower than the one used for the Draft Decision. Security FTE forecasts have been updated following, in particular, the provision of further detailed information from Dublin Airport. The link between fire service staff and passenger volumes has also been removed from the model. Several adjustments were also made to other non-staff costs including increases in the allowed Metrolink, prebooking and credit card commission, and airside bussing costs. Similarly, non-payroll cleaning costs were increased to align with updated benchmark estimates. Finally, insurance projections increased to allow for certain upward pressures.

8.46 Both ACI and Dublin Airport express the opinion that the draft forecast was too low, with Dublin Airport pointing to the new challenges as a result of the significant changes in the industry since 2019, and ACI stating that passengers now have higher expectations of airports which the airport requires higher expenditure to achieve. These concerns are considered in the final report, with CEPA/TA stating that the challenges noted by Dublin Airport are most notable for Security and Cleaning costs and they have been considered in the relevant sections of the report.

Payroll Opex

8.47 ACI, Dublin Airport and ICTU suggest that the wage assumptions should be adjusted upward to reflect inflation and labour market pressures. Ryanair argues that both short and long run wage assumptions are overstated. CEPA/TA do not find sufficient evidence to suggest that the general wage growth at the airport should be higher than the general labour market, but accept Dublin Airport's evidence in the case of certain specific business units. They also accept Ryanair's submission in relation to the potential for averaging two forecasts, as per the draft, to generate an overall biased forecast. They now use only the forecast from the Central Bank of Ireland (CBI). As noted above, if we used the wage growth forecast from the source suggested by Dublin Airport, our payroll forecasts would have been slightly lower than using the CBI forecast.

8.48 It should be noted that we use real wage forecasts as the real price cap input, but the corresponding nominal wage forecast is also detailed in the CEPA/TA report. In fact CEPA/TA already use a source suggested by ICTU, but in real terms.

8.49 In relation to security FTE forecasts, several respondents addressed staffing, rostering, passenger throughput assumptions, and various other aspects of the draft CEPA/TA security model. Dublin Airport provided a detailed response in its redacted Appendix 1. We are unable to provide full details on the forecasts for this area, as they are security sensitive.

8.50 CEPA/TA agree with Dublin Airport that resilience is required to ensure that there are staff in place as passenger volumes increase, given that the show-up profile of passengers is less predictable, and to account for random headwinds that the airport may face over the determination period. This is captured in the forecast, in particular by the decision to not apply a roster efficiency adjustment to the forecast for any of the years 2023-2026, which is a change from the original 2019 Determination approach. CEPA/TA do not accept Dublin Airport's position in relation to certain other areas such as absence rates and the additionality of training requirements relative to previous training requirements.

8.51 The installation of EDS C3 cabin baggage scanners (as well as rollout of ATRS lanes in T2) is expected to change the security operation within the period 2023-2026. C3 scanners will mean that passengers no longer have to remove Liquids and Gels (LAGs) and electronic items from cabin baggage. Trials are set to commence this year, with rollout planned by Dublin Airport from late 2023 to late 2024. Thus, CEPA/TA forecasts are separately based on 'pre-C3' and 'post-C3' scenarios. They assume conservatively that 2023/2024 are fully 'pre-C3' years, and 2025/2026 are 'post-C3'.

- 8.52 The CEPA/TA modelling of the 'post-C3' scenario now broadly accepts the updated Dublin Airport assumptions in relation to the tray throughput rates, Images per Passenger (IPP), and resultant passenger processing rates. CEPA/TA consider the tray throughput rate assumption to be potentially conservative, but acceptable to use as a modelling input.
- 8.53 A significant driver of difference in FTE forecasts is that CEPA/TA do not accept Dublin Airport's revised position in relation to the 'post-C3' level of staffing per pair of lanes. Dublin Airport's initial submission suggested that these would increase from the current level of 12 in T1 and 8 in T2, to 15 in both facilities. Dublin Airport's revised submission then suggested that they would increase to 20 for T1 long lanes and 17 for T2 and T1 short lanes. CEPA/TA accept that the level of staffing per pair of lanes will need to increase for the 'post-C3' scenario, but do not accept the levels now suggested by Dublin Airport. Based on benchmarks that they have previously used for the implementation of C3 in a major UK international airport, and other regulatory determinations, they adopt assumptions of 12 per short lane and 15 per long lane.
- 8.54 CEPA/TA accept that the final lane planning and staffing will however be subject to testing throughout the rollout phase. We note that there are also various sources of potential upside risk for Dublin Airport relative to our forecast, including:
- The potential for Dublin Airport to improve rostering efficiency, particularly if show-up profiles normalise or stabilise.
 - An 8.5% reduction in throughput rates observed in 2022 relative to 2019 is not sustained, or not fully sustained, over 2023/2024, where CEPA/TA assume it will be sustained.
 - The 'post-C3' tray throughput rate assumption turns out to be conservative, as CEPA/TA consider it may be.
 - Partial impact of C3 within 2024, as it is being rolled out.
 - CEPA/TA believe that there is likely to be opportunity for Dublin Airport to further increase the efficiency of the security operation once the new technology has been implemented, and once both staff and passengers have become accustomed to the new security processes and equipment.
- 8.55 Thus, overall, we are satisfied that the CEPA/TA assumptions and forecasts provide for a reasonable centreline FTE scenario, while allowing for Dublin Airport to build additional resilience and improve the security operation relative to pre-Covid 19 performance.
- 8.56 In relation to central functions, Dublin Airport states that some of the growth in FTEs which was not accepted in the draft analysis due to lack of evidence, is related to roles being moved from other business units rather than new roles. It also considered that incorrect costs were applied for property and advertising staff.
- 8.57 Ryanair highlight the increase in staffing between 2018 and 2019, stating that it was inefficient. It believes that the evidence provided for the additional 10 FTEs to work on sustainability initiatives was not adequate. Finally, it also noted that the proposed cost

per passenger in central functions was higher than in the 2019 study and that the share of central function expenditure remains constant through the period.

- 8.58 CEPA/TA accept the evidence provided regarding the reallocation of 4 FTEs from other business units, but did not find the evidence regarding the other 19 FTEs compelling enough to justify the increase. They agree that there was an error in relation to the costs for property and advertising staff and has rectified this. In relation to the additional sustainability FTEs, CEPA/TA requested further data from Dublin Airport and based on this allows for 8 of the 10 FTEs requested by the airport. Finally, in response to Ryanair, it points to the inelasticity of central functions in relation to passenger volumes and the restructuring of the airport since 2019 as the drivers behind the higher central functions Opex per passenger relative to 2019.
- 8.59 In relation to cleaning and facilities, Dublin Airport provided a detailed facilities staffing matrix in support of its position. CEPA/TA consider that, based on their experience, much of this is disproportionate to the respective tasks. CEPA/TA also consider that Dublin Airport has not effectively made the case that some of these roles are required in addition to a general increase to be expected as passenger volumes increase (and, therefore, already captured within the elasticity driven forecast). In relation to cleaning, Ryanair criticises our acceptance of the cost of the outsourced T1 cleaning contract '*without adequate scrutiny*' and suggested that this should be reduced by €9m, whereas Dublin Airport states that cleaning costs would now need to increase relative to its initial submission.
- 8.60 CEPA/TA accept that spending will now need to increase, to ensure Dublin Airport delivers the quality of cleanliness that passengers expect. They now apply an updated benchmarking analysis based on cleaning costs at other airports. This results in an increase in the cost relative to the Draft Decision, but not as high as suggested by Dublin Airport.

Non-Payroll Opex

- 8.61 Dublin Airport and ACI argue that IT costs will increase over the determination period as a result of increased digitalisation. Dublin Airport states that specific initiatives and the Opex impacts of certain CIP projects were excluded from the draft forecast. On the other hand, Ryanair argues that IT costs should be based on the historic costs of 2019 as this cost level was assessed to be efficient in 2019. CEPA/TA assessed the necessity of the cost increases for each of the projects noted by the airport. They conclude that the costs related to Common Use Self Service (CUSS) kiosks should be brought forward a year as evidence provided by Dublin Airport demonstrated the need for this. Similarly, they include an additional allowance for drone detection software.
- 8.62 Regarding rent and rates, Dublin Airport submitted that rent costs associated with several facilities were not captured in the draft forecast. This includes additional costs for a head office within Dublin Airport Central, rental costs for Cloghran House and various car parks, and rental costs for a new training facility. Based on its analysis of these line items, CEPA/TA concludes that the additional cost for the head office should be allowed on the condition that the associated offsetting revenue is also included (which we have done, as set out in Section 9). It also allowed additional costs for Cloghran house but at a lower rate than suggested by the airport. Similarly, the rental

costs for the training facility are allowed for but the upkeep costs are not as they should be covered with savings achieved as it will no longer need to rent hotel facilities or upkeep older training facilities.

- 8.63 Ryanair raises a concern that CEPA/TA failed to appropriately determine an efficient level of consultancy costs, as the forecast was higher than Dublin Airport's forecast. Based on this comment, CEPA/TA conducted further analysis to see if changing the time horizon over which the average spend was calculated would affect the average spending. CEPA/TA also note that they consciously avoided cherry-picking between their analysis and Dublin Airport's; it would not be appropriate, as suggested by Ryanair, to make a downward adjustment where we assess that Dublin Airport's costs are overstated, but to accept Dublin Airport's cost proposal elsewhere despite evidence suggesting that it may be understated.
- 8.64 In relation to other non-staff costs, Dublin Airport submits that the draft forecast was significantly lower than its forecast. It notes that the categories driving the difference are prebooking and credit card commission, airside bussing costs, lounge costs, and other overheads. It argues that prebooking and credit card commissions should be linked to car parking, lounge, fast track and retail revenues. CEPA/TA accept this and adapt the forecasting approach in the final report accordingly, based on our final forecasts for these revenue lines as described in Section 9. CEPA/TA also conclude that additional bussing would be required as passenger numbers increase past 2019 levels and as such, allow for an increase of costs from 2024 onwards. No adjustments were made in relation to non-staff lounge costs. Finally, following an analysis of the requests by Dublin Airport, CEPA/TA allows for additional costs for both the Metrolink and VIP Handling costs.

Final Forecasts

- 8.65 Table 8.2 outlines the final forecast by category from the CEPA/TA, which we have used for the Opex allowances for 2023-2026.

Table 8.2: CEPA/TA Final Forecasts by Category, including CIP impacts, € million

Category	2023	2024	2025	2026
Security	44.8	47.0	46.6	47.7
Maintenance (payroll)	17.9	18.6	19.1	19.6
Maintenance (non-pay)	16.9	18.9	19.3	19.6
Central Functions	32.1	33.0	33.6	34.1
Facilities and Cleaning (payroll)	21.8	23.1	23.6	24.0
Facilities and Cleaning (non-pay)	7.2	7.4	7.6	7.8
Other Non-Staff Non-Pay	25.6	27.7	29.5	30.0
Campus Services	19.3	19.7	20.0	20.2
Retail	19.2	19.9	21.8	22.4
IT (payroll)	7.5	8.1	8.4	8.6
IT (non-pay)	12.0	12.7	13.3	13.6
Rent-Rates	16.9	15.9	15.1	14.4
PRM/ Car Parks	15.6	16.8	17.7	18.5
Utilities	12.8	12.9	11.3	10.4
Marketing	6.0	6.3	6.6	6.9
Airside Operations	6.3	6.5	6.6	6.7
Other Staff Non-Pay	6.8	6.9	6.8	6.9
Consulting	7.1	7.1	7.1	7.1
Insurance	5.5	5.8	6.1	6.4
Capital Projects	3.3	3.4	3.4	3.5
Total	304.6	317.7	323.5	328.3

Source : CEPA/TA. Car parking and PRM grouped based on Dublin Airport confidentiality requests.

8.66 Table 8.3 provides the corresponding FTE forecast for the period 2023-2026.

Table 8.3: CEPA/TA Forecast Required Staffing Levels by Category, (FTEs, inclusive of CIP FTEs)

Category	2023	2024	2025	2026
Security	866	893	873	881
Maintenance	232	238	241	244
Central Functions	333	335	336	336
Facilities and Cleaning	428	451	455	458
Campus Services	232	233	234	234
Retail	342	348	375	379
IT	66	70	72	75
Airside Operations	79	80	80	80
Capital Projects	33	33	33	33
Total	2611	2680	2699	2720

Source : CEPA/TA

Glidepath

8.67 Dublin Airport suggests that a glidepath for the early years of the review period would be an appropriate way to allow the airport to rebuild operations back to 2019 levels in a timely manner, run a resilient operation, and offer a service quality that reflects changing passenger expectations and demographics.

Commission Response

8.68 The forecasts are intended to be challenging but achievable. In 2019, the gap between the CEPA/TA efficient baseline and Dublin Airport's actual costs was substantial, prompting us to set a glidepath over which the airport could align its costs to the efficient level. This is not the case in the 2022 analysis, as the baseline is higher than Dublin Airport's actual expenditure this year, and we anticipate significant further increases in expenditure next year, rather than a decrease.

8.69 In addition, the CEPA/TA brief for 2022 included an assessment of immediate achievability. Where there is a material gap between CEPA and Dublin Airport assumptions in relation to the baseline for a specific cost line item, the question of achievability/glidepath is addressed in the CEPA/TA report. The elements of service provision referenced by Dublin Airport are already addressed in the analysis as described above.

Opex Passthrough Mechanism

8.70 Dublin Airport is supportive of the proposed passthrough mechanism. Dublin Airport requests that we consider the inclusion of an increased range of non-payroll costs, including energy and security related costs. IATA on the other hand considers that the scope of the mechanism should be kept to a minimum; it considers the proposed elements to be acceptable.

8.71 Ryanair welcomes the proposal to pass back to airport users certain categories of savings within a period, but has concerns that the mechanism allows Dublin Airport to

engage in regulatory gaming and claim inefficient costs.

Commission Response

8.72 We have decided to include the passthrough mechanism as established in the 2019 Determination (as updated pursuant to the referral from the 2020 Appeals Panel). This remains limited to cost lines over which Dublin Airport has little control. Thus, it is limited to the following:

- Local Authority Rates applicable to the regulated entity and not rechargeable.
- Direct charges set out in new or amended primary or secondary legislation, or levied by a regulatory authority, which are outside the control of Dublin Airport, which exceed €0.5m and relate to activity undertaken by the regulated entity. Such costs would include a charge levied by the noise regulator (ANCA), CAR costs, or the costs of the Irish Aviation Authority.

8.73 Any changes in these cost lines relative to our forecasts (whether higher or lower) would be passed on to airport users directly rather than being absorbed by Dublin Airport.

8.74 As was the case in the Draft Decision, we do not consider that Dublin Airport has sufficiently established the benefit of including other lines of Opex, thus we do not expand the mechanism. As demonstrated by CEPA/TA, we consider that variations in energy costs will already be adequately captured in the CPI adjustment which will be made throughout the period. We note that such costs are not fully outside the control of Dublin Airport; it can prioritise the projects to enhance the energy efficiency of its buildings, and sustainability projects to reduce consumption such as the Photovoltaic Farms. Allowing for the passthrough of energy costs would dull the incentive to deliver such projects.

8.75 As set out in 2019, in order for a relevant cost to be included in full in the passthrough mechanism, Dublin Airport must demonstrate that it took all reasonable measures to achieve the best value for airport users. This will be considered each year ahead of our publication of the price cap statement, which generally occurs in November. Therefore, we do not believe that there is an opportunity for Dublin Airport to take advantage of the mechanism to claim inefficient costs.

Opex and Quality of Service

8.76 ACI states that the Draft Decision only allows for a bare minimum standard of service. It claims that passengers today expect more from airports and that passengers understand that the quality of infrastructure at an airport is related to the airfare they pay and are willing to pay for a more comfortable airport experience.

8.77 Dublin Airport claims that the forecast is inconsistent with the QoS targets. It states that the reduction of €150m compared to its forecast will have a serious impact on QoS.

Commission Response

- 8.78 We agree that the regulatory settlement should be internally consistent in that the Opex targets should be sufficient to meet service quality expectations. In their assessment of Opex costs, CEPA/TA have maintained the 10-minute average security queue length assumption from the 2019 Determination and have also considered service quality in the setting of allowances for other key operational functions such as cleaning and maintenance.
- 8.79 As set out in Section 13, the QoS system for 2023-2026 remains broadly in line with that which was set out in the 2019 Final Determination. Thus, in broad terms, from 2023 we are expecting Dublin Airport to return to a level of service in line with that which was provided in 2019, which is consistent with our Opex forecasts.

9. Commercial Revenues

Summary

Table 9.1: Commercial Revenue Forecast

	2019	2020	2021	2022f*	2023f	2024f	2025f	2026f
Commercial Revenue Outturn / Target, (€m)	280.7	99.9	120.9	251.2	276.2	297.1	315.5	329.6
Year-on-Year		-64.4%	21%	107.8%	10%	7.6%	6.2%	4.5%
Per passenger, (€)	8.53	13.51	14.29	8.94	8.72	8.84	9.10	9.22
Year-on-Year		58.4%	5.7%	-37.5%	-2.5%	1.4%	3.0%	1.3%

Source: CAR

*The 2022 forecast is based on the latest forecast provided by Dublin Airport

- 9.1 Our final forecast for Dublin Airport's Commercial Revenues is €276m in 2023, increasing to €330m by 2026. This compares to the 2019 outturn of €281m. At a per passenger level, we expect this to rise from €8.72 in 2023 to €9.22 in 2026, compared to the 2019 per passenger figure of €8.53.

Table 9.2: Commercial Revenue Forecast by Category, €m

	2023	2024	2025	2026
Retail	117.6	127.3	138.9	144.7
Car Parking	54.5	57.8	61.4	64.9
Commercial Property	26.4	28.0	27.5	28.6
Property Concessions	31.4	32.9	33.8	35.4
Lounges, Fast Track & Platinum Services	18.3	20.7	21.7	22.6
US Preclearance	16.9	18.6	20.3	21.2
Property Advertising	5.4	6.1	6.4	6.5
Other	5.6	5.6	5.6	5.6

Source: CAR

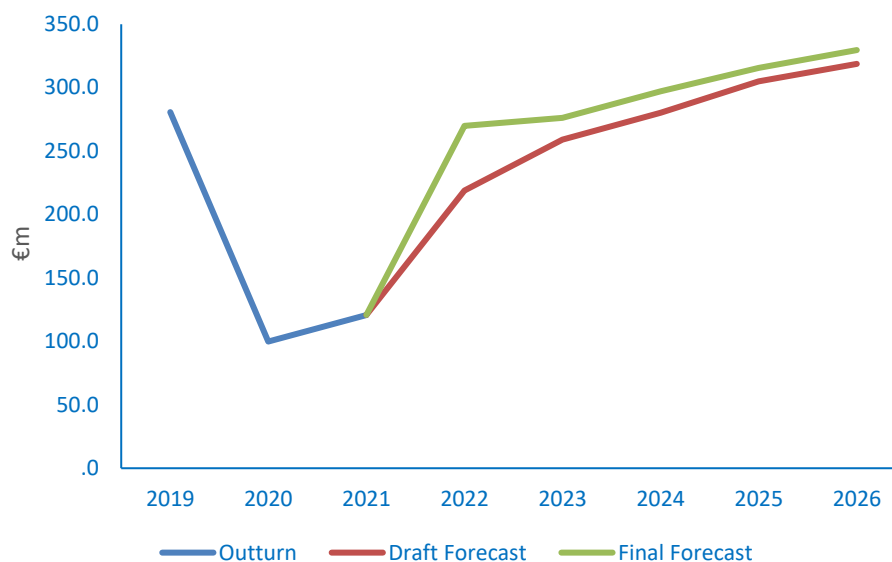
- 9.2 These figures are somewhat higher than those proposed in the Draft Decision. Overall, we now forecast total Commercial Revenues of €1.22bn over 2023-2026, up by €55m from €1.16bn in the Draft Decision. The main areas which have led to changes are:
- Higher passenger traffic forecasts, which increases the revenue forecasts for passenger driven revenue lines such as retail and carparking. This accounts for almost half the difference, at €25m.
 - A review of more recent outturn data.
 - A review of certain proposed forecast overlays and adjustments, following submissions in relation to these.
 - Adjustment of how the financial model calculates the US Preclearance revenue for a given US departing passenger traffic forecast.

- 9.3 In nominal terms, Commercial Revenues are forecast to be €316m next year,

increasing to just over €400m by 2026. We therefore forecast that, by 2026, total Commercial Revenues will be broadly in line with total Opex.

- 9.4 Figure 9.1 shows total Commercial Revenue outturns from 2019 to 2021, and our Draft and Final Forecasts.

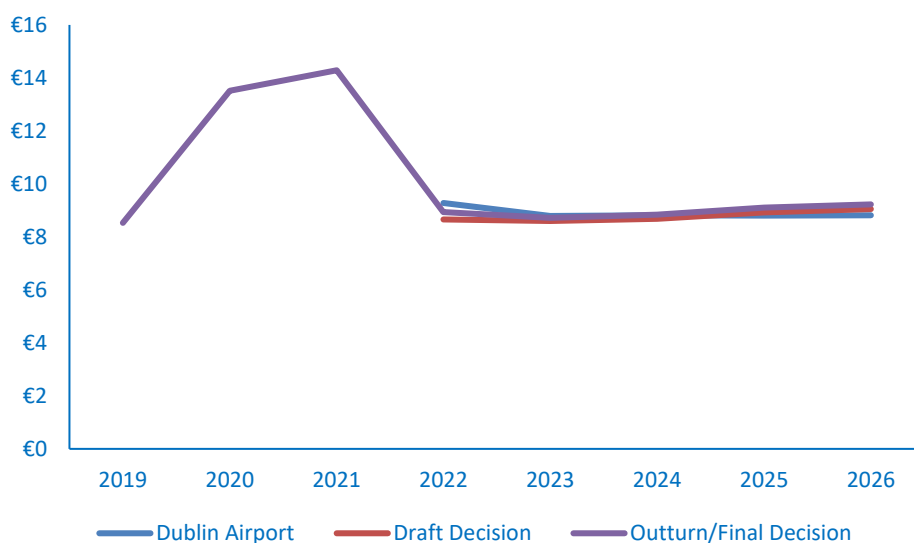
Figure 9.1: Commercial Revenue Outturns and Forecasts



Source: CAR

- 9.5 Within the period, Dublin Airport is incentivised to outperform these figures, as any revenues above this level are retained by it.⁴⁹ We have decided to reintroduce the rolling schemes, which were suspended between 2020 and 2022 in response to the Covid-19 pandemic. The schemes incentivise Dublin Airport to act commercially throughout the 2023-2026 period rather than postpone revenue generating initiatives, such as new retailing outlets or carparks, to the start of the next period.
- 9.6 Over 2023-2026, the airport is proposing to deliver various commercial and capacity projects that will add extra capacity and improve the quality of the commercial offer. We noted in the Draft Decision that ideally, Commercial Revenues provide a twin benefit; improved offerings for passengers as Dublin Airport seeks to improve its performance in areas such as retail and Food & Beverage (F&B), and also lower Airport Charges, all else equal, which in turn benefits passengers. Figure 9.2 compares our Draft and Final forecasts per passenger with those of Dublin Airport.

⁴⁹ Except for revenue from ATI fees.

Figure 9.2: Commercial Revenue Per Passenger Comparison

Source: CAR

- 9.7 Dublin Airport expects higher per passenger revenue in 2023 than we forecast, though lower for 2025 and 2026. This is due to its expectation that revenues will remain largely flat at a per passenger level, across the period. We consider that our profile is more consistent with the planned revenue generating projects allowed for over the period. Our forecast and Dublin Airport's forecast are very close for 2024.
- 9.8 Our updated average retail forecast per passenger over 2023-2026 is €3.89, very close to that of Dublin Airport at €3.92. Similarly, our average carparking forecast is €1.76 compared to Dublin Airport's at €1.73. Our property concessions per passenger forecast remains in line with our Draft Decision at €0.98, slightly lower than Dublin Airport's at €1.02. Our forecast for Lounges/Platinum/FastTrack is €0.61, slightly higher than Dublin Airport's forecast of €0.57. Our forecast for advertising per passenger is higher than Dublin Airport's at €0.18 compared to €0.14.
- 9.9 As in the Draft Decision, there are three Commercial Revenue lines which are not driven by our general passenger traffic forecast. Our forecast for US Preclearance is higher than Dublin Airports, because we forecast a higher volume of US-departing passengers compared to Dublin Airport. Our forecast for property rents is also higher than Dublin Airport's, primarily due to Dublin Airport's Commercial Revenue forecasts assuming later delivery of rental property projects relative to the CIP timeline and/or Dublin Airport's Opex forecasts. Our forecast for 'Other' (non-passenger) is higher than Dublin Airport's, based on outturns for 2022 being considerably ahead of Dublin Airport's forecast.
- 9.10 Thus, overall, our total Commercial Revenue per passenger, on average over 2023-2026, is €8.98, somewhat higher than Dublin Airport's forecast of €8.81.
- 9.11 For 2022, as with Opex, we use Dublin Airport's latest forecast, which we have validated based on the annual profile of revenue compared to 2019. This does not change the price cap for 2022 but is used in the model for the anticipated net debt position at the end of this year.

Approach to Commercial Revenue Targets

- 9.12 In the context of economic regulation, the forecast Commercial Revenue income figure may be considered as a target for the managing body of the airport, as any revenue generated in excess of this figure is retained by it. Our overall forecast is an aggregate of forecasts in eight categories of Commercial Revenue. Our high-level approach to forecasting these categories remains in line with our Draft Decision proposals.
- 9.13 We use econometric modelling to establish the relationship between each category, and a key driver (for example, GDP or passenger traffic). We implement this methodology in four steps. First, we use outturn data from 2001 to 2019 to estimate the elasticity of each category with respect to associated drivers. The elasticity measures how the category of revenue varies due to changes in the specific driver. Second, we select the most appropriate driver based on the robustness of the results. Third, we construct a base to project from by taking the 2019 outturn per passenger for each category and multiplying it by our 2023 passenger forecast.⁵⁰ Fourth, we use the base, the estimated elasticity, and forecasts for the selected driver to arrive at the target for each revenue category in each year from 2024 to 2026.
- 9.14 For passenger driven revenue lines, we continue to use a 2023 starting point and project from there (rather than using 2022 as a baseline) as we expect revenue and passenger growth to be more stable from this point. We expect there to be lingering Covid-19 impacts on passenger behaviour and market dynamics in 2022, which are likely to lead to higher yields per passenger in areas such as retail and car parking. We do not expect this to continue into 2023. Thus, in overall terms, our baseline assumption is that Commercial Revenues per passenger will return to 2019 levels in real terms by 2023.
- 9.15 From this point, we apply our elasticity and any relevant CIP related adjustments. The calculated elasticities have been validated, and the appropriate driver selected, using a range of statistical tests. The tests aim to identify autocorrelation (Durbin-Watson and Durbin's alternative test) and any ARCH (Autoregressive Conditional Heteroskedasticity) effects (ARCH-LM test). These tests were explained in detail in Appendix 1 of the Draft Decision.
- 9.16 Table 9.3 summarises the selected drivers and elasticity for each category. For commercial property, we use Irish GDP as the driver. For US Preclearance revenue, we use our forecast of US departing passengers. As per the Draft Decision, we do not use an elasticity for 'Other' category as we did not obtain statistically significant results for passenger and GDP elasticities. For the remaining five categories we use our forecast of total passengers at Dublin Airport.

⁵⁰ Except for Commercial Property, US Preclearance, and 'Other'.

Table 9.3: Final Elasticities Used by category

	Base Elasticity	Driver
Retail	1.3	Passenger Numbers
Car Parking	1.0	Passenger Numbers
Commercial Property	1.0	GDP
Property Concessions	0.8	Passenger Numbers
Lounges, Fast Track & Platinum Services	1.0	Passenger Numbers
US Preclearance	1.0	US Passenger Numbers
Property Advertising	0.8	Passenger Numbers
Other	0	None

Source: CAR

- 9.17 The elasticities calculated now are slightly different to those calculated in 2019, despite the same methodology being used. This is due to an additional year of outturn data being used (2019).
- 9.18 We then adjust our forecasts to account for uplifts for revenue generating CIP projects and known changes in circumstances relative to 2019 (e.g., UK passengers now being duty free rather than duty paid). We also subtract revenue associated with the displacement of certain commercial property due to the planned developments in the north and south aprons. These adjustments are laid out in the financial model.
- 9.19 Consistent with the original 2019 Determination, in two cases we use an elasticity of 1 instead of the (higher) econometrically calculated elasticity:
- For carparking, this was in view of capacity constraints and noting that planning permission had not been obtained for the carparking projects, and the potentially long lead time for this. While we noted that the carparks are yield managed and thus capacity constraints are not inconsistent with an elasticity of greater than 1, we adopted an approach which would align more specifically with the investment programme. We added in specific uplifts associated with new car parking projects in the allowed CIP. We also aligned the capital remuneration of carparking projects with the same expected delivery timeline.
 - For Lounges, FastTrack, and Platinum Services, we considered the estimated elasticity of 2.53 to be unrealistically high to use for a forward projection. The elasticity is high because revenues were largely flat until 2014 but grew significantly between 2015 and 2019, an average annual increase of 35%. In 2019, we similarly estimated a passenger elasticity of 2.73, which we did not use.
- 9.20 The implication of using an elasticity of 1 is that the revenue growth will track passenger traffic growth, rather than exceed it. We continue this approach in our Final Decision, for the reasons described below.

General Submissions Received on the Draft Decision

- 9.21 Dublin Airport asserts that the higher revenues observed in 2022 have been driven by the greater share of Irish originating passengers, because Irish passengers make more

use of the car parks, lounges and premium products. Dublin Airport believes that the macroeconomic situation has changed with the onset of high inflation which has an impact on the airport's commercial business. It adds that the economic uncertainty has led to reduced consumer sentiment that will lead to lower Commercial Revenues.

- 9.22 Joseph Ryan believes that the airport is over reliant on Commercial Revenues. He considers that our forecast will push it further towards increased reliance. He states that Dublin Airport's prices for carparking, F&B, and the proposed Drop Off charge have been heavily criticised, but states that, given the '*low passenger price cap*', the revenues must be found somewhere. He states that Commercial Revenues will exceed Airport Charges for each year 2023-2026 based on our Draft Decision.
- 9.23 As set out in Section 7, Dublin Airport considers that our passenger forecast is too high. It notes that this, in turn, leads to increased Commercial Revenue forecasts, even though our forecast of Commercial Revenue per passenger is similar to theirs. Dublin Airport also disagrees with what it refers to as an assumption that the airport has no capacity impediments. It refers to constraints such as limited retail floor space, limited car parking, commercial property occupancy at maximum and car rental facilities at capacity.
- 9.24 Ryanair believes that the forecasts should be adjusted in line with updated passenger forecasts. Ryanair asks why use a lower base for Commercial Revenues in 2022 through to 2024 than estimated by Dublin Airport. Ryanair thinks that revenues will rise as the share of leisure traffic grows and the number of people using private transport remains high. Ryanair believes that the forecasts are therefore understated.

Commission Response

- 9.25 Dublin Airport's submission in relation to the passenger traffic forecast is considered in Section 7. We do not ignore capacity constraints or downside risks; these are addressed below, where specifically relevant.
- 9.26 In relation to Joseph Ryan's comment on the scale of Commercial Revenues compared to Aeronautical Revenues, it is correct that Commercial Revenues are expected to continue to increase faster than Aeronautical Revenues. This is largely because as passenger numbers increase, Commercial Revenues increase with a higher elasticity than the cost base (due to economies of scale in the cost base).
- 9.27 We use a single till approach to setting the maximum level of Airport Charges, which means that we consider all costs and revenues, aeronautical and commercial, at the airport.⁵¹ As noted by Dublin Airport, all else equal, this dilutes the incentive on it to maximise Commercial Revenues compared to dual till airports elsewhere in Europe. While we consider it plausible that in some circumstances Dublin Airport might seek to substitute aeronautical revenues with Commercial Revenues, we note that historically, aeronautical outperformance has instead tended to coincide with Commercial Revenue outperformance. For example, by the end of the 2014-2019 regulatory period, Dublin Airport was significantly outperforming in relation to aeronautical revenues, but outperformed the Commercial Revenue forecasts by more,

⁵¹ With the specific exception of the Dublin Airport City development, which has been exited from the till.

even at a per passenger level. We consider it more likely that Dublin Airport will seek to simultaneously maximise its performance in both categories, subject to the constraining factors which respectively apply to them.

- 9.28 In relation to Ryanair's submission, where structural changes/discontinuities relative to historic data have been specifically identified or evidenced, we have sought to take account of these, as described below.

Submissions Received on Elasticities, Econometrics, and Baselines

- 9.29 As a general point, IATA is concerned that our elasticities are calculated based on Dublin Airport's own historic performance instead of whether other airports have been able to achieve more.
- 9.30 IATA considers that our approach to setting a 2023 baseline is 'acceptable'.
- 9.31 Dublin Airport supports the approach of using outturn Commercial Revenue per passenger in 2019 to set a 2023 baseline.

Retail

- 9.32 Ryanair and IATA support the use of the recalculated elasticity for retail.

Carparking

- 9.33 IATA asks us to reconsider the approach to the carparking elasticity, in the context of our comment that, because Dublin Airport is expected to continue to yield manage the carparks, an elasticity higher than 1 is not inconsistent with capacity constraints.
- 9.34 Ryanair also believes that an elasticity greater than 1 is realistic for car park revenues. It points to several reasons for this: Changed passenger demographics with different usage patterns, capacity concerns being less of a factor, and enhanced revenues from carparking CIP projects. It also believes that there has been a shift from public transport to private transport, together with a shortage of taxis. Similar to IATA, it notes that the carparks are yield managed, and states in particular that it understands that there is no plan to re-open a particular competitor carpark with 3,500 spaces. Ryanair thus believes that our assumption that carparking revenues per passenger in 2023 will return to 2019 levels in real terms, is flawed.

Lounges/FastTrack/Platinum

- 9.35 IATA believes that the applied elasticity of 1 is conservative. On the other hand, Ryanair considers it to be reasonable, provided that sufficient CIP uplifts are included.

Commercial Concessions

- 9.36 Ryanair notes that this revenue line includes banking and telephony. Ryanair considers that structural changes over 2001-2019, with a shift from the use of cash and telephony to virtual and mobile technology, makes the calculated elasticity of 0.7

unrealistically depressed to use for a forward projection.⁵² Ryanair considers that it is unreasonable to use an elasticity below 1.

US Preclearance

9.37 IATA asks why we assume that US Preclearance charges will remain constant, and that Dublin Airport will not increase charges, since there is no recourse for airlines if Dublin Airport decides to increase these charges.

Commission Response on Elasticities, Econometrics, and Baselines

9.38 As in 2019, IATA is concerned that, if Dublin Airport has been performing inefficiently in generating revenues for the period over which our elasticity was calculated, this will continue to be built into our forecasts for 2023 to 2026. We accept that our methodology is not designed to identify inefficiencies in historic performance. However, we note that IATA does not provide any specific evidence of historic inefficiency. In considering this point, and more generally, we added a benchmarking analysis in the original 2019 Determination.⁵³ Noting the caveats mentioned in Section 6 of that report, the overall conclusion was that Dublin Airport is not a particular outlier in Commercial Revenue performance, a conclusion supported by Dublin Airport's benchmarking analysis presented at Table 6.2 of its 2022 response. Given that our 2023 baseline is based on 2019 per passenger revenues, this analysis remains relevant for our updated forecasts.

9.39 We agree with IATA that the approach of using elasticities generated from historic performance to predict future performance will miss step-changes relative to historical performance. That is why we apply overlays where there are known or likely step changes compared to historic performance; for instance, UK passengers now being duty-free, or incremental revenues expected to be delivered by CIP projects. We also consider whether there is a specific reason why it would not be reasonable/appropriate to assume a baseline level of growth in line with historic growth, and if so, apply an elasticity of 1.

9.40 However, in most cases, we have not seen evidence to suggest that a continuation of the historic trend does not form a reasonable forecasting baseline assumption around which to make such adjustments. In particular, we do not see evidence that Dublin Airport was becoming relatively more inefficient at generating revenues compared to other airports at the same time that passenger numbers were increasing.

Carparking

9.41 We have considered the reasons provided by Ryanair and IATA as to why carparking yields will remain elevated above 2019 levels and/or continue to grow in line with an elasticity of 1.55. Ryanair does not, in general, provide specific evidence to support these points. Overall, we consider that there are various potential upside risk factors to our forecast (as identified by Ryanair), but also various potential downside factors:

- It is not clear to us that there has been a shift from public to private transport which

⁵² The calculated elasticity used is 0.8, rather than 0.7 as stated by Ryanair.

⁵³ See from paragraph 7.39.

will continue over the period 2023-2026, and that this is likely to lead to an ongoing step change in carparking revenues at Dublin Airport. While possible, we note that there are also risks posed to carparking revenues by efforts to increase the use of public transport, especially bussing.⁵⁴ Ryanair does not, either, provide any persuasive evidence of a likely ongoing shortage in taxis at Dublin Airport and/or a shift in the passenger mix, together with the impact these are likely to have on carparking demand.

- Ryanair's separate suggestion that capacity constraints in 2023 will be lesser than 2019 is not fully consistent with its arguments suggesting an ongoing step increase in demand (especially given that our forecast passenger numbers for 2023 has now increased to almost 32m passengers). Furthermore, if Ryanair is correct, this is likely to put downward pressure on yields per passenger relative to 2019.
- We expect the QuickPark facility, which has been closed since 2020, to reopen, bringing capacity for long-term car parking in the vicinity of the airport close to 2019 levels. We also note the risk of planning related delay impacting the timing of delivery of new carparking capacity.

9.42 The baseline elasticity for carparking was proposed to be set at 1, but we also included CIP uplifts which raises the implied elasticity of the overall target, across 2023 to 2026, to 1.49. We consider that there is a reasonable argument to either use the elasticity of 1.55 with no CIP uplifts, or to continue with our approach of using a unit elasticity, and adding CIP uplifts. We note that the elasticity of 1.55 was already calculated over a period in which incremental carparking space capacity was delivered, especially the T2 short-term car park.

9.43 The approach proposed in the Draft Decision was based on the premise that it is incremental carparking capacity which will increase the overall implied elasticity above 1, i.e. because relatively more passengers are using carparking facilities. A blanket elasticity of 1.55 instead must, given capacity constraints, be driven by yields per passenger above 2019 levels in real terms at least in certain years.

9.44 Government policy sets out an objective for us in relation to airport customers being presented with value. We note that carparking is a relatively discrete service in comparison to retail; that is, increased retail yields per passenger does not necessarily imply reduced value for passengers, whereas increased carparking yields likely does. We agree with Joseph Ryan regarding the sharply higher yields observed in 2022, and from a Government policy perspective, consider that it would preferable for these to return closer to 2019 levels, rather than us building the currently elevated levels into ongoing targets. While we cannot enforce such an outcome on Dublin Airport, we can use a forecasting approach which should enable Dublin Airport to improve the value of its carparking services to customers relative to 2022.

9.45 Thus, overall, we have not been persuaded to change our approach to the carparking forecasts, either in terms of the baseline or the elasticity.

⁵⁴ See for example the Greater Dublin Area Transport Strategy 2022-2042 <https://www.nationaltransport.ie/wp-content/uploads/2021/11/NTA-GDA-Transport-Strategy-2022-42-Exec.-Summary-10.11.12-FA-WEB.pdf>

Lounges/Fast Track/Platinum

- 9.46 For Lounges/Fast Track/Platinum, we did not propose to use our higher calculated elasticity as we think that this rate of growth is unlikely to continue through the regulatory period. This is in line with the approach we took in the original 2019 Determination. We believe that this estimated elasticity is significantly generated by coincidence rather than causation, with Dublin Airport investing in and overhauling these products from 2014, at the same time as rapid growth in passenger traffic materialised. We note that the implied passenger elasticity between 2023-2026, including the incremental CIP uplifts, is now 1.86.
- 9.47 The overhauled versions of these products are now included in our base forecast (and expected to generate an average of c€21m per annum compared to €6m in 2015), but we expect further growth in revenue per passenger to be driven by further investment in these facilities, with revenues otherwise growing in line with passenger traffic growth.

Commercial Concessions

- 9.48 We are not convinced by Ryanair's arguments in relation to the Commercial Concessions elasticity. We note that telephony and banking make up a relatively small proportion of this revenue line, at 2%, and 15% respectively in 2019. Rather than a transition from cash finishing by 2019, there is evidence to suggest that in fact it accelerated subsequently in the last couple of years.⁵⁵ This is also reflected in the Opex forecasts, where CEPA/TA assess that cash handling costs will reduce relative to 2019.
- 9.49 We calculated the elasticity with telephony and banking excluded; it is in fact slightly lower at 0.7, compared to the category elasticity of 0.8. Thus, the Ryanair supposition is not the case and we retain our approach as proposed in the Draft Decision.

Commercial Property

- 9.50 Commercial Property is not driven by passenger numbers. In the Draft Decision, we used Dublin Airport's latest forecast for 2022 property rents (€26.4m) as a baseline. We have reviewed outturn data for 2022 thus far, together with the monthly profile of expenditure compared to 2019. This broadly validates Dublin Airport's estimate. Thus we continue to use this figure as a 2022 baseline, from which we then apply our GDP elasticity.

US Preclearance

- 9.51 Dublin Airport keeps the US Preclearance charge at €8.85 out to 2026 (in real terms) in its forecasts. IATA is correct that Dublin Airport is not prevented from increasing the charge within the period. However, subsequent to the period, if there is a higher US Preclearance charge, this would likely be built into future forecasts. Currently, we have no basis for assuming that Dublin Airport would decide to increase it in real terms, contrary to Dublin Airport's own forecast. Furthermore, such an approach by Dublin Airport might add weight to the argument that the US Preclearance charge should be

⁵⁵ <https://www.ecb.europa.eu/press/key/date/2021/html/ecb.sp210615~05b32c4e55.en.html>

considered an Airport Charge in future determinations. This is a matter we considered in 2019 and intend to keep under review.

- 9.52 Since the Draft Decision, we identified that the financial model is applying the baseline adjustment for US Preclearance at a total passenger level, which is not appropriate in the context of this revenue stream being related to US passengers. We have adjusted the model to now calculate US Preclearance revenues by multiplying the US departing passenger forecast, as outlined in Section 7, by the charge per passenger.

Submission Received on Uplifts/Overlays

Retail

- 9.53 Ryanair believes that our draft retail revenue uplift to account for UK departing passengers now being duty free as opposed to duty paid, at €3.1m per year, is substantially understated. It states that the duty free sector's estimate of the impact would be about €0.90 per departing passenger, whereas our uplift implies an increase of €0.62 per newly-duty-free departing passenger, (i.e. per UK departing passenger). It refers to commentary from Dublin Airport regarding the significant impact this change will have on its revenues. Ryanair also considers that the uplift should increase over the period in line with traffic growth. Ryanair generally supports our other retail uplifts, stating that these must be retained if the associated Capex continues to be allowed for.
- 9.54 IATA also asks us to further explain the retail uplifts, in particular the duty free uplift.

Carparking

- 9.55 Ryanair supports the proposed uplifts for the delivery of new carparking projects, which it believes we should continue to include together with the higher elasticity of 1.55 as discussed above. It believes that we should include an uplift for the car park management system (CIP.20.04.001) project as well.

Commercial Concessions

- 9.56 Ryanair considers that the uplift of €0.8m included in commercial concessions in 2026 is 'derisory' in the context of a €30m investment for the Car Hire Consolidation Centre project (CIP.20.04.002).

Commercial Property

- 9.57 Dublin Airport asks us to include the revenue uplifts for the Drop Off/Pick Up (CIP.20.04.032) and OCTB refurbishment (CIP.20.04.034) projects, together with associated cost allowances.
- 9.58 IATA asks for further information on the reductions in commercial property rent assumed from the North and South Apron displacements. Ryanair does not agree with the reduction in revenues due to facilities which are set to be displaced for south apron capacity projects, because we have allowed for Capital Expenditure to replace these facilities. Ryanair also expresses concerns at the level of expenditure on refurbishing office accommodation without there being an associated substantial revenue benefit.

Lounges/Fast Track/Platinum (Dublin Airport Travel Services)

9.59 Ryanair expects a better return on investment for the level of Capex allowed for these projects.

US Preclearance

9.60 Ryanair is concerned at the level of expenditure on the US Preclearance project (CIP.20.03.030). It states that the revenue is not sufficient to justify the expenditure of €75.4m, particularly as no additional retail/F&B revenue uplift has been included. Ryanair considers that airport users who do not use the US Preclearance facility are being asked to cross-subsidise it, and any shortfalls in revenue reflected in the price cap should fall to users of the facility alone.

Advertising

9.61 Ryanair considers that a €7.9m investment being written off over 5 years, with a revenue uplift of €0.8m in years 3 and 4 implies that the investment is uneconomic and should be either disallowed or the revenue increased to at least €1.65m per annum. Ryanair also considers that our downward adjustment to reflect a revaluation of a particular advertising deal constitutes a double-count with our elasticity of less than 1.

Other

9.62 IATA notes that we are not assuming any uplifts in revenues resulting from sustainability projects, and seeks confirmation on whether these projects will therefore be completed after the regulatory period. Ryanair asserts that there should be revenue uplifts associated with the sustainability projects, if we allow for the associated Capex.

Commission Response on Uplifts/Overlays

Retail

9.63 Ryanair provided us with clarification as to how it estimated the duty free uplift of €0.90 per UK-departing-passenger. We consider the approach to be reasonable in principle but note that, in part, this analysis was based on assumptions derived from other airports which may differ from Dublin Airport, and data which could not be shared with us. We also reviewed Dublin Airport's approach to calculating the impact of Brexit on duty free revenues. Dublin Airport forecast an overall 4 percentage point increase in Gross Margin (GM) for direct retail (from 55% to 59%), and provided us with a breakdown of how it had estimated this. It also provided us with data on outturn GM for 2022 to end October, showing that this assumption is being borne out.

9.64 We applied the four percentage point increase in GM to direct retail outturn for 2019, which at €71m (2019 prices) made up approximately 64% of the total reported net retail revenues in 2019. The increase in GM implies a 7% increase in direct retail, assuming consistent Cost of Goods Sold; that is, if UK-departing-passengers in 2019

had been duty-free, direct net retail would have been just over €5m higher, at €76m.⁵⁶ The remaining 36% of the net retail line (concessions and F&B) are duty-paid sales only, thus are not impacted. An increase of €5m in 2019 equates to approximately €0.98c per UK-departing-passenger, i.e. close to and slightly above the figure estimated by Ryanair; it would be very close if Ryanair had used a more precise figure for UK departing passengers in 2019.

- 9.65 We therefore adopt this methodology into our forecast, replacing the previous flat uplift of €3.1m. We convert it from 2019 prices to February 2022 prices, meaning an increment of €5.4m. We agree with Ryanair that the impact should not be static across the period, but should grow with traffic as per the rest of the retail forecast. We therefore build the impact into the 2023 baseline as an adjustment, meaning that it is scaled according to the difference between 2019 outturn and 2023 forecast passengers, in line with our approach to setting the 2023 baseline as described above. All else equal, this increases our retail forecast relative to the Draft Decision by c€2m in 2023, growing to almost €3m by 2026.
- 9.66 In relation to the other retail uplifts, these relate to allowed CIP projects, where we assess that incremental associated revenues are likely not captured within our elasticity. For certain capacity projects which will deliver additional retail space, such as an increase in the size of the T1 IDL, we consider that the project is likely required to maintain historic elasticities despite increased passenger numbers. Thus, we do not include an uplift. However, a project such as retail refurbishments and new stores (CIP.20.08.001) provides for additional retail units in targeted locations. The project is also intended to enable a continued move from concessionaire to in-house run stores, relative to the historic ratio, which is based on the enhanced margin that Dublin Airport can achieve from a direct operating model. This approach is consistent with the approach we took in the original 2019 Determination.
- 9.67 The business cases provided by Dublin Airport (and included at the CIP consultation in March) form the basis for the calculation of the associated uplifts. In the Draft Decision, we said that we considered some of the associated uplifts were potentially conservative but, in the context of a recalculated higher general elasticity, we consider the overall forecast to be reasonable.

Carparking

- 9.68 We do not include a further uplift for the Carparking Management System project (CIP.20.04.001), as we consider it to be required to maintain historic revenues. This project provides for replacement of car park management equipment (new software, entry/exit terminals, pay stations, barriers, CCTV) in the short term and long-term carparks. We note that the current equipment was installed in 2006 and is End-of -Life. It would not be reasonable to assume that historic revenues will be maintained without periodic investment such as this in the facilities. Separately, we continue to disallow the Drop-Off/Pick Up project as set out in the Appendix. Thus, our approach to the carparking uplifts remains unchanged from the Draft Decision.

⁵⁶ Dublin Airport was unable to provide Cost of Goods Sold data separated between duty free and duty paid.

Commercial Concessions

9.69 Phase 1 of the car hire project is expected to complete in 2025, generating a relatively modest revenue uplift of €0.8m in 2026. The final phase is to be delivered by the end of the regulatory period. This explains the relatively low uplift in the current period. Ultimately, Dublin Airport's business case (as presented to airport users during the CIP consultation) foresees the investment delivering €3.4m per year by the end of the next regulatory period, with passenger traffic in line with a forecast 40mppa. Thus, most of the revenue uplifts are expected in future periods, similar to how investments in Lounges/FastTrack/Platinum in the previous regulatory period have paid off in this one.

Property Rents

9.70 As suggested by Dublin Airport and Ryanair, and in line with the approach now taken by CEPA to Opex for Rent and Rates, we add the uplift of €1.3m per year for the OCTB refurbishment project (CIP.20.04.034) for each year 2024-2026. This is further discussed in the CEPA final report 'rent and rates' section. We note that the positive EBITDA impact of Office Consolidation and Refurbishment project (CIP.20.07.010) is primarily Opex reduction rather than revenue increase, as reflected in the CEPA forecast.

9.71 Other than that, refurbishment of rental property on a rolling basis is required to protect the income stream associated with such property. The Commercial Property Refurbishment project (CIP.20.04.025) enables the airport to refurbish 500-1500 sq. metres of existing commercial property per year till end of regulatory period. A similar project was allowed in the 2014 Determination. Thus, our approach remains in line with 2014/2019 original Determinations. Real step changes in this revenue line are primarily driven by additions/demolitions of property, as reflected in our forecasting approach.

9.72 The North and South Apron capacity projects will lead to a displacement of several buildings which would otherwise continue to generate property rent. While allowances are made for replacement facilities which should ultimately restore the rents, it is likely that there will be an interim phase of reduced property rents as reflected in the Draft Decision. While it is possible that this impact will be lessened if the capacity projects are delayed, conversely, incremental revenues will be lower if revenue generating projects are delayed. We use Dublin Airport's planned CIP delivery timeline consistently for both positive and negative adjustments.

Lounges/Fast Track/Platinum

9.73 Ryanair considers that these uplifts appear low relative to the level of investment. We did not receive any specific comments regarding the uplifts for individual projects from Ryanair. Dublin Airport has presented a positive business case for the projects at the CIP consultation. Again, the timing of certain aspects of the investment (e.g., the second lounge) is at the end of the current period, thus we anticipate the benefits to follow subsequently. We do not see any reason to adjust our proposed approach.

Advertising

- 9.74 In the Draft Decision, we included a downward reduction of €0.75m per year to advertising revenues (in line with the Dublin Airport regulatory proposition) to account for a step change since 2019 due to the expiry and revaluation of a bespoke deal generated by a particular set of circumstances. This related to a historic non-cash value included in the advertising revenue line and not, according to Dublin Airport, the value which could be obtained from paying clients. Dublin Airport supported this position with evidence of the value of the replacement deal, which we note is significantly lower. We have further considered this in the context of Ryanair's submission that this constitutes a double count with our elasticity of less than 1.
- 9.75 We have confirmed with Dublin Airport that there were no other revenues or costs accrued in 2019 in relation to this deal. We consider this to analogous to the duty-free adjustment described above, i.e. a known step-change, between 2019 and 2023, in revenues likely to be accrued. We note that the elasticity does not include the rate of change in revenues caused by this step change, which occurred after 2019.
- 9.76 We note that there were, however, more advertising sites within the scope of the old deal, which partly accounts for the reduced value of the new deal. Assuming that the sites not in the new deal were similarly overvalued within the old deal, we apply a downward baseline adjustment of €0.7m. Similar to the duty free adjustment, this is then scaled according to passenger numbers and the elasticity is applied to it.
- 9.77 The Digital Advertising Infrastructure project referenced by Ryanair (CIP.20.04.004) has a positive business case set out by Dublin Airport during the CIP consultation. Delivery is phased, with the construction starting in 2023 and ending in Q4 2024, thus in the Dublin Airport business case it is expected to continue to generate revenues until 2028. We assign the project is an asset life of 5 years but, as with other commercial projects, the forecast expenditure is phased over the four remaining years of the determination period. We make no changes to this uplift relative to the Draft Decision.

US Preclearance

- 9.78 The US Preclearance facility generates revenues, but also facilitates additional passenger traffic as a capacity project. It is intended to meet anticipated US traffic demand and is supported by Aer Lingus (being required for their strategy in the South Apron hub) and IATA. As set out in Section 7, we forecast that US traffic will exceed the general level of traffic growth, putting downward pressure on the price cap. These passengers will also spend money on other Commercial Revenue lines such as retail and carparking.
- 9.79 While Ryanair does not currently use this facility, carriers who do use the facility are similarly unlikely to use other facilities such as Pier 1 extension which is expected to be mostly be used by Ryanair but also remunerated collectively through the price cap by all users. Ryanair states that it is subsidising US Preclearance but does not provide any evidence to suggest that, within the price cap calculations, the costs of this facility exceed the revenues associated with it. We note that operating the facility is relatively low cost for Dublin Airport, given that it pays for only a certain portion of the CBP

officers and does not pay for the staffing of the TSA screening.

9.80 The question of a separate retail/F&B uplift does not arise, because the new US Preclearance facility is not expected to be delivered in this regulatory period.

Other

9.81 This category relates to a number of smaller revenue lines, including taxi permits, FEGP revenues, and a range of small miscellaneous sources of revenue. As in 2019, we did not find a statistically significant driver; in particular it does not appear to be driven either by passenger numbers or by GDP. In the Draft Decision, we used the Dublin Airport forecast, noting that we would consider outturn performance against this forecast and/or the potential for increases due to more FEGP units and/or vehicle chargepoints. Thus, our Draft Decision forecast showed this revenue line increasing from €3.6m this year to €4.2m in 2026.

9.82 We have reviewed outturn performance to the end of September this year and note that:

- The 2019 figure in the Dublin Airport regulatory proposition was not correct; the outturn was actually €4.6m rather than €4.2m.
- The Dublin Airport forecast for this year is understated. By September this year, the outturn is already at €4.3m, higher than the original full-year estimate.

9.83 Applying the monthly profile for 2019 would give a forecast for the remainder of this year of €5.6m. We note that a significant driver of the increase relative to 2019 is related to FEGP, i.e. some of the incremental revenues are already included in the 2022 figure.

9.84 We acknowledge that there is the potential for Dublin Airport to earn some further increases in net revenues (i.e. net of the cost of incremental electricity)⁵⁷ related to further FEGP installations and/or vehicle charging installations. However, there remains uncertainty as to the business model for this infrastructure, and there is a separate question as to whether these should be the subject of ATI fee applications, in which case Dublin Airport would be de-risked in relation to charges for them. In that case, as with previous ATI fees, we would expect to reconcile the approved ATI fee with relevant building block forecasts established in the prevailing Airport Charges determination.

9.85 Thus we have decided to use a baseline estimate of €5.6m per year, and hold this flat in real terms across the period 2023-2026, i.e. we apply an elasticity of zero, in line with the original 2019 Determination.

Rolling Incentives

9.86 Ryanair disagrees with the rolling scheme incentives, as it considers them unnecessary. It believes that the Capital Expenditure entering the RAB and being remunerated provides sufficient incentive to deliver projects, and as such there is no need for rolling

⁵⁷ CEPA/TA, in the Opex forecast, do not include incremental Utilities costs for these projects.

schemes.

- 9.87 IATA asserts that a proper calibration of rolling incentive schemes is needed to ensure that actual outperformance, as opposed to outperformance resulting from a conservative forecast, is remunerated. In relation to retail and carparking, IATA asks whether, if our forecasts are conservative, it is appropriate to apply rolling scheme targets.
- 9.88 Dublin Airport supports the reintroduction of rolling schemes. It does not support the proposed cap of 10% on outperformance subject to carry-forward, because the rolling scheme would apply to more material initiatives above the 10% threshold.

Commission Response

- 9.89 We have not been persuaded to change our approach to the rolling schemes as proposed in the Draft Decision. Thus, we reintroduce them, but apply a 10% cap to per-passenger outperformance in relation to each of the four categories.
- 9.90 As set out in the Draft Decision, we consider that the schemes have previously incentivised the airport to act commercially, avoiding a potential perverse incentive created by the timing of the regulatory cycle. The continued usefulness of rolling schemes was questioned during 2019, but the schemes were ultimately deemed to have incentivised Dublin Airport to act commercially across the 2014-2019 period rather than postpone revenue generating initiatives to 2020. We consider that unbalanced incentives across the period could lead to decision making which is ultimately sub-optimal for all stakeholders. In the original 2019 Determination, we assessed that rolling schemes incentivised Dublin Airport to undertake initiatives such as the US Preclearance Lounge (51st and Green) and T2 Multistorey Car Park, among other projects.
- 9.91 We consider that IATA's submission relates more to the calibration of the target itself rather than the rolling scheme mechanism. It is difficult to distinguish true 'outperformance', from a forecast being shown to be conservative. We are looking to set a reasonable target which incentivises Dublin Airport to further develop its commercial offerings but does not do so in a way which is unachievable or undesirable. Because of risk allocation, there is then an incentive to outperform the target, which is equalised across years by the rolling scheme mechanism.
- 9.92 We therefore include rolling scheme incentives for 2023-2026 for four categories which we consider are most likely to be at risk of such an outcome. These are the same categories as the original 2019 Determination, namely Retail, Carparking, Lounges/FastTrack/Platinum Services, and Advertising. We have decided that, in any one year and for each category, the total outperformance subject to carry-forward would be capped at 10% of the target, due to relative uncertainty over the scope for significantly outperforming these targets.
- 9.93 We retain the 10% cap to guard against a potential disproportionate impact on the interests of future users, relative to the benefit of the rolling scheme, in the event that upside risk materialises in a way which we do not currently foresee. This risk outweighs the potential dulling of the strength of the rolling scheme relative to an unbounded

scheme, which will only be relevant if Dublin Airport is already substantially outperforming the category forecast overall, which Dublin Airport believes to be very unlikely, based on its submissions. It does not exclude or apply to individual initiatives.

- 9.94 Regarding the suggestion that Capital Expenditure entering RAB would, alone, provide sufficient incentive, we note that this would also be the case if the project is delivered early in the subsequent regulatory period. The RAB reconciliation also occurs ahead of the subsequent period. The incentive suggested by Ryanair would, in isolation, potentially be an incentive to spend inefficiently by increasing expenditure without increasing Commercial Revenues (at least in the short term). This, in our view, adds weight to the argument for the use of rolling incentives, rather than weakens it as suggested by Ryanair.

Table 9.4: Per Passenger Commercial Revenue Targets for Rolling Schemes

Revenue Category, €	2024	2025
Retail Revenue	3.79	4.01
Car Parking Revenue	1.72	1.77
Lounges, FastTrack & Platinum Services	0.62	0.63
Advertising	0.18	0.18

Source: CAR

ATI Fees

- 9.95 Ryanair disagrees with the increase in per passenger fees and seeks further explanation.
- 9.96 IATA supports capping ATI fees.

Commission Response

- 9.97 The ATI fee mechanism has been in place since 2009. It de-risks Dublin Airport in relation to ATI fee revenue, because these fees must separately be approved by the Commission, but the revenues also come within the single till as property rent.⁵⁸ The below is an estimate against which to compare outturns at the next determination for the purposes of making the de-risking adjustment, based on approved fees and/or Dublin Airport's view of expected future fees. It does not pre-empt or pre-determine our decision in relation to potential future ATI fee applications, which would be subject to consultation.

Table 9.5: ATI Fee Forecasts

	2019	2020	2021	2022f	2023f	2024f	2025f	2026f
ATI Outturn / Forecast, (€m)	3.5	2.6	2.2	3.7	3.8	4.1	4.4	4.6
Per passenger, (€)	0.11	0.35	0.26	0.13	0.12	0.12	0.13	0.13

Source: CAR, Dublin Airport

- 9.98 As in previous determinations, we also include the adjustments relating to

⁵⁸ <https://www.aviationreg.ie/economic-regulation/access-to-installations.220.html>

undercollection on ATI fees over 2020-2022, within the 2023 price cap adjustments.

10. Cost of Capital

Summary

Table 10.1: Pre-tax Weighted Average Cost of Capital (WACC), Real

	2022 Final Decision	2022 Draft Decision	Difference to 2022 Final	2019 Final Determination	Difference to 2022 Final
Pre-tax WACC (at BBB+)	4.35%	4.22%	13 bps ↗	4.22%	13 bps ↗
Pre-tax WACC (at BBB)	4.37%	4.24%	13 bps ↗	4.25%	12 bps ↗

Source: Swiss Economics 2022 Final Report

- 10.1 The Cost of Capital is the return investors in Dublin Airport require to reimburse them for the risk they are assuming. We estimate the efficient level of the real Cost of Capital for Dublin Airport, based on updated data until the end of October 2022, at 4.35% (assuming, as in 2019, a notional credit rating at BBB+). This final rate is 13 basis points higher than the 4.22% proposed in the Draft Decision (which was based on data until the end of 2021) and similarly 13 basis points higher than the rate set in the 2019 Final Determination.
- 10.2 We again commissioned Swiss Economics to assess the efficient Cost of Capital for Dublin Airport for the 2023-2026 period. Most aspects of the methodology remain unchanged compared to the 2022 Draft Decision and the 2019 Determination. Specifically, we continue to estimate the return on capital using a Weighted Average Cost of Capital (WACC) approach. This methodology separately estimates the cost of equity and the cost of debt and assigns them each a weighting using the estimated efficient level of gearing. The cost of equity is calculated using the Capital Asset Pricing Model (CAPM). This methodology was used in all previous determinations and is recommended by the Thessaloniki Forum. The cost of debt is estimated using Dublin Airport's actual and forecast future debt obligations and a market rate for corporate bonds with comparable risk.
- 10.3 While we continue using the overarching methodology based on the weighted average Cost of Capital framework, we have sought to take account of the most recent information regarding market developments and have conducted an extensive review of stakeholder responses, which resulted in several methodological adjustments.
- 10.4 Compared to the Draft Decision, amendments were made to the calculation of the risk-free rate, the determination of the Asset Beta, and the cost of debt:
- Risk-Free Rate: Use of a 6-months-averaging period instead of the previous use of 1-year, 2-year, and 5-year averages of Irish and German government bonds to reflect recent bond market developments.
 - Asset Beta: Removal of Sydney Airport (SYD), Aeroporti di Roma (AdR), London Gatwick Airport (LGW), London Heathrow Airport (HAL), and TAV Airports Holding (TAV) from the comparator sample for the reasons of delisting (SYD), outdated regulatory decisions (AdR, LGW), and concerns of double counting stock price movements of certain related airport operators (HAL, TAV). Consistent with the methodology of the 2019 Determination, we use 1-year, 2-year, and 5-year Betas. However, we continue to exclude all data from 2020,

based on the analysis of Swiss Economics set out in its report.

- Cost of Debt: Inclusion of an issuance cost uptick on the cost of debt, and use of a 6-months-averaging period rather than the previous use of 1-year, 2-year, and 5-year averages for the determination of the cost of new debt analogous to the estimation of the risk-free rate.
- 10.5 Compared to the Draft Decision, we observe an increase in the cost of equity, primarily driven by an increase in Dublin Airport's Asset Beta. This is somewhat offset by a decrease in the real cost of debt, driven by increased inflation expectations in the market.
- 10.6 We use a real WACC and update the RAB for inflation, rather than holding the RAB at historical cost and applying a nominal WACC. Thus, with forecasts for higher inflation compared to when the original determination was made in 2019, and again since we published our Draft Decision, we expect that nominal returns for Dublin Airport generated by this WACC over the period 2023-2026 will increase significantly relative to 2019. This is reflected in Section 12 which discusses financeability.
- 10.7 To combat increasing inflation, the European Central Bank has raised interest rates several times from July 2022 onwards. While the interest rate hikes translated into significant increases of nominal corporate bond yields, on a real basis the effect was dampened due to offsetting inflation expectations. For embedded debt with fixed nominal interest payments, increasing inflation leads to a decrease in interest in real terms.
- 10.8 A range of sensitivity analyses of the WACC with respect to changes in its various parameters were conducted. These include the following:
- Assuming a BBB notional credit rating for Dublin Airport instead of BBB+. This increases the WACC from 4.35% to 4.37%.
 - Assuming a tax rate of 15% instead of 12.5%. This increases the WACC from 4.35% to 4.41%.
 - Assuming a notional gearing rate of 60% instead of 50%, which results in a WACC of 4.30%, and assuming a notional gearing rate of 40%, resulting in a WACC of 4.40%.
- 10.9 This section summarises at a high level the calculation of the individual WACC components, the submissions received, our decision and the changes from the Draft Decision, and a comparison with the Cost of Capital estimates submitted by Dublin Airport and its advisors, NERA. The full details of the analysis of the Cost of Capital and technical responses to stakeholders are in the Swiss Economics 2022 Final Report, published alongside this document.

Submissions Received on the Draft WACC

- 10.10 We received submissions on the proposed WACC from a range of stakeholders, including Dublin Airport, airport users, industry associations, and interested individuals.

10.11 The responses submitted by stakeholders concern a range of aspects of the methodology, with a general emphasis on risk and inflation. For example, Dublin Airport expresses a concern that the methodology to determine the Asset Beta does not capture the full extent of risk that the airport is exposed to and evidence of its vulnerability to events such as pandemics. Airlines, on the other hand, are more concerned that rising inflation may not be properly reflected in the estimates of real interest rates. Overall, Dublin Airport and ACI consider the proposed WACC to be understated, whereas IATA, Ryanair, and Aer Lingus consider it to be overstated.

Commission Response

10.12 Swiss Economics has considered and assessed the merits of submissions made in response to its draft proposal for the WACC components, and made adjustments where persuasive evidence or arguments were made. We follow Swiss Economics' advice in relation to the WACC for the interim review regulatory period 2023-2026. A summary of the submissions received for each WACC component, and any change implemented compared to the Draft Decision, is given below.

10.13 As a general submission, ACI Europe claims that the unchanged WACC in the Draft Decision compared to the 2019 Determination is not credible. According to ACI Europe, airports risks have increased which should be reflected in a higher WACC.

10.14 First, compared to the Draft Decision, the WACC in the Final Determination is set at 4.35% and hence is 13 basis points higher than the 4.22% set in the Draft Decision and in the 2019 Determination. Second, we note that the WACC components are set in real terms. While Beta risk and nominal interest rates increased significantly compared to the original 2019 Determination, so too have inflation expectations. The observed changes in nominal terms are hence cancelled out when transformed to real values. As noted above, with higher inflation, a given real WACC will generate substantially higher nominal returns for Dublin Airport over the 2023-2026 regulatory period.

WACC Components

Table 10.2: WACC Components (at BBB+)

	2022 Final Decision		2022 Draft Decision		Difference
	Range	Estimate	Range	Estimate	
Gearing	45% - 55%	50%	45% - 55%	50%	-
Tax rate	-	12.5%	-	12.50%	-
Risk-free rate	-0.85% - -0.06%	-0.45%	-1.59% - -0.54%	-1.07%	61 bps ↗
Total market return	5.70% - 6.81%	6.25%	5.70% - 6.81%	6.25%	-
Equity risk premium	6.15% - 7.26%	6.71%	6.77% - 7.87%	7.32%	61 bps ↘
Asset Beta	0.59 – 0.61	0.60	0.52 – 0.59	0.56	0.04 ↗
Equity Beta	1.11 – 1.15	1.13	0.98 – 1.12	1.05	0.08 ↗
Cost of Equity	5.99% - 8.29%	7.13%	5.55% - 7.65%	6.60%	53 bps ↗
Cost of embedded debt	-1.19% - -1.13%	-1.16%	-0.41% - -0.33%	-0.37%	79 bps ↘
Cost of new debt	1.20% - 1.39%	1.29%	-0.14% - 0.83%	0.35%	95 bps ↗
Issuance cost uptick	-	0.05%	-	0.00%	5 bps ↗
Share embedded/new debt	-	73%	-	62%	11 bps ↗
Cost of Debt (at BBB+)	-0.50% - -0.40%	-0.45%	-0.31% - 0.11%	-0.10%	35 bps ↘
Aiming up	-	50 bps	-	50 bps	-
Pre-tax WACC	4.04% - 4.54%	4.35%	3.85% - 4.49%	4.22%	13 bps ↗

Source: Swiss Economics 2022 Final Report

10.15 Table 10.2 summarises our ranges for each component and compares them with the values of the 2022 Draft Decision. To arrive at the pre-tax WACC of 4.35%, the midpoint estimates for each component is used and an aiming up allowance of 50 basis points is added to the results.

Cost of Equity

10.16 We estimate the cost of equity at 7.13%. This is 53 basis points higher than the 6.60% cost of equity estimated in the Draft Decision. The components of the cost of equity changed as follows:

- The Equity Beta increased from 1.05 to 1.13. This is the main driver of the change in the cost of equity compared to the Draft Decision. The increase in Equity Beta reflects a general trend observed in airport Asset Betas.
- The risk-free rate increased from -1.07% to -0.45% by 61 basis points. The impact of this change on the cost of equity is small.
- The equity risk premium decreased in line with the risk-free rate from 7.32% to 6.71% by 61 basis points.

10.17 We discuss our decision on each of the individual components below.

Risk-Free Rate

10.18 We allow a risk-free rate of -0.45%. This value is based on the following observations:

- Historic averages of Irish and German government bond yields suggest a range from approximately -0.99% to -0.39%.
- Forward rates indicate that the market expects an increase in Euro area government bond yields of 14 basis points to 33 basis points over the 2023-2026 period.

10.19 Compared to the Draft Decision, we amend the methodology by using a shorter averaging period of 6 months to estimate the upper and lower bound of the risk-free rate. In the Draft Decision, by contrast, we took 1-year, 2-year and 5-year averages of Irish and German government bonds and used the lowest estimate as a lower bound and the highest estimate as an upper bound.

10.20 The main reason for this change in methodology is an observed transition to a higher inflationary period, which raises doubts over the predictive power of long-run historical averages.

10.21 The recent increases in the real bond yields, as well as our amended approach, lead to an overall increase in the RFR by 61 basis points compared to the Draft Decision.

10.22 As is the case for all WACC components, the level of the risk-free rate is expressed in real terms. The conversion from nominal to real rates is done using the Fisher Equation.⁵⁹

10.23 Submissions on the risk-free rate were received from the following stakeholders:

- Aer Lingus expresses criticism of the predictive power of forward curves. We do not agree and deem the predictive power of spot rates to be lower.
- Dublin Airport considers it more appropriate to rely exclusively on Irish bond yields. We consider that for investors in the Euro area a broader view is warranted, as capital mobility in the Euro area is well established.
- Aer Lingus is of the opinion that uplifts from inflation indexation are higher than the inflation assumptions used to deflate nominal estimates of returns. IATA also states that inflation is currently higher than the long-term inflation expectations used in the Draft Decision analysis. However, for the conversion of nominal to real yields, a long-run estimate of inflation in line with the time to maturity of the underlying bonds (i.e. 10 years) should be used. Professional forecasters as well as financial markets expect that the current very high levels inflation will subside over the coming years (e.g. driven by tightened ECB monetary policy) and may conversely fall below our estimate of long-run inflation expectations.

Beta

10.24 We use an Equity Beta for Dublin Airport of 1.13. Compared to the Draft Decision

⁵⁹ Fisher, Irving (1907). *The Rate of Interest*. Mansfield Centre, CT: Martino Publishing (2009); MacMillan (1907)

Equity Beta of 1.05, this represents an increase of 0.08.

10.25 Underlying the Equity Beta is a point estimate of the Asset Beta of 0.60 with a range of 0.59 to 0.61. The point estimate is correspondingly higher than the Asset Beta of 0.56 used for the Draft Decision.

10.26 Consistent with the Draft Decision, the Equity Beta reflects the impact of the notional gearing level of 50% and tax rate of 12.5% on Dublin Airport's Asset Beta as indicated by the Hamada formula.⁶⁰

10.27 The methodology for estimating Dublin Airport's Asset Beta is generally in line with the methodology used in the Draft Decision (and the original 2019 Determination). Compared to the Draft Decision, the following amendments were made:

- We drop Aeroporti di Roma (AdR) and London Gatwick (LGW) as comparators in line with the submission from Dublin Airport. The publicly available regulatory decisions on their respective Asset Betas are becoming increasingly outdated and may risk that more recent tendencies in market perceptions of airport risk are not adequately reflected.
- We also drop London Heathrow Airport (HAL) as the remaining comparator based on regulatory precedent. HAL's pre-pandemic Asset Beta is based on the empirical analysis of stock price movements for Fraport AG Frankfurt Airport Services Worldwide (FRA), Aéroports de Paris (ADP), and Aeropuertos Españoles y Navegación Aérea (AENA), all of which are airports that we already consider separately. TAV Airports Holding (TAV) was excluded for similar reasons.
- Sydney Airport (SYD) was excluded from the comparator sample following the stock's delisting in February 2022. This is partly in line with the submission by Ryanair, which advocates calculating Dublin Airport's Asset Beta solely on European comparator airports.
- We continue to estimate empirical Asset Betas of peer airports using non-pandemic data only (i.e. excluding 2020). However, instead of using a combination of a post-pandemic 1-year Beta and pre-pandemic 1-year, 2-year, and 5-year Betas as in the Draft Decision, we change back to 1-year, 2-year, and 5-year Betas with the most recent available data consistent with our 2019 Final Report.

10.28 The stakeholder submissions received on the Beta estimation are predominantly related to the risk from Covid-19, the selection and weighting of comparator airports, and the methodology and data quality.

10.29 Submissions regarding the risk related to Covid-19 and other future catastrophic events were received from the following stakeholders:

- Dublin Airport believes the exclusion of 2020 data leads to an underestimation of Dublin Airport's Beta risk over the 2023-2026 period and argue for a Covid-uptick. We disagree for two main reasons, based on Swiss Economics analysis set

⁶⁰ Hamada, R.S. (1972). The effect of the firm's capital structure on the systematic risk of common stocks. *The Journal of Finance*, 27(2): 435-452.

out in its report. First, we find that markets' assessments of the impact of future catastrophic events on airports are likely to be much less negative than it has been for Covid-19. We expect that markets have updated their beliefs on factors such as the level of airport cost-fixity and whether and how determined governments and regulators are ready to step in to protect airports during a crisis. Second, among a large range of remedial efforts by the relevant authorities, Swiss Economics assesses that our intervention has been among the most decisive. We would be similarly enabled to again amend the price control in the event of another similar incident over 2023-2026. Both reasons indicate that 2020 data have little relevance for Dublin Airport's future risk exposure and should not be included in the estimation of Asset Betas. Similarly, we now have doubts on the predictive power of older data on bond yields and exclude all but the last 6 months of data on corporate bond yields.

- IATA and Ryanair on the other hand believe that our approach did not go far enough and suggest to also exclude 2021 data from the analysis. While we acknowledge that there may be a risk of overestimating Dublin Airport's Asset Beta by keeping 2021 data in our empirical analysis, we find that financial markets' reactions to outbreaks of new Covid-19 variants (e.g. the Omicron outbreak in November/December 2021) were much more in line with the overall market and consistent with historically observed airport Beta risk. As such, we believe it would be disproportionate to ignore more recent data which could contain valuable information on the development of markets' risk perception of airports that are not of a temporary nature.
- Finally, Aer Lingus broadly supports our methodology to estimate the Asset Beta. For instance, Aer Lingus supports excluding the peak of the pandemic from the calculation of comparator Betas.

10.30 Submissions regarding the selection and weighting of comparator airports were received from the following stakeholders:

- Dublin Airport argues that the primary criterion in the risk assessment should be whether the peer airport is regulated under a multi-annual incentive-based regime. Other criteria, such as the composition of demand, is secondary. We disagree since, in practice, there are crucial differences even among regulatory models which are apparently similar. These differences make the choice of "perfect comparators" challenging. Besides the design of economic regulation, there is also a range of factors related to the structure of demand and business risks that affect an airport's Beta risk, as demonstrated by Swiss Economics final report.
- Dublin Airport considers that the choice of the number of flights and passengers to estimate demand volume risks is arbitrary, and that a better predictor of its volatility would have been the mix of flag vs low-cost carriers, or the mix of business vs leisure passengers. We rely on the number of passengers and the number of flights because these are good proxy variables for airport size and for reasons of data availability. More granular data, such as the mix of flag vs low-cost carriers, or the mix of business vs leisure passengers are not reported by all airports.

- Dublin Airport further argues that the main reasons we do not rely exclusively on AENA and ADP as comparator airports are primarily their greater size and organisation as a portfolio of airports. According to Dublin Airport, 80% of revenues for ADP and 90% of revenues for AENA are generated from their principal domestic hub which makes them comparable to Dublin Airport. We do not agree for two reasons. First, as stated above, the reason for not focusing exclusively on AENA and ADP is not limited to their size and portfolio structure, but to a range of other important features reducing their comparability with Dublin Airport. Second, the revenue shares of AENA and ADP stated by Dublin Airport do not refer to Madrid-Barajas and Paris Charles de Gaulle, both of which account for only 20% of their group's revenue. Instead, the numbers reported reflect the revenue shares of the entire domestic networks of AENA and ADP. Thus, the majority of ADP's and AENA's risk is driven by smaller, more geographically diverse airports that bear little resemblance to Dublin Airport.
- NERA argue that our approach to keeping all comparator airports in the sample and assigning them weights should be replaced with focusing on a smaller sample that is best comparable to Dublin Airport. We disagree since, apart from the difficulties of determining a small sample that is "best" comparable to Dublin Airport, our approach also avoids systematic over or underestimation of risks and minimises estimation errors due to random noise. Also, using a weighted average of a relatively large sample is a central factor that allows for regulatory consistency over time. Larger samples decrease the risk of random noise or irrelevant comparator airport characteristics biasing the Beta estimate. In addition, our approach means that the sample selection process does not have to be repeated from scratch at every determination, leading to improved regulatory predictability.
- Ryanair advocates using only European airports as comparators and argue that the late opening of borders for international travel following Covid-19 in Australia and New Zealand renders SYD and Auckland (AIA) as comparators unreliable. While it is true that Australian and New Zealand borders were closed more thoroughly to international travellers than other borders, a major part of this period coincides with 2020, which we do not consider in our estimation of Asset Betas. However, we drop SYD as comparator due to its delisting in February 2022.

10.31 Submissions regarding the methodology and data quality were received from the following stakeholders:

- Dublin Airport argues with regards to Copenhagen Airports (KBHL) and AIA that the respective stock market data is unreliable due to a low free float share (KBHL) and the poorly diversified New Zealand's Exchange (NZX) with AIA constituting a high share of the total market value. In our view, the fraction of KBHL's shares that is listed does not impede the accuracy of the risk signals implied in their returns. As the empirical analysis by Swiss Economics in their 2022 Final Report shows in detail by applying a Dimson adjustment for infrequent trading, there is no reason to doubt that the Copenhagen Stock Exchange is a liquid and efficient marketplace. AIA's weight in NZX is 6% and hence still far from being dominant, not warranting an adjustment which would necessarily introduce additional

uncertainty in the validity of the Beta estimate.

- Dublin Airport also argues for the exclusion of LGW and AdR Asset Betas since the regulatory precedent underlying these Asset Betas is becoming increasingly outdated. We accept Dublin Airport's argument on this point and drop AdR and LGW as comparators.

Equity Risk Premium

10.32 We allow an equity risk premium of 6.71%, which is 61 basis points lower than Draft Decision's value of 7.32%.

10.33 We have not changed the methodology from the Draft Decision, and the original 2019 Determination, for the estimation of the equity risk premium. It is derived as the difference between the total market return estimate of 6.25% and the risk-free rate of -0.45%.

10.34 We combine backward-looking evidence using long-term historic stock market returns from Dimson Marsh and Staunton dataset⁶¹ and forward-looking estimate using a dividend discount model to inform the level of the total market return estimate.

10.35 The decrease of the equity risk premium by 61 basis points compared to the Draft Decision is driven exclusively by the increase of the risk-free rate from -1.07% to -0.45%; that is, the total market return has stayed the same.

10.36 Key submissions on the equity risk premium were received from the following stakeholders:

- IATA and Aer Lingus argue that the use of the total market return (TMR) approach, whereby the ERP is estimated by subtracting the RFR from the TMR, should be reconsidered. They note that this is not the approach applied in continental Europe where the ERP approach (i.e. separate calculation of the ERP) is used more widely. Given the strong theoretical and empirical evidence set out by Swiss Economics showing that the ERP and the RFR systematically move in opposite directions, we continue to believe that the TMR approach is the right approach to estimate the ERP.
- While NERA agrees with using Blume's method, NERA states that, considering equity market evidence, holding periods of 1 to 5 years rather than 10 years should be used. We disagree with NERA's suggestion, since a 10-year holding period allows for consistency across WACC elements, as we use a similar investment horizon for estimating the RFR.
- NERA also argues for the use of Irish and World TMR instead of Irish and European TMR. We believe that a European equity portfolio is likely to better represent an Irish investors' investment universe than a world equity portfolio. A worldwide portfolio contains equity from countries with only negligible relevance to Irish investors.
- NERA argues against the use of our dividend discount model (DDM) due to

⁶¹ See Dimson, E., Marsh, P. and Staunton, M. (DMS) (2022). Credit Suisse Global Investment Returns Yearbook 2022.

unrealistic assumptions. We continue to use a DDM based on empirical evidence showing that more complex models have comparable explanatory power relative to the model used in our analysis.

Cost of Debt

10.37 We estimate the real cost of debt at -0.45%. This is 35 basis points lower than the -0.10% cost of debt estimated in the Draft Decision. The components of the cost of debt change as follows:

- The cost of embedded debt decreases by 79 basis points, from -0.37% to -1.16%. This is the main driver of the decrease in the cost of debt. A key reason for the decrease in the cost of embedded debt is the increase in inflation expectations over the past several months, which has reduced the level of real interest rates on Dublin Airport's embedded debt.
- The cost of new debt increases from 0.35% to 1.29% by 95 basis points. This exerts upward pressure on the cost of debt but not enough to compensate for the decrease in the cost of embedded debt. A key reason for the increase in the cost of new debt is the increase in nominal corporate bond yields over the past months which has slightly exceeded the rise in inflation expectations, leading to an increase in Dublin Airport's real interest rates on new debt.
- An issuance cost uptick of 5 basis points is added to the cost of debt.
- The share of embedded debt in total debt increases from 62% to 73% by 11 basis points, reflecting our updated forecast on the expected debt structure of Dublin Airport.

10.38 Key submissions on cost of debt were received from the following stakeholders:

- Dublin Airport states that we failed to include issuance cost in our determination of the cost of debt. Based on our conclusion that some of these costs are not included in any other allowances (e.g. as part of Opex or in the RAB), we add an issuance cost uptick of 5 basis points to the cost of debt in line with daa's actual level of expenses related to raising debt.
- Dublin Airport notes that the forward rate adjustment for the cost of new debt should be based on Irish government bonds. We disagree, since Dublin Airport raises its debt in European markets. Our calculations show that the use of Irish forward rates has a relatively small impact on the overall WACC.
- Both IATA and Ryanair disagree with us using a longer time to maturity for the cost of new debt. IATA considers that there was no evidence given as to why 10+ year maturities should be more efficient than 7-year to 10-year maturities. We note that the change to a longer time horizon in the cost of new debt is due to continued evidence that Dublin Airport's actual debt tenor at issuance is closer to 15 years than 10 years. We consider that the use of bond yields with remaining time to maturity closer to Dublin Airport's actual debt tenor serves as a superior proxy for the estimation of its cost of new debt.

10.39 We discuss our results and decision on each component below.

Cost of Embedded Debt

10.40 The cost of embedded debt is calculated based on the cost of current cost of existing debt and a forecast of how existing debt agreements are drawn down over the 2023-2026 period. We allow a real cost of embedded debt of between -1.13% and -1.19% with a point estimate of -1.16%. Compared to the Draft Decision point estimate of -0.37%, this corresponds to a decrease of 79 basis points. The main reason for this decrease is higher expected inflation rates compared to 2021. We do not amend the methodology from the Draft Decision.

Cost of New Debt

10.41 For the Draft Decision, the methodology for estimating Dublin Airport's cost of new debt was amended to reflect the actual average maturity of debt at issuance more accurately. Given continued evidence that the average time to maturity at issuance of Dublin Airport's debt is approximately 15 years, we maintain the notional lender investment horizon of 15 years for the calculation of the cost of new debt in the Final Determination. Thus, we retain the Draft Decision methodology in this respect.

10.42 This means that we focus entirely on bond yields of an index for corporate (non-financial) bonds with a remaining maturity of more than 10 years and a BBB investment grade rating as a benchmark. To transform this evidence to BBB+, we also consider yields from a A-rated non-financial corporate bond index, using the same methodology as in the Draft Decision.

10.43 As pointed out above, a transition to a higher inflationary period can be observed, which raises doubts over the predictive power of long-run historical averages. This is also true for corporate bonds. Thus, as set out by Swiss Economics, we deem it reasonable to reduce the averaging period for the estimation of the cost of new debt to 6 months instead of relying on 1-, 2- and 5-year averages.

10.44 Based on the amended methodology, the allowed real cost of new debt ranges between 1.20% and 1.39% with a point estimate of 1.29%. Compared with the allowed real cost of new debt in the Draft Decision of 0.35%, this equates to an increase of 95 basis points.

Issuance Costs

10.45 In the Draft Decision we used a notional issuance cost uptick of 10 basis points applied solely to the cost of new debt estimate. Since then, Dublin Airport provided us a list of issuance expenses that were incurred on embedded debt, enabling us to estimate a more informed issuance cost uptick. This is applied to the cost of debt, since both embedded and new debt entail costs at issuance.

10.46 The calculation of the uptick is based on the actual issuance cost incurred on embedded debt, as well as the average of forecast embedded debt of the coming regulatory period 2023-2026. The issuance cost uptick was then calculated by dividing the total annual issuance cost write-off with the average forecasted embedded debt capital. This leads to an issuance cost uptick to the cost of debt of 5 basis points.

Share of Embedded Debt

10.47 In the Draft Decision, we used the same weighting between the cost of embedded debt and cost of new debt as in the original 2019 Determination. Hence, a share of new debt of 38% and a share of embedded debt of 62% was assumed. Reflecting updated information on the debt structure of Dublin Airport the share of new debt has been amended to 27% and the share of embedded debt to 73%. This is close to the weighting estimated by NERA in its advice for Dublin Airport.

Gearing

10.48 The weighting of the cost of debt and cost of equity is based on a notional gearing of 50%. The assumption on the efficient capital structure remains unchanged compared to the Draft Decision and the 2019 Determination.

10.49 Gearing remains unchanged, in the interests of regulatory consistency and since we are not aware of any compelling reasons to update the methodology for determining Dublin Airport's notional gearing compared to previous determinations.

10.50 Key submissions on gearing were received from the following stakeholders:

- Aer Lingus notes that our methodology implicitly assumes that marginal investments for Dublin Airport are almost entirely funded by debt. We note that the WACC feeds into the price cap formula as a multiplicative term with the total regulated asset base (RAB). It must thus reflect average capital costs rather than marginal capital costs.
- Ryanair argues that the actual gearing of Dublin Airport is higher than 50%, whereas Aer Lingus notes that the notional gearing assumption of 50% is higher than the (actual) gearing of the most listed airports. Our approach with regards to setting a gearing rate is a notional approach. Rather than reflecting Dublin Airport's actual gearing, the notional capital structure underlying the regulatory WACC should reflect a hypothetical gearing rate, representing the capital structure that an efficient airport operator would choose.

Aiming Up

10.51 In line with the approach taken in the Draft Decision and the 2019 Determination, the pre-tax WACC includes an aiming up allowance of 50 basis points.

10.52 The reasoning behind applying the aiming up component remains unchanged compared to the Draft Decision and the original 2019 Determination:

- Risk of measurement errors in the WACC components.
- Asymmetric economic effects of underinvestment relative to overinvestment, since underinvestment is likely to have asymmetric dynamic effects on welfare.
- No implicit aiming up is included in other WACC components.

10.53 Key submissions on aiming up were received from the following stakeholders:

- IATA argues that measurement errors can be positive or negative, and that it is not clear why the regulated company should be shielded from potential negative errors but be allowed to benefit from potential positive ones. While it is true that measurement errors can be positive or negative, we consider that the reasoning behind the use of an aiming up is that the **consequences** of positive and negative measurement errors are asymmetric.
- Ryanair does not agree with the position that the effects of under-investment, relative to over-investment, are asymmetric. Given the nature and scale of the investment programme, and the status of Dublin Airport within Ireland, we remain of the view that underinvestment would have longer lasting consequences for the Irish air travel industry and the Irish economy in general than possible overinvestments. Further detail on this is set out by Swiss Economics.
- Aer Lingus states that a government-owned company does not require an aiming up allowance. While it may be plausible that the risk of underinvestment tends to be reduced for a public entity, following goals other than pure profit orientation, we are not aware of any evidence to support this claim. Allowing for an aiming up component is in line with a prudent approach to regulation. We also note that reducing or removing the aiming up allowance would lead to an increased requirement for prefunding and/or accelerated depreciation, as set out in Section 12.
- Aer Lingus is of the opinion that our methodology already overestimates individual components of the WACC. We do not agree, since our methodology follows best practice regarding the estimation of all individual WACC components. We also base the point estimates of all elements on the 50th percentile of their estimated ranges and do not include any implicit aiming up.

Comparison with Dublin Airport

Table 10.3: WACC components 2022 vs Dublin Airport

	2022 Final Decision		2022 Dublin Airport – approach 1	2022 Dublin Airport – approach 2
	Range	Estimate	Range	Range
Gearing	45% - 55%	50%	50%	50%
Tax rate	-	12.5%	12.5%	12.5%
Risk-free rate	-0.85% - -0.06%	-0.45%	-0.07% - 0.30%	-0.07% - 0.30%
Total market return	5.70% - 6.81%	6.25%	6.75% - 7.00%	6.75% - 7.00%
Equity risk premium	6.15% - 7.26%	6.71%	6.70% - 6.82%	6.70% - 6.82%
Asset Beta	0.59 - 0.61	0.60	0.70 - 0.78	0.62 - 0.71
Equity Beta	1.11 - 1.15	1.13	1.40 - 1.56	1.24 - 1.42
Cost of equity	5.99% - 8.29%	7.13%	9.48% - 10.75%	8.39% - 9.81%
Cost of debt	-0.50% - -0.40%	-0.45%	-0.08% - 0.14%	0.08% - 0.14%
Aiming up	-	50 bps	50 bps	50 bps
Pre-tax WACC	4.04% - 4.54%	4.35%	5.88% - 6.71%	5.26% - 6.18%

Source: Swiss Economics 2022 Final Report, Dublin Airport's Response To The Commission's Draft Decision 2022

- 10.54 Table 10.3 compares our WACC allowance with two different approaches put forward by Dublin Airport. Both suggested approaches result in a higher WACC relative to our assessment. Dublin Airport's higher WACC estimates are primarily due to higher Beta estimates resulting in higher cost of equity estimates.
- 10.55 Dublin Airport estimates higher Beta values in both approaches since it fully includes the pandemic period (approach 1) or adjusts pre-pandemic Betas by a pandemic uplift (approach 2).
- 10.56 As explained above, we exclude the pandemic period (2020) from the estimation of Beta values. First, we consider that markets' assessments of the impact of future catastrophic events on airports are likely to be much less negative than it has been for Covid-19. And second, because CAR's intervention has been among the most decisive among a large range of remedial efforts by the relevant authorities.
- 10.57 A further reason for the higher Beta estimation by Dublin Airport is an exclusive reliance on ADP and AENA as comparator airports. As discussed above, there are a number of reasons as to why we disagree with this. A key reason is that, in practice, there are crucial differences even among regulatory models which are apparently similar. These differences make the choice of "perfect comparators" challenging. There is also a range of factors related to the structure of demand and business risks that affect an airport's Beta risk, which are disregarded in the approach taken by Dublin Airport.
- 10.58 As discussed in detail in the Swiss Economics final report, Dublin Airport and their consultants NERA have previously shared our view regarding issues such as the importance of demand and business risk in submissions to us relating to previous Airport Charges determinations. Examples include the following:
- In 2005, NERA argued for a wide range of comparator variables.⁶² As well as the regulatory regime, NERA also considered the size and nature of an operation, the revenue split between aeronautical and non-aeronautical revenue, the share of short-haul passengers, leisure passengers, and transfer passengers as well as the degree of the fixity of costs as relevant risk factors. Based on these considerations, NERA decided on a broad group of comparator airports.
 - In a 2009 report, NERA excluded Macquarie Airports Group '*as it is a multi-national multi-airport operator which means that its Beta estimates are unlikely to be indicative of Beta at any particular airport*'⁶³. This stands in contrast with NERA's current focus on the international multi-airport operators AENA and ADP as key comparator airports for Dublin Airport.
 - In its response to our 2018 Issues Paper, NERA cited airport demand, revenue risks, and regulatory framework all as key Beta risks to be considered.⁶⁴

⁶² NERA (2005). The Cost of Capital for the DAA. A Final Report for the DAA.

https://www.aviationreg.ie/fileupload/Image/PR_AC2_PUB12G_ANNEX8.pdf

⁶³ NERA (2009, p.27). The Cost of Capital for Dublin Airport. A Report for Dublin Airport Authority.

<https://www.aviationreg.ie/fileupload/Supporting%20Document%20VI%20Cost%20of%20Capital%20Report%20Redacted%20Version.pdf>

⁶⁴ Dublin Airport Response to Issues Paper CP7/2018, p. 55.

[https://www.aviationreg.ie/_fileupload/2019%20Determination/Dublin%20Airport%20\(Non-Confidential\).pdf](https://www.aviationreg.ie/_fileupload/2019%20Determination/Dublin%20Airport%20(Non-Confidential).pdf)

- In its 2019 response to the 2019 Draft Determination, NERA recognized the importance of non-regulatory variables in assessing a comparator airport's relative risks.⁶⁵ Dublin Airport stated that '*key risk factors which affect systematic (Beta) risk of companies operating in the airport industry*' must be considered when determining the suitability of individual comparator companies for Dublin Airport.⁶⁶ Dublin Airport listed airport demand, revenue risk, and the regulatory framework in place as variables of key Beta risk factors that need to be considered.

10.59 We consider that there would be more merit in the approach proposed by NERA if it could be shown that AENA and ADP are the single best comparators for Dublin Airport, and that the multi-annual price cap regulatory framework is the dominant source of Beta risk. In that case, we would still want to assess whether the benefits of a smaller and more comparable sample outweighs the other benefits of a larger sample outlined above; smaller comparator samples inherently bear estimation risks that reduce their reliability. However, as established by Swiss Economics final report, we consider that the arguments for these positions are weak.

10.60 Lastly, Dublin Airport argues that the UK CAA's recent H7 final proposals contradict our assessment of Dublin Airport's Asset Beta. Specifically, Dublin Airport is of the opinion that it is exposed to significantly more risk than HAL.

10.61 Our Asset Beta estimates for Dublin Airport fall within the top end of the CAA's range for HAL. A comparison of some of the two airports' characteristics does not raise any concerns in relation to this outcome. In terms of regulatory environment, the two airports are comparable. The introduction of a traffic risk sharing mechanism (TRS) for HAL may imply a reduction of demand risks over the next regulatory period. However, Swiss Economics finds that Interim Reviews at Dublin Airport can have a comparable effect to a TRS. Additionally, we are setting a WACC to cover a four year period, i.e., one year less than H7, reducing risk relative to HAL.

⁶⁵ NERA (2019). Dublin Airport Response to the 2019 Draft Determination CP3/2019. Appendix 8 – Cost of Capital for Dublin Airport for 2019 Determination. https://www.aviationreg.ie/_fileupload/2019%20Determination/Submissions%20to%20Draft%20Determination/Dublin%20Airport%20Appendix%208%20Non%20Confidential.pdf

⁶⁶ Dublin Airport (2018). Response to Issues Paper CP7/2018. [https://www.aviationreg.ie/_fileupload/2019%20Determination/Dublin%20Airport%20\(Non-Confidential\).Pdf](https://www.aviationreg.ie/_fileupload/2019%20Determination/Dublin%20Airport%20(Non-Confidential).Pdf)

11. Capital Costs

Table 11.1: Capital Cost Allowances 2023-2026, €m

	2020	2021	2022	2023	2024	2025	2026
Original 2019 Determination Capital Costs, (€m)	194.4	240.2	275.8	303.6	332.0		
<u>Reviewed Determination</u>							
Return on Capital, (€m)				95.2	103.6	111.4	119.6
Return of Capital, (€m)				108.1	126.5	140.0	159.5
Return of Capital (extra depreciation), (€m)				-	2.2	-	-
Total, (€m)				203.3	232.3	251.4	279.1
Per passenger, (€)				6.42	6.91	7.25	7.81
Forecast Triggered Capital Costs				-	10.3	37.6	64.2
Total including triggers, (€m)				203.3	242.6	289.0	343.3
Per passenger, (€)				6.42	7.22	8.33	9.62

Source: CAR

- 11.1 We provide capital cost allowances for the period that are slightly lower on average than the original 2019 Determination allowances, at an untriggered average of €241.5m per year versus an average of €269.2m per year allowed in 2019. The allowances will increase from €203.3m in 2023 to €279.1m in 2026 in the untriggered scenario. Capital costs include a small financeability adjustment, through accelerated depreciation, which is explained in Section 12. The main driver of the difference between Capital Costs for the upcoming period and the Capital Costs arrived at in the 2019 Determination is that new untriggered Capex per year is lower.
- 11.2 We received a range of submissions on the various Capital Expenditure (Capex) topics and individual projects, which are summarised and addressed below, in the Appendix, and in the IFS final report. We continue to follow the IFS's advice in relation to project costings; submissions in relation to project cost estimates are addressed in the IFS report. We have carefully considered these submissions, making a number of adjustments since the Draft Decision. We have:
- Updated project cost allowances based on submissions received, in particular to address construction price inflation;
 - Increased the number of projects in StageGate by 1;
 - Increased the number of triggered projects from 5 to 8;
 - Combined the Asset Care Civil/Structural/Fleet and Mechanical and Electrical project groupings into a single grouping;
 - Significantly reduced the level of accelerated depreciation, as it is no longer required to achieve the same outcome (this is discussed further in Section 12);
 - Adjusted the 2023 opening RAB to address an error identified by Dublin Airport.
- 11.3 As discussed in the Draft Decision, the main driver of the difference between Capital Costs for the upcoming period and the Capital Costs arrived at in the 2019 Determination is that new untriggered Capex per year is lower. This is somewhat offset by the Cost of Capital having now increased to 4.35% as set out in the previous section.

11.4 This section assesses, in turn:

- The RAB Roll Forward, and a reconciliation of the 2020-2022 Capital expenditure;
- The 2023-2026 Capital allowances, and the regulatory treatment of these. The Appendix lays out our responses to Stakeholder comments on the individual projects.
- Comments received on the Draft Decision, and our responses.

RAB Roll Forward

Opening RAB 2023

11.5 The 2023 opening RAB is €1972.6m. We have corrected an error from the Draft Decision which led to the opening RAB being understated by approximately 3%, because a downward adjustment for underspend on PACE Type 2 projects was double counted in the draft financial model. This did not affect the proposed price caps because it was offset by an increased estimate of the extent of accelerated depreciation required. We agree with Dublin Airport's corrected version set out in Appendix 5 of its response. We have also increased the opening RAB slightly to account for the latest HBS3 StageGate allowance recommended by the IFS (an increase of €1.47m) and reduced it slightly to account for the three projects which were previously included in the baseline regulatory settlements which are now triggered. Other than those changes, the opening RAB is in line with the Draft Decision.

Table 11.2: Deriving the 2023 Opening RAB

RAB Summary Table	€m	€m
Opening RAB 2020	1,851.4	
Standard Capex 2020-2022		248.7
Completed PACE Projects		41.9
Completed StageGate Projects		206.8
Standard Regulatory Depreciation		-320.0
Extra Regulatory Depreciation		-56.1
Opening RAB 2023	1,972.6	

Source: Dublin Airport, CAR calculations

11.6 To derive the 2023 opening RAB, we follow the approach we initially proposed in the Issues Paper, and then the Draft Decision. This approach is consistent with the one used in 2019. It also takes account of the decisions of the first and second interim reviews of the 2019 Determination which committed to making a RAB adjustment by not clawing back the remuneration of unspent Capex allowances in the period 2020 to 2022. We confirm that this unspent Capex does **not** enter the RAB for ongoing remuneration in 2023 and beyond.

Submissions received on the RAB Roll Forward

11.7 Ryanair disagrees that the airport should have been able to retain the return on and return of capital costs for 2021 and 2022. It believes this is unfair as users have not

only had to pay for project prematurely but are now being asked to pay twice.

Decision on the RAB Roll Forward

11.8 The point raised by Ryanair falls outside the scope of this Interim Review. This was addressed previously in Section 7 the Decision on an Interim Review of the 2019 Determination in relation to 2020 and 2021 and Section 5 of the Decision on an Interim Review of the 2019 Determination in relation to 2022.

Reconciling 2020-2022 Capital Allowances

11.9 Our approach to reconciling expenditure against allowances remains broadly in line with our Draft Decision, at paragraphs 11.10 to 11.25. We have made one minor adjustment suggested by Dublin Airport in its Appendix 5. For CIP projects completed up to the end of 2022 where a portion of their costs has already been remunerated (e.g., HBS 3 and Pace Type 1), we have reduced their asset lives to also align with the portion that is unremunerated. This reduces the remaining asset lives by 1 year.

Table 11.3: Finalised 2020-2022 Allowances and Expenditure, excluding triggered projects

	Allowance (€m)	Adjusted Allowance (€m)	Spent (€m)	Enters 2023 RAB (€m)
Asset Care	221.1	132.7	69.1	69.1
Capacity	110.8	66.5	27.3	27.3
Commercial	118.6	71.1	18.0	18.0
IT	78.2	46.9	33.3	33.3
Security	57.5	34.5	10.9	10.9
Other	21.9	13.2	13.0	13.0
Sustainability	-	-	1.8	1.8
StageGate	1091.4	N/A	19.7	19.7

Source: Dublin Airport, CAR calculations. Expenditure and Allowances are in nominal prices. StageGate projects are not subject to the grouped allowances approach.

11.10 In 2019, we split the PACE projects into two groups, those completed (Type 1), which were added in full to the 2020 opening RAB, and those not completed (Type 2), which were added in increments across the regulatory period in the same manner as new CIP projects. We maintain this approach, updating it by moving the PACE projects completed since 2019 from Type 2 to Type 1. The net remuneration of these projects (€41.9m) is included in the 2023 Opening RAB. The remaining allowances for projects in Type 2 have been added to the Capital Expenditure allowances for the period 2023-2026 along with the CIP2020+ projects, with forward remuneration being profiled over 2023-2026.

11.11 We confirm our approach to the HBS3 project, which is complete in T2 and expected to be completed in T1 in early 2023. We use the latest StageGate allowance recommended by the IFS for these projects, which is €224.8m. Of this, €206.8m remains undepreciated as of the start of 2023. This has been included in the 2023 opening RAB.

11.12 We also confirm our approach to the North Runway triggers, which we anticipate will be reached in the forthcoming regulatory period, with M2 expected to enter the price

cap in 2024 and M3 expected in 2026.⁶⁷ These are set to add the amounts in Table 11.4 to the price cap, based on our final WACC and passenger forecasts. As determined in 2014, a 50/50 risk sharing mechanism between the airport and users remains in place for cost over/underruns on this project. We expect to reconcile outturn expenditure on the runway project at the next determination, with the net allowed remuneration not already deemed to be remunerated by the triggers entering the opening RAB.

11.13 In its Appendix 5, Dublin Airport states that pre-existing triggers such as the Northern Runway M2 should be adjusted to February 2022 prices and that the yearly price cap formula should ensure that this falls within the CPI adjustment mechanism. However, like other Capex, this project was costed in nominal terms by Dublin Airport. Expenditure has already been incurred which we understand is broadly in line with the 2016 nominal budget. The project is subject to a bespoke cost risk sharing approach as described above. We continue to reflect the 2014 decision and treatment in relation to this project.

11.14 We expect to reconcile outturn expenditure on the North Runway at the next determination. This will include applying the risk sharing mechanism and calculating the net remuneration, to calculate the final allowance. In that context we note that any difference in timing of delivery relative to the planned timeline may be an element of cost risk. We thus disagree that the North Runway allowance should now be restated in February 2022 prices, but when ultimately reconciling this project, there may be merit in adjusting the final allowance to account for inflation between the respective years of expenditure, and the price base in which the final net allowance enters the RAB.

Table 11.4: North Runway Triggers

Trigger	2023	2024	2025	2026
M2 Trigger	€0.32	€0.31	€0.30	€0.29
M3 Trigger	€0.02	€0.02	€0.02	€0.02

Source: CAR

2023-2026 Capital Allowances

Summary of Dublin Airport's Capital Investment Plan

11.15 As part of its Regulatory Proposition, Dublin Airport updated its capital investment programme (CIP) from 2019, updating the cost estimates and timelines, the scope of many projects, as well as including several new projects and removing or deferring others. Dublin Airport proposed approximately €3.2bn in capital expenditure allowances for inclusion within the scope of the regulatory settlement. Approximately €0.5bn was set to be spent by the end of 2022 and approximately €2.1bn was proposed in forward allowances for 2023 to 2026, with the balance of approximately €0.6bn to be spent post 2026.

11.16 Dublin Airport's approach for Core projects was to maintain the project scope as per the 2019 CIP but to adjust the project costs for interim and forward construction

⁶⁷ <https://www.fingal.ie/sites/default/files/2022-06/Regulatory%20Decision%20Report.pdf>

inflation. Core was made up of the following groupings from the 2019 Determination:

- Asset Care Civil/Structural/Fleet
- Asset Care Mechanical and Engineering
- IT
- Security
- Other

11.17 For the additional two years of this CIP period, Dublin Airport proposed (ahead of the Draft Decision) the addition of four new Core projects and a pro-rata allowance of €39m per year for the extra two years, for minor ‘*typical*’ projects. This approach differed to the one Dublin Airport initially proposed in its consultations on the draft CIP, which included a larger pro-rata allowance but not the four additional projects. In response to the Draft Decision, Dublin Airport then submitted seven new and updated Core project sheets for consideration, at a total additional cost of €137m. As discussed further in the inflation subsection below, Dublin Airport also requested a change to the inflation calculations which increased its estimate of the total CIP cost by approximately €370m.

11.18 For the Commercial category, approximately €190m in expenditure was proposed by Dublin Airport. A number of new projects were also proposed.

11.19 For the Capacity category, approximately €1.4bn of expenditure was proposed. Several new projects were also proposed, including the Taxiway Romeo Widening Works, and Fuel Hydrant Network projects. These projects were adjusted for inflation, and in some cases scope change.

11.20 A new Sustainability grouping was added. It included €395m in planned expenditure on projects which are designed to enable the airport meet environmental and emissions targets and goals. Most of these projects will enter the StageGate process.

11.21 Several projects from 2019 were cancelled or deferred. These include: the Terminal 1 Pier New Airbridges and the Hydrant Enablement – Pier 2 & 3 projects, which were cancelled, and the New Remote Apron 5M and Terminal 1 Check-in projects, which were deferred.

Summary of the Draft Decision on 2023-2026 Capital Allowances

11.22 We commissioned Steer, in its role as the Independent Fund Surveyor (IFS) at Dublin Airport, to carry out an updated efficiency assessment of the proposed projects. This involves:

- An assessment of the project cost proposals from Dublin Airport, and the quantity assumptions and rates underpinning these.
- An assessment of scoping efficiency, i.e. whether there is any inefficiency in the scope of the project works in order to deliver the intended project output.

11.23 We considered the approach Dublin Airport took to the Core project groupings to be reasonable in principle and followed it in our own analysis; that is, we did not reassess

all of the Core projects, which were already subject to full cost/need assessment in 2019. For the remaining projects, we assessed the proposed outputs, having regard to our Statutory Objectives and the views expressed by stakeholders. In many cases, project outputs were broadly in line with 2019, and therefore we continued to draw on our 2019 analysis of these projects. This included the simulation modelling we commissioned which showed that the airport, post completion of the CIP, would allow for 40 million passengers per annum, with most of the key processors then being appropriately sized. In line with Dublin Airport's approach, we considered the 'Core' project groupings at a group level. Two changes were proposed in these groupings, namely inflationary adjustments and the inclusion of four new projects.

- 11.24 We did not propose to include the additional pro-rata Core allowance for 2025 and 2026. As identified in the IFS report, the inclusion of the pro-rata allowance would bring average annual Core Capex for the period to almost €100m, which is twice the ten-year average for Core between 2010 and 2019 in real terms. While we expected that Core expenditure would likely need to increase relative to that decade, our view was that delivering all of the proposed projects by 2026 was already ambitious. We therefore did not view this additional allowance as likely to be needed, or that the total level of Core expenditure proposed by Dublin Airport would likely be spent within the period. We did propose to add flexibility to the Asset Care Civil/Structural/Fleet (CSF) grouping which would enhance the airport's ability to reallocate allowances to projects which have not yet crystallised.
- 11.25 We also considered the appropriate regulatory treatment for each project, i.e., the deliverability status, and the time profiling of remuneration.
- 11.26 We concluded that the updated CIP was generally in the interests of users of the airport. We allowed 158 of the 159 proposed projects. The only project we proposed to disallow is the Drop-off/Pick-up access charging project. We assessed that significant uncertainty remained in relation to this project, including details of the commercial proposition and the objectives of the project. We also did not include this project in our forecasts for Commercial Revenues or Operating Costs.
- 11.27 We noted that there are already within-period mechanisms available should Dublin Airport consider that additional expenditure relative to any of the grouped allowances is required. In previous determinations, we laid out a clear process for Dublin Airport to follow should the allowances be insufficient. If it believed it would exceed an allowance on a particular group, it should consult with users. If users agreed to that overspend, when reconciling outturn expenditure in the next determination we would increase the allowance by the amount established through the consultation. For a consultation to result in an increased allowance Dublin Airport, must demonstrate substantial support from users. In 2016, we developed a more concrete process to allow for supplementary Capex within the regulatory period. In 2018, Dublin Airport made use of this process for the Programme of Airport Campus Enhancement (PACE).
- 11.28 Inflation in the construction sector was a major contributor to the project-level cost increases seen in the updated CIP. We converted the project costings to real prices by adjusting them downward to account for forecast general inflation. This is necessary to avoid double counting general inflation, given that the price cap is already indexed to it. The IFS assessed the treatment of construction inflation in the costings. When

reconciling outturn expenditure in the next determination, we expect to do this with direct reference to the nominal costings, as we have done with HBS3 and completed PACE projects in this Interim Review.

- 11.29 We proposed that several Capacity projects would be classified as trigger projects, meaning that remuneration for these projects will only begin upon the achievement of certain key milestones.
- 11.30 In total, the Draft Decision proposed making allowances for capital projects of approximately €2.9bn in real terms, including expenditure before and after the current review period 2023-2026.

General Comments on the Draft Decision

- 11.31 Ryanair disagrees with the overall size of the CIP and believes that Dublin Airport has failed to take account of the climate of recovery for airlines. It argues that in putting forward a price cap predicated on delivering such a large capital programme, we are placing the interests of future users ahead of those of current users. It argues that this is unjust, unwarranted, and not consistent with good regulatory practice. Ryanair also references the point made in the Thessaloniki Forum paper *Airport Charges in times of crisis* that “*If charges increase too much, the restoration of traffic will slow down, which in turn may further increase charges*”, as justification. Ryanair recommends that investments be postponed in a time of crisis.
- 11.32 Ryanair also argues that the allowed capital expenditure program does not have support from airport users, and we proposed to allow for it without adequate scrutiny from the IFS of the need, scope, or scale of the works. Ryanair states that the maximum sum that should be allowed for the period 2023-2026 should be €800 million.
- 11.33 Ryanair notes that since many capacity projects will not be delivered until after the regulatory period, it is unfair to ask the users to pay for these projects in this regulatory period.
- 11.34 Ryanair does not agree that the risk of underinvestment is more detrimental to users than over or premature investment leading to higher charges. It further considers that even a CIP of half the proposed size could not be considered under-investment.
- 11.35 Ryanair disagrees with the inclusion of 28% CIP wide contingency, which it considers to be excessive. It requests that ‘*unnecessary and duplicative*’ contingency costs be removed.
- 11.36 Aer Lingus states that the proposed project timelines will delay the economic benefits of developing a functioning hub at Dublin until the 2030s. It notes that the development of hub operations is set out in the National Aviation Policy. It believes that hub operations will become unmanageable and uncompetitive if aircraft are spread across the airport.
- 11.37 Aer Lingus believes that the delivery timelines proposed by Dublin Airport are unacceptable and will result in Dublin Airport being unable to meet expected demand. It welcomes the introduction of the proposed trigger mechanism to incentivise timely delivery.

- 11.38 Limerick Chamber, Galway Chamber and IALPA note that capacity expansion could lead to challenges for transport infrastructure around the airport which would not be in the interest of current or prospective users, whilst also having a negative environmental impact. IALPA considers that, should the airport be unable to overcome the surface access issues, as well as the ongoing planning issues, it should consider halting the expansion, with focus instead being put on promoting regional airport development.
- 11.39 IALPA argues that the long-term development of the airfield campus should not be determined by airlines that may not use Dublin Airport long term, and that this should not come at the expense of the expansion of terminal capacity.
- 11.40 IATA argues that the priority and timelines for projects should be reviewed as capacity constraints will start to have an impact well before completion of these projects.

Commission Response

- 11.41 Between the Draft Decision on this Interim Review, and the original 2019 Determination, we and the IFS have scrutinised the cost and scope of every project in detail. We have also assessed the need for the projects. Any increases in project costs between 2019 and 2022 have also been assessed for efficiency by the IFS.
- 11.42 The Helios capacity analysis assessed how the post CIP2020+ airport would be able to manage 40mppa. As the airport is still expected to achieve this level of passengers in the coming years, and as many of the capacity projects are broadly similar to the projects proposed in the original CIP, we continue to draw on this analysis where relevant.
- 11.43 The projects allowed are needed to maintain the functioning of Dublin Airport, to grow capacity to 40mppa, and to facilitate the airport in meeting its statutory obligations. We do not agree with Ryanair that providing adequate facilities for future users is contrary to the needs of current users, many of whom will benefit from these projects once they are delivered. We have a statutory obligation to protect and promote the reasonable interests of both current and prospective users of Dublin Airport. Our current traffic forecasts indicate that Dublin Airport will reach 40m passengers per annum by 2030. Specifically, we note the following:
- We continue to allow for Core projects as they are intended to address specific requirements in areas such as asset care and security.
 - Commercial projects are required to meet our commercial forecasts and serve to enhance the commercial product available to passengers.
 - The capacity projects remain similar to the original CIP2020. The goal is still to meet demand for 40 million annual passengers. Since 2019, the estimated date when 40mppa will be reached has changed from 2026 to 2030, but so too has our timing of the allowances. We use triggers for most of these projects by value. We note that the airlines have expressed support for the projects which would benefit them, for example, Aer Lingus is supportive of the South Apron developments, while Ryanair supports more investment in Pier 1 than Dublin Airport has proposed, notwithstanding its objections to projects which will be

primarily used by other Airport users.

- The new sustainability projects are intended to allow Dublin Airport to meet its sustainability goals and, in many instances, will provide Commercial Revenue or Opex benefits.

11.44 We reiterate our views on the risks of underinvestment, which both restricts Dublin Airport's ability to expand (benefitting future users) and potentially leads to the degradation of existing assets, which would not be in the interests of current or future users.

11.45 Contingency estimates included in the IFS report include escalation and design variability, with escalation making up the majority of this cost line. Contingency and escalation have been assessed at an individual project level by the IFS. The delayed timing for some of these projects, which was supported by Ryanair, increases escalation allowances. We also note that some projects, including most of the sustainability projects, are at an early stage of design development. It would thus be expected that these would have relatively high contingency allowances.

11.46 Regarding Ryanair's position on the quantum of the allowed Capex, we note that €800m would be too low to deliver the projects necessary to facilitate a 40 mppa airport, or to deliver the necessary Asset Care, and Sustainability projects.

Table 11.5: Capex allowances (Groups shown net of StageGate Projects)

	Draft Allowance (€m)	Final Allowance (€m)
Asset Care	244.5	253.5
Capacity	86.0	88.3
Commercial	174.4	162.2
IT	86.5	82.3
Security	91.1	94.7
Sustainability	29.5	31.0
Other	24.6	24.8
StageGate	1647.7	1,717.7

Source: CAR. Real Prices

11.47 In relation to the planned timelines for delivering the South Apron Hub infrastructure, we note that it is not our role to determine the precise phasing of projects nor the various regulatory and planning steps required. However, we note that the triggered allowances approach creates an incentive for Dublin Airport to deliver the projects in a timely manner.

11.48 We do not expect the Summer 2022 stand availability to be representative of Summer 2023 and beyond. This can be considered further if Aer Lingus wishes to make a concrete proposal within the Coordination Committee, as this point would likely be best addressed within the stand parameter of the capacity declaration. We have allowed for projects which will increase the number of stands available such as Apron 5H, and the West Apron Underpass which will open up the West Apron for passenger operations.

11.49 In response to IALPA, the capacity projects are proposed to facilitate the development of an airport capable of facilitating 40mppa by 2030 and are part of Dublin Airport's

Capex masterplan. We assess that the projects which we have allowed for are in the interests of current and future users of Dublin Airport. We also note that the CIP is aligned with Dublin Airport's 55mppa masterplan scenarios.

11.50 IALPA's submission makes it clear that it considers the Capex programme to be sub-optimal. However, it is not our role to design the airport; that is the role of Dublin Airport. In the context of Capex allowances, we consider projects which are presented by Dublin Airport to us for remuneration. If we consider that allowing for a particular project at a particular point in time better protects the interests of users relative to not allowing for that project, we allow for the project. We cannot compel Dublin Airport to build a particular piece of infrastructure, and we do not provide allowances for projects Dublin Airport has not proposed.

Timing, Deliverability, and Future Reconciliation

11.51 IATA recognises the benefits the investment plan will deliver for users of Dublin Airports but is concerned about whether the required resources will be available to complete it. It asks if Dublin Airport has sufficiently justified that airfield operations will not be overly disrupted by the programme.

11.52 Ryanair argues that progressing this work will be detrimental to operational conditions for existing users, and the work needs to be re-sequenced over a longer timeframe to minimise operational disruption. Ryanair believes that our proposal to allow for the majority of the Capex programme is unreasonable, given our belief that the programme is ambitious in terms of delivery timelines.

11.53 While Ryanair welcomes the change from negative to positive triggers, it believes that this action is insufficient compared to the level of expenditure proposed. Ryanair argues that by allowing for the prefunding of capital costs, we are in breach of the regulatory principles set out by the Thessaloniki Forum. Ryanair disagrees with 80% of remuneration of capital costs being allowed to enter the price cap upon projects receiving full planning permission. Ryanair believes that this is unacceptable as it favours future users at the cost of current users.

11.54 Aer Lingus does not believe that prefunding triggers are necessary from the perspective of financeability, but supports the approach on the grounds that it will incentivise Dublin Airport to deliver the projects.

11.55 Ryanair argues that there is a case for making all StageGate projects subject to triggers given uncertainty as to scope and costs, especially because the justification for increasing the number of StageGate projects is to reflect uncertainty around deliverability and project costs.

11.56 Ryanair supports our proposal to carry forward existing allowances for projects which have already commenced and to deal with any discrepancies at the start of next regulatory period. However, it believes that we need to rigorously scrutinise any increased costs to ensure they are not due to Dublin Airport's inefficiency.

11.57 Dublin Airport suggests that the US Preclearance project should not be triggered, as it not expected to require an extended planning process.

11.58 Dublin Airport asks that it be allowed to redeploy any underspend on Deliverable projects to other projects within the same grouping. It also asks that Asset Care categories Civil/Structural/Fleet, and Mechanical/Electrical be merged, as they are under the control of the same internal department.

11.59 Ryanair notes that a number of projects which were previously the subject of triggers are now included in the base price caps, namely works to the T1 Departures Lounge, Check-In and Security, and the West Apron Underpass. Ryanair is unclear as to why this has changed.

Commission Response

11.60 Regarding the operational impacts, we note that it is within the remit of Dublin Airport to ensure that the CIP is phased and delivered in a manner which reduces impact on operations. Dublin Airport has noted in response to queries from the IFS that once contractors have been appointed, it will work with stakeholders to develop detailed construction sequencing to minimise impacts.

11.61 However, to assist us in considering the concerns raised by a number of respondents, we asked Steer to carry out a high level assessment of risks to the programme timeline and assess, to the extent possible at this stage, the likelihood of such risks materialising in the form of programme delays. It identified several challenges facing Dublin Airport, including:

- The allowed Capex would place Dublin Airport significantly ahead of comparators in terms of the scale and timeframe of capital spend.
- The available labour market is below that targeted to deliver Ireland's national development plan, which is itself a major Capex program, reducing the pool of available workers and potentially driving up labour costs.
- The Irish construction supply chain is impacted by the global macro-economic outlook and uncertainty driven by inflation, as well as the possible impacts of recession and the knock-on effects of international conflict.
- That there is historical evidence of a delay in the delivery of a recent, smaller, simpler suite of projects at Dublin Airport (PACE). This is particularly the case for the taxiway projects and Apron 5H.
- Detailed phasing is not yet developed.
- Finally, that several projects are likely to require a lengthy planning process, including review by the Aircraft Noise Competent Authority. Different planning pathways across projects may prevent optimal phasing of the programme.

11.62 In the Draft Decision, while we accepted the merits of almost all proposed projects in principle, we noted that the planned level of investment was ambitious. We made a number of adjustments, including not accepting the proposed pro-rata increases to the Core project groupings, and extending the expected delivery profile for a number of projects including Sustainability projects and carparking projects. We also proposed trigger conditions in relation to the remuneration of a number of large scale projects. These adjustments still enable Dublin Airport to progress and deliver investments, while guarding against programme delay leading to significant over-remuneration in

the period, which would be contrary to the interests of airport users.

11.63 In the context of clear risks to the programme timelines, and submissions received, we consider it reasonable to set triggered allowances for three further major capacity projects, rather than including them in the base price caps. These are:

- T1 security relocation to the Mezzanine, and the associated T1 departure lounge reconfiguration. We note the risk of planning delay for this project, as well as the operational challenge it will pose to a key processor in T1.
- The West Apron Underpass. This project is likely to be challenging to deliver from an operational perspective, requiring significant works at Pier 3 as well as the Foxtrot Taxiways and Runway 16/34.

11.64 We retain the other five trigger projects as proposed in the Draft Decision for the same reasons. We note that the US Preclearance project is operationally challenging and, if it is delivered as per the timeline suggested by Dublin Airport, the trigger amount will enter the price cap in any case.

Table 11.6: Triggered Projects

Project	Allowance (€m)
Terminal 1 Central Search- Relocation to Mezz Level	45.5
Terminal 1 Departure Lounge (IDL) Reorientation & Rehabilitation	34.7
New Pier 5 (T2 & CBP Enabled)	298.0
Expansion of US Pre-Clearance Facilities	74.9
South Apron Expansion (Remote Stands, Taxiway & Apron, PBZ)	199.6
North Apron Developments- Pier 1 Extension (Module 1) & Apron 5H PBZ	210.9
West Apron Vehicle Underpass- Pier 3 Option	239.2
South Apron Airside Support Centre	10.9
Total	1,113.7

Source: CAR

11.65 We have not opted to trigger all StageGate projects. This approach would create difficulties in projects that are delivered in phases (such as the Sustainability projects), as well as, in our view, a disproportionately volatile price cap. We have already profiled the sustainability projects over five years, from 2023-2027, on the grounds of deliverability.

Table 11.7: Type 'A' Trigger price cap adjustments by project, 2023-2026

Project	2023	2024	2025	2026
Terminal 1 Central Search- Relocation to Mezz Level	€0.10	€0.10	€0.10	€0.09
Terminal 1 Departure Lounge (IDL) Reorientation & Rehabilitation	€0.08	€0.07	€0.07	€0.07
New Pier 5 (T2 & CBP Enabled)	€0.46	€0.44	€0.42	€0.41
Expansion of US Pre-Clearance Facilities	€0.12	€0.12	€0.11	€0.11
South Apron Expansion (Remote Stands, Taxiway & Apron)	€0.28	€0.27	€0.26	€0.25
North Apron Developments- Pier 1 Extension (Module 1) & Apron 5H PBZ	€0.31	€0.29	€0.28	€0.27
West Apron Vehicle Underpass- Pier 3 Option	€0.30	€0.28	€0.27	€0.26
South Apron Airside Support Centre	€0.02	€0.02	€0.02	0.02
Total	€1.68	€1.59	€1.54	€1.49

Source: CAR

- 11.66 We confirm that 80% of capital cost remuneration for a triggered project will occur at the Type A milestone, with full remuneration (together with any associated Opex or Commercial Revenue adjustment) at the B milestone. The specifics of these milestones are set out in Section 2.

Table 11.8: Type 'B' Trigger price cap adjustments by project, 2023-2026*

Project	2023	2024	2025	2026
Terminal 1 Central Search- Relocation to Mezz Level	€0.13	€0.12	€0.12	€0.12
Terminal 1 Departure Lounge (IDL) Reorientation & Rehabilitation	€0.10	€0.09	€0.09	€0.09
New Pier 5 (T2 & CBP Enabled)	€0.58	€0.55	€0.53	€0.51
Expansion of US Pre-Clearance Facilities	€0.16	€0.15	€0.14	€0.14
South Apron Expansion (Remote Stands, Taxiway & Apron)	€0.35	€0.33	€0.32	€0.31
North Apron Developments- Pier 1 Extension (Module 1) & Apron 5H PBZ	€0.39	€0.36	€0.35	€0.34
West Apron Vehicle Underpass- Pier 3 Option	€0.37	€0.35	€0.34	€0.33
South Apron Airside Support Centre	€0.03	€0.02	€0.02	€0.02
Total	€2.10	€1.98	€1.92	€1.86

Source: CAR

*'B' amounts include the 'A' amounts

- 11.67 Regarding Dublin Airport's request to be able to reallocate funding for Deliverable projects, we note that this is already the case. Deliverable projects are not reconciled individually; they are still part of a grouping. Deliverability relates to the final grouped allowance, not actual expenditure. For example, consider a grouped allowance was €100m with a Deliverable project worth €20m. If that project is delivered then the final group allowance remains at €100m. If not, the final allowance is €80m. This is the case regardless of the quantum actually spent on the individual Deliverable project. If Dublin Airport delivers it at a lower cost (e.g. €15m) it benefits from having an extra €5m in the grouped allowance.

11.68 We agree with Dublin Airport's proposal to merge the two Asset Care groupings. This is reflected in the groupings table above. As the groupings are under the ultimate control of the asset management department, this will facilitate the redeployment of allowances to areas of need across these two groupings, increasing flexibility. We also note that the projects in these groupings are significantly interchangeable.

Asset Lives

11.69 Dublin Airport challenges the basis for some of the proposed asset life changes. It believes the adjustment of the Taxiway R (CIP.20.03.074) asset life from 20 to 30 years is incorrect as most of the works are pavement rehabilitation and widening as opposed to new pavement construction. It notes that the asset life for the Apron and Taxiway rehabilitation projects is 20 years.

11.70 It argues that a 30-year asset life is too long for the de-flex project on Pier 4 (CIP.20.03.078) and claims that these corridors will not last 30 years without replacement or major refurbishment within this 30-year period. It asks that the asset life of this project to be reduced to 20 years to reflect this.

11.71 Dublin Airport asks us to set the asset lives for the projects New Food & Beverage Fitout (CIP.20.04.003), Food & Beverage Provision & Fitout Post CBP (CIP.20.04.023) and New Kitchen in Terminal 2 (CIP.20.04.030) to ten years to reflect the '*F&B commercial cycle*'.

Commission response

11.72 We accept Dublin Airport's submissions on these asset lives.

11.73 For Taxiway R, we note that most of the works do not constitute new pavement but rehabilitation of older pavement, and that this aligns with the asset life for Apron and Taxiway rehabilitation. We have therefore reduced the asset life to 20 years.

11.74 We agree with Dublin Airport that the Pier 4 project corridors are likely to require replacement or major refurbishment as suggested by Dublin Airport. We have therefore reduced the asset life to 20 years. We also adjust the asset lives of the three commercial projects. We note that 10 years is, in each case, within the range identified by the IFS as a reasonable useful life assumption for these projects.

StageGate

11.75 Ryanair supports the inclusion of more projects in the StageGate process. However, it is concerned that the StageGate process only addresses cost and that it should be enhanced to ensure that the need and business case for projects is also properly interrogated. It notes the intention of the Commission to issue a non-binding opinion in relation to StageGate projects but is unclear as to how this would work.

11.76 It welcomes the return of StageGate to its quarterly schedule, but only if users can be satisfied that the consultation requirements will be met, and that users will retain the right to reject projects that cannot be demonstrated to be in the interests of the majority of users at the cost proposed.

11.77 IATA supports the continuation of StageGate and quarterly reporting.

11.78 Dublin Airport proposes that methods to demonstrate the environmental impact of projects be outlined during the StageGate assessment process of the sustainability projects. It also expresses support for the return to a regular cycle and additional consultation with Airport stakeholders through this regular consultation meeting.

Decision on the StageGate Process

11.79 We acknowledge Ryanair's support for the StageGate process and note that any changes in scope can be queried and rejected by users based on need and cost efficiency. The process does also allow for reconsideration of whether the project should continue to be progressed. In particular, an airline may object to the proposed StageGate 1 allowance if the cost has increased, or if it originally supported the project but no longer does.

11.80 Regarding the prospect of us issuing a non-binding opinion should the StageGate process reach an uncertain outcome due to disagreement, the purpose would be to provide clarity on our current thinking in the event of such a disagreement, lessening the risk of a project which may be generally supported being held up in the event of minority or unfounded disagreement. This would be non-binding, and subject to consultation at the next determination.

11.81 We note IATA's support for continuing the StageGate process.

11.82 We agree with detail on the environmental benefits being set out through the StageGate process, as well as increased user engagement at the outset of StageGate cycles. This will be further developed following this decision and in consultation with users.

Table 11.9: StageGate Projects

Project	Asset Lives (Years)	Final Allowance (€m)
Apron Rehabilitation Programme	20	47.6
Airfield Taxiway Rehabilitation Programme	20	18.2
Second Medium Voltage (MV) Connection Point	5	1.3
Terminal Kerb Security Mitigation*	20	11.5
MV Resilience Substation*	15	54.5
Upgrade to Hold Baggage Sortation Equipment*	15	40.6
Terminal 1 Central Search-Relocation to Mezz Level	15	45.5
Terminal 1 Departure Lounge (IDL) Reorientation & Rehabilitation	15	34.7
Terminal 2 Early bag store and transfer lines	10	33.7
New Pier 5 (T2 & CBP Enabled)	28	298.0
Expansion of US Preclearance Facilities	25	74.9
South Apron Expansion (Remote Stands, Taxiway & Apron)	34	199.6
South Apron Airside Support Centre	20	10.9
North Apron Developments- Pier 1 Extension (Module 1) & Apron 5H PBZ	32	210.9
West Apron Vehicle Underpass- Pier 3 Option	50	239.2
Taxiway R widening*	30	6.1
Fuel Hydrant Network Works*	20	30.8
Code E Engine Test Facility*	20	14.8
Surface Water Environmental Compliance	20	85.4
Airport Charging*	15	73.9
Alternate Fuels*	20	1.7
Anaerobic Digestion*	15	9.1
Fixed Electrical Ground Power Phase 3*	15	12.0
Photovoltaic Solar Farm Phase 2*	25	37.4
Terminal 2 Sustainable Upgrade*	15	100.8
Terminal 1 and Campus Sustainability Feasibility*	15	5.6
Office Consolidation & Refurbishment (primarily Level 4&5, Terminal 1)	25	18.9
Total		1717.7

Source: CAR

Construction Inflation

- 11.83 Dublin Airport expresses concern that a specific mechanism to allow for construction inflation has not been included in the Draft Decision. It believes that this could threaten the overall CIP delivery and proposes that we alter the projected Tender Price Inflation (TPI) to 12% for 2022, 8% for 2023, 6% between 2024 to 2026 and 4% from there on to reflect market sentiment.
- 11.84 Dublin Airport states that elongating delivery timelines would not be a solution to cost increases, as it is unlikely that the inflationary period will be followed by a deflationary period.
- 11.85 While Ryanair supports our efforts to remove double counting, it argues that the proposals leave open the potential for Dublin Airport to '*game the system*' with a view to justifying increased costs. It is concerned by the IFS' use of the Society of Chartered Surveyors Ireland's (SCSI) tender price indices, which, it argues is not an officially recognised body and that the data is based on '*sentiment*' alone. It argues that slowing construction growth in China and in Ireland should lead to lower prices over the medium term.

Commission response

- 11.86 As set out in its report, the IFS has adjusted its costings to account for recent information/data on construction inflation, providing for a centreline forecast. Under the terms of the regulatory settlement, Dublin Airport does not own inflation risk for individual projects, as it might do under certain types of construction contracts. The StageGate process already provides a mechanism to adjust costs for projects within the scope of that process. Grouped allowances provides for an overall set of programme budgets within which Dublin Airport has freedom to work, and if insufficient, Dublin Airport may hold an interim consultation, or make a supplementary Capex submission. The risk between TPI and CPI is not fully borne by Dublin Airport as it suggests, thus there is no basis for a specific risk premium.
- 11.87 As stated in the Draft Decision, we do not consider it appropriate for us to provide an open-ended commitment that airport users will pay escalating construction costs if they were to increase further. We have already taken account of escalation in construction costs since 2019 and the expectation that this will continue.
- 11.88 Regarding the elongated timelines, the point is not, as suggested by Dublin Airport, that we are expecting subsequent deflation which would offset greater escalation than currently allowed for. Rather, we would expect Dublin Airport to continue to assess the inflation environment and, if warranted, make adjustments to the programme. For example, if construction inflation were to surge ahead of our forecasts, some of the business cases for commercial projects may become negative, which would suggest that Dublin Airport should rationalise the programme and/or defer certain projects. It would not be rational of Dublin Airport to continue to progress the exact same programme regardless of cost developments associated with doing so. Nor would it be appropriate for us to commit airport users to paying for the programme no matter how high construction inflation becomes.

11.89 We note that the IFS has evaluated the SCSi inflation index since 2018 and finds it reasonable, as it is the only independent assessment of tender prices in Ireland, and because using non construction indices or inflation data would be inappropriate in this situation. Further discussion on this index is available in the IFS report.

Consultation and reporting

11.90 Ryanair argues that the CIP document presented by Dublin Airport did not comply with the requirements for consultation set out by us. It disputes the assertion in the Draft Decision that the CIP was formulated through consultation with users, arguing that Dublin Airport presented its proposals to users without having sought prior input, and then failed to account for the views of key users. It further argues that users were given insufficient business case information on the need and benefits of the projects, and potential alternatives considered by Dublin Airport, to effectively judge them, and that the consultation meeting failed to fill in the information gaps present in the document or give users enough time to consider the projects.

11.91 Ryanair considers that there is little evidence that the CIP was amended based on user views, and notes that Dublin Airport missed several deadlines associated with the CIP. It argues that Dublin Airport has not explained why user views on specific projects were not taken into account. As such, it questions whether the airport is fulfilling its transparency objectives.

11.92 Ryanair believes that the body of users whose views Dublin Airport considered when deciding on the final CIP was too broad, and that this low threshold should not be accepted by the Commission. It further notes that Aer Lingus and Ryanair (the airlines representing the majority of traffic at Dublin Airport) have expressed concern over the CIP in its totality, that the Commission should consider this when making its Final Decision, and that expanding the scope of StageGate is not sufficient to address its concerns.

11.93 Ryanair reiterates its support for the continuation of the mechanism that projects over €4m should not be taken forward unless there is support from users representing more than 50% of passengers.

11.94 Ryanair refers to the Structured Needs Assessment carried out by the CAA at Heathrow as part of its H7 Final Proposals. It argues that the Commission has not undertaken an equivalent analysis on business cases, their cost efficiency, and whether they are in the interests of users.

11.95 Dublin Airport proposes using the format presented in the CIP2020+ Review document to report timelines, rather than the quarterly reporting currently employed. On this basis, three project phases will be reported: Pre-construction which will be feasibility/design/planning/procurement, a construction phase, which will consist of the site works involved in the project, and a handover phase section which will signify when the project will be brought into operation.

Commission response

11.96 We do not agree with Ryanair that Dublin Airport did not comply with our consultation

requirements. Dublin Airport consulted with users on the need and merit of the projects and the details on delivery and timelines of proposed projects. Dublin Airport justified its capacity projects with an updated capacity assessment. We note that business case information was available to users upon request and who had signed a Non-Disclosure Agreement (NDA).

11.97 Airport users are defined under the Airport Charges Directive (ACD) as natural or legal persons responsible for the carriage of passengers, mail and/or freight. We note that there was a wide range of views expressed at the consultation, with Airport users generally supportive of projects relevant to their own operations. Furthermore, while Dublin Airport is required under the ACD to consult with users on infrastructure projects, we consider a broader range of criteria, under national legislation, when making decisions on proposed projects. We must adhere to our statutory obligations, which includes protecting and promoting the reasonable interests of current and prospective users, facilitating the efficient and economic development and operation of Dublin Airport, and taking account of the policies of the Government on aviation, climate change and sustainable development.

11.98 Thus, while the views of major operators at the airport are important, it is also important to ensure that capacity is developed to meet foreseeable demand, including demand which may be satisfied by airlines who would compete with the main incumbents, leading to enhanced value, competition, and choice for passengers in line with government policy. It would not be in the broader interests of current and future users (or our other objectives) if the views of the main incumbent carriers were the sole drivers of the development of the airport.

11.99 The €4m consultation requirement was introduced to protect the interests of future users by ensuring that Dublin Airport would not proceed with the major capacity expansion projects until the post-Covid-19 scenario became clearer and a full review could be carried out. The review has now been completed and so we see no reason to continue the requirement.

11.100 As described above, we have also assessed the business cases and cost efficiency of all projects in the CIP and made adjustments to the allowances where we disagreed with the costings.

11.101 We note Dublin Airport's proposal to change the manner in which timelines are reported. An updated reported format will be considered in 2023, after the Final Decision.

11.102 It is important to note that a meaningful and effective consultation (albeit in a shorter timeline than 2019 but with many projects broadly unchanged) does not necessarily equate to full agreement on the programme. We are cognisant that, where there is a level of disagreement on the outcome, this can lead to criticism of the process. If a view is not accepted in a consultation process, this may be because the view is assessed to have less merit or is less evidenced than alternative views.

11.103 Ultimately, all parties had the opportunity to make further submissions in response to our Draft Decision to make the case that the consultation was insufficient, or their views were unreasonably not given effect to, in the specific circumstances. We have

further considered these views and agree to a certain extent in relation to the overall quantum of the programme, and the timing of the capital remuneration of same, as discussed above.

Further Comments

11.104 Dublin Airport argues that the current South Apron Passenger Boarding Zone (PBZ) should be remunerated pro-rata for the time it has been used, as it has been fully utilised and will continue to be fully utilized until it is replaced.

11.105 IALPA has asked that the revised CIP 2020+, as well as the next CIP be used to rapidly commence spending on a number of additional or replacement projects.

11.106 IALPA supports the Commission's decision to not make an allowance for the Drop off/Pick up project.

11.107 IALPA asks, as a matter of policy, whether our price caps will incorporate all airport related Fingal County Council (FCC) development levies.

Commission response

11.108 We acknowledge Dublin Airport's request that an allowance be granted pro rata for the time that the South Apron PBZ has been used. However, the conditions set out under the Supplementary Capital Expenditure Allowance process for the remuneration of this project have not been met. This means that the associated additional allowance will not be remunerated. The PBZ was not included in the original 2019 Determination for this same reason.

11.109 In response to IALPA we note that our approach is to assess projects that are submitted to us by Dublin Airport, as we are not responsible for designing Dublin Airport. However, there is considerable flexibility in the capital plan for projects to be adjusted, and we have referred these comments to Dublin Airport for their consideration.

11.110 We acknowledge IALPA's support for our decision to not provide an allowance for the "Drop off / Pick up kerb access charging project". We reiterate our decision to not provide an allowance for this project as set out in the Appendix.

12. Financing, Risk and Financial Viability

Table 12.1: Price Caps before and after Financeability Adjustment

	2023	2024	2025	2026
Before Adjustment				
Base Price Cap	€7.59	€7.46	€7.49	€7.77
Price Cap with expected triggers	€7.59	€7.77	€8.28	€9.01
After Adjustment				
Base Price Cap	€7.59	€7.53	€7.48	€7.77
Price Cap with expected triggers	€7.59	€7.83	€8.57	€9.57

Source: CAR, February 2022 prices

Adjustment includes accelerated depreciation of €2.2m and A triggers increased from 50% to 80% of remuneration when projects are on-site.

12.1 This section examines Dublin Airport's ability to raise finance in a cost-efficient way to fund the development of the airport in the interests of current and future users. Having finalised the individual building blocks and arrived at an initial regulatory settlement, we then consider, in a practical manner, the anticipated impact of the regulatory settlement on Dublin Airport's financial metrics and key ratios.

12.2 Since the Draft Decision analysis, we have:

- Updated the nominal cost of new debt assumption, increasing this to 4.04% in line with advice from Swiss Economics.
- Updated various building block inputs. For example, the higher WACC increases cashflows in the period and reduces the required level of financing adjustment. Similarly, the higher inflation (and our acceptance of Dublin Airport's suggestion in relation to the indexation of the price cap to inflation, as described in Section 14), means that the 'standard' capital costs are now higher. Counterbalancing this is the increase in the estimates of the costs of individual projects, and the higher cost of new debt. Overall, the changes offset the requirement for most of the accelerated depreciation included in the Draft Decision.
- Corrected an error in the interest cost calculations identified by Dublin Airport in its response to the Draft Decision.

12.3 Our broader approach remains unchanged from the Draft Decision. We adjust the regulatory settlements to enhance financeability, in order to protect against reasonable downsides. We do so by targeting Net Debt/EBITDA of less than 5.0x, which also ensures that the FFO/Net Debt ratio stays above 15%.

12.4 To achieve this, based on our draft approach to the other building blocks, we have provided for a significant degree of pre-funding of the allowed trigger projects, with 80% of the capital cost allowance to enter the price cap once the relevant project has received full planning permission and the project is on-site. We have also accelerated a small amount of future depreciation (€2.2m) into 2024. Accelerated depreciation is approximately €59m lower than proposed in the Draft Decision. Table 12.1 above shows the impact of this adjustment.

- 12.5 In our Draft Decision, we set out the rationale for assessing the financeability of the regulatory settlement. As explained in Section 5, although under the ANTA it is no longer a primary statutory requirement for us to enable daa to operate Dublin Airport in financially viable way, we continue to consider the question of financeability. Should there be a practical challenge in raising the level of debt implicit in the regulatory settlements, Dublin Airport's ability to progress the planned investment programme would be reduced which would not be in the interest of users.
- 12.6 As noted in the Draft Decision, we commissioned Centrus to advise on financeability by reviewing the initial building block pricing outcome and, if warranted, suggest adjustments to enhance the financeability of the price control. Centrus finalised its report, addressing submissions received. The final report is published alongside this document.
- 12.7 This section details, in turn:
- The CIP and resulting capital requirements;
 - An overview of the advice we received from Centrus, and how we have applied it;
 - Tests performed on the regulatory decision against downsides in the various Building Blocks;
 - Submissions received on the Draft Decision and our responses to them.

CIP and Capital Requirements

- 12.8 For a given Cost of Capital, the key driver of the forecast financial metrics is the allowed level of investment. We have allowed for an ambitious investment programme for 2023-2026 at Dublin Airport. Investment will need to be financed from a mix of debt and retained earnings. Equity investment, other than retained earnings, is not available to Dublin Airport.
- 12.9 We have modelled the profile of capital expenditure based on the allowed investment programme. This can be observed in the 'Capex Profile' tab of the model. As set out in Section 11, we have decided that most of these projects are allowed for in the base price cap. We assume that the remaining 'Core' allowances for this regulatory period are fully spent by 2026. We make a similar assumption in most cases for the commercial and capacity projects (with the exception of a number of the carparking projects). We assume the new Sustainability projects are fully delivered by 2027.
- 12.10 We have also decided that eight major projects will be triggered, rather than included in the base price cap. The major trigger projects are not expected to be delivered until 2026-2029. Much of the expenditure on these projects is thus not expected to occur until after the regulatory period. However, particularly for major projects, a material proportion of the expenditure will be required in this regulatory period if the projects progress to the planned timeline. Thus, it is necessary to account for this in our cash flow and financial ratio forecasts.
- 12.11 We do this by estimating an overall profile of expenditure relative to project completion for the trigger projects in the model. This is based on the project-level

profiles assumed by Dublin Airport, weighted by project allowance, which we also cross-checked with expenditure profiles for recently delivered major projects. The profile is laid out in Table 12.2 below, where Year ‘Y’ is the planned year of project completion.

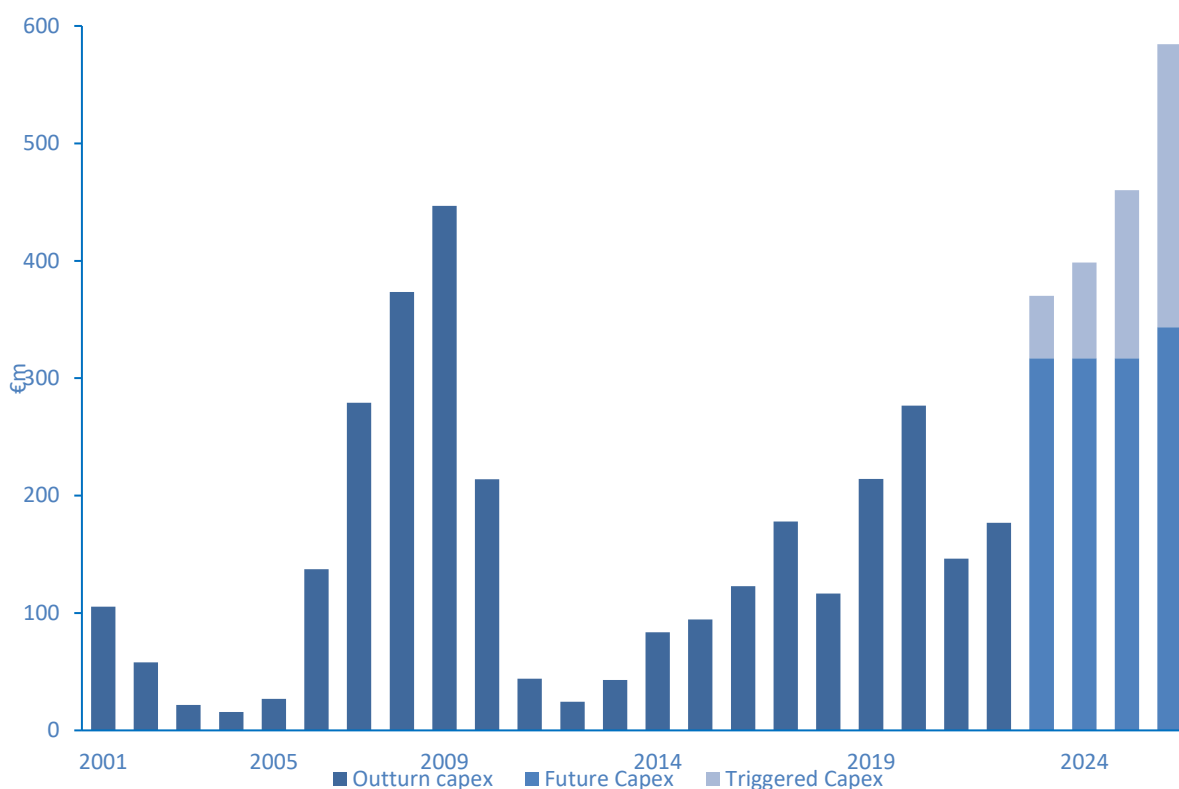
Table 12.2: Profile of Triggered Project Expenditure Relative to Project Completion

Y-3	Y-2	Y-1	Y	Y+1
18.5%	21.3%	28.6%	27%	4.5%

Source: CAR Calculations

12.12 Overall, this leads to a total anticipated Capex spend of €1.8bn in real terms over 2023-2026 (€2.1bn in nominal terms). Dublin Airport has not previously invested this level of capital for a sustained period. Only at the peak year of T2 construction, in 2009, was annual Capex close to the spending we have allowed over the 4 years, and significantly lower than allowed for in 2026.

Figure 12.1: Capital Expenditure, 2001-2026



Source: Dublin Airport, CAR Calculations. Real Prices.

12.13 The commonly referenced ‘lumpy’ nature of airport investments can be plainly observed in the above figure. This can lead to a mismatch in the short term between cash flow given that the depreciation profile for a major project usually allows for the recovery of associated costs over the full life of the asset, whereas Capex is linked to the delivery of the asset over a much shorter time period.

12.14 As set out above, we consider that there is significant uncertainty in relation to the

planned timelines for some projects proposed by Dublin Airport. Thus, while we allow for Capex increasing to almost €600m by 2026, we also use triggers for a number of projects. There is also a reasonable likelihood that not all other projects will progress to the planned timeline, due to factors such as a historically high level of planned Capex to be delivered within the timeframe, planning issues, or construction related delay, as outlined in the deliverability report. In that scenario, Capex may be lower than anticipated in the period.

12.15 The use of triggers gives certainty to the airport and investors on remuneration of projects. There is clear link between proceeding with a project and an increase in revenue delivered by the trigger to fund the capital costs.

Centrus' Assessment

12.16 Centrus' Approach to assessing financeability is laid out in detail in its report. The approach can be summarised as:

- Assessing the ratings methodologies and credit rating reports from S&P (who rate daa), and other ratings agencies.
- Considering the impact of events which have taken place since the original 2019 Determination, such as the Covid-19 pandemic, the global energy crisis, and other major macro events.
- Assessing the likely impact of various downsides on the forecasted financials and key financial ratios of the regulated entity.
- Examining market data and funding conditions for debt issuance.

12.17 Thus, a key aspect of the financeability analysis is to forecast the financial ratios for the regulated entity under the proposed regulatory settlements. In the model, we forecast and display the following ratios based on both real and nominal calculations:

- FFO/Net Debt
- Net Debt/EBITDA
- FFO/Cash Interest
- EBITDA/Interest
- Free Operating Cash Flow/Debt
- EBITDA margin

12.18 To forecast the ratios, we use our forecast of Dublin Airport's anticipated 2023 opening net debt position of €919m. We then model the cashflows expected to be generated under the proposed regulatory settlements. For the ratio analysis, we use nominal prices for both the Capex profile described above, and the price cap and building block inputs. These are converted from real prices using the IMF inflation forecasts for 2023 to 2026. We consider it appropriate to use nominal prices for this analysis, as this is how ratings agencies and investors would likely view the financials and key ratios.

12.19 We calculate the interest payments based on the nominal cost of debt, both embedded debt and the forecast new debt requirement. For the purposes of cashflow analysis,

this provides for a more realistic profile than using the real cost of debt and the notional gearing assumptions underpinning the WACC. This is relevant in particular to generating an accurate FFO/Net debt ratio, and also the other ratios in which interest is the denominator.

- 12.20 In line with Dublin Airport, we assume a tax rate of 12.5%. We assume that dividends are payable in the centreline scenario, in line with Dublin Airport's assumption. However, as in 2019 and in our Draft Decision, when considering reasonable downside scenarios, we assume that dividend payments would be suspended in line with the dividend policy, in order to protect Dublin Airport's target credit rating while enabling allowed investment in the business. That is, we assess that in the event of a material financial downside scenario arising, and Dublin Airport deciding to continue to invest at the level allowed for, dividend payments would not be made as well. That is not to suggest that we do not expect a dividend to be paid under any downside scenario; however we consider it would be disproportionate relative to the interests of airport users for us to model dividend payments in the event of both downside risk materialising and Dublin Airport continuing to invest the level of expenditure we have allowed for.
- 12.21 Given that Dublin Airport's investments are likely to be financed from a mix of debt and retained earnings only, we assess that negative net cash flow equates to a requirement to raise new debt.
- 12.22 As per the Draft Decision, we provided Centrus with our initial building block outcome based on the above modelling approach, including the 'A' triggers as discussed in Section 11, but with these set to remunerate 50% of capital costs. The model produced ratios as set out in Table 12.3.

Table 12.3: Financial Ratios under Initial Building Block outcome

	2023	2024	2025	2026
FFO/ Net Debt	17.1%	16.2%	15.5%	14.5%
Net Debt/EBITDA	4.8	5.03	5.17	5.47
FFO/cash interest	6.2	5.6	5.3	4.7
EBITDA/interest	7.5	6.9	6.5	6.0
FOCF/debt	-19.2%	-16.7%	-16.3%	-18.6%
EBITDA Margin	41.0%	43.1%	46.3%	49.6%

Source: CAR

- 12.23 Centrus's conclusions and advice are detailed in their report, but key among this was the conclusion that, in order to increase confidence, we may consider enabling a path to Dublin Airport achieving an FFO/ Net Debt above 15%, and a Net Debt / EBITDA of less than 5.0x.
- 12.24 Table 12.4 summarises the categorisation of cash flow/leverage analysis for low volatility companies.

Table 12.4: S&P Cash Flow/ Leverage Analysis Ratios for Low Volatility Companies

	FFO/debt (%)	Debt/EBITDA (x)	FFO/cash interest (x)	EBITDA/interest (x)
Minimal	35+	Less than 2	More than 8	More than 13
Modest	23-35	2-3	5-8	7-13
Intermediate	13-23	3-4	3-5	4-7
Significant	9-13	4-5	2-3	2.5-4
Aggressive	6-9	5-6	1.5-2	1.5-2.5
Highly Leveraged	Less than 6	Greater than 6	Less than 1.5	Less than 1.5

Source: S&P

12.25 As noted in the final Centrus report, the FFO / Cash Interest ratio for the period 2023-2025 and the EBITDA / Interest metric for 2023 are now commensurate with Modest/Intermediate rather than Minimal. This is linked to a significant increase in the estimated cost of new debt which we now allow (4.04% in nominal terms). Centrus notes that funders may positively assess that the ratios exhibit headroom above the credit rating downgrade thresholds. Centrus also notes that, if new debt is issued above the interest rate forecast by us, this increase in the interest rate will be captured during the next regulatory pricing period as part of our cost of embedded debt allowance.

Application of Centrus Advice

12.26 We follow Centrus' advice in relation to the financeability of the regulatory settlement.

12.27 We expect that the financial metrics generated by our building blocks approach would likely be consistent with retaining a rating of BBB+ as well as sufficient to access debt markets (i.e., FFO/Net Debt is in the mid-teens and Net Debt/EBITDA is less than 6.0x). However, we note Centrus' assessment that there is a risk that funder appetite at these levels over the regulatory may not persist and/or fully return to pre-pandemic levels. There is also a risk of company specific adverse scenarios, which may result in financial underperformance relative to our building block targets. To protect against potential downside scenarios, Centrus continues to advise us to enable a path to Dublin Airport achieving an FFO/ Net Debt above 15%, and a Net Debt / EBITDA of less than 5.0x.

12.28 We first assess the centreline scenario with dividends paid. If our building block targets were met (or exceeded) overall, we assess that Dublin Airport should be able to access the debt markets to raise the required level of debt while also paying a dividend. As per Table 12.3, the FFO/Net Debt ratio is in the mid-teens and Net Debt/EBITDA is less than 6.0x.

12.29 We then consider downside scenarios. Due to the proposed triggers in the price cap for the period, we consider two separate scenarios:

- A 'triggered' scenario where, as in the centreline scenario, the triggered projects progress to the planned timeline and Capex totals €1.8bn in real terms as described above.
- An 'untriggered' scenario, where the new triggered projects are delayed and Capex is correspondingly lower at €1.3bn (real).

12.30 That is, as per the centreline scenario, if the projects progress to the planned timeline, the price cap will increase due to the associated triggered allowances. On the other hand, should the triggered projects all be delayed such that none have commenced construction by 2026, the price cap would be lower but so too would capital expenditure. These scenarios are the two ends of a spectrum in relation to triggered project delivery and so other scenarios can be expected to fall within that spectrum (for example, if one triggered project was delayed and others were not, or all projects were delayed by one year).

12.31 As these are testing downside scenarios, we assume that dividends are not paid as outlined above. Table 12.5 sets out the ratios.

Table 12.5: Untriggered and Triggered centreline scenario ratios for downside testing

	2023	2024	2025	2026
Untriggered Scenario				
FFO: Net Debt	18.3%	19.0%	19.4%	20.3%
Net Debt/ EBITDA	4.6	4.4	4.3	4.2
Triggered Scenario				
FFO: Net Debt	17.1%	16.5%	16.0%	15.0%
Net Debt/ EBITDA	4.8	5.0	5.0	5.3

Source: CAR. Nominal Applied forecasts

12.32 There is now greater divergence between the scenarios relative to the Draft Decision, with the ratios in the 'untriggered' scenario now significantly improved because the level of Capex in the period is lower at €1.3bn across the four years (compared to €1.7bn in the Draft Decision). This is because of our decision to set triggers for three major projects as described in Section 11. The 'Untriggered' scenario now falls comfortably within the thresholds set out by Centrus.

12.33 In the Triggered scenario, while the FFO/Net Debt ratios align with Centrus' advice, being 15% or above, the Net Debt/EBITDA ratios is at or above 5.0x from 2024. We thus conclude that, based on Centrus' advice, an adjustment to the regulatory settlement to enhance its financeability is warranted.

12.34 As in the Draft Decision we consider how best to combine the quantum of capital cost remuneration included in the 'A' triggers with accelerated depreciation in order to achieve the target advised by Centrus. Notwithstanding updated building block inputs, the optimal 'A' trigger amount remains closely in line with the Draft Decision.

12.35 We have thus decided to retain our Draft Decision 'A' trigger value of 80% and make up the required difference with accelerated depreciation, which is laid out in the capital costs section. While we have not changed our approach, the resulting total amount of accelerated depreciation required is considerably lower than proposed in the Draft Decision, at just €2.2m in real prices.

12.36 As discussed further below, there are various reasons for this change, these include:

- The increase in inflation since the Draft Decision, together with our amended approach to indexation as described in Section 14. We use a real WACC and index the entire RAB (including all historic Capex) to inflation. This is the single biggest

factor offsetting the requirement for accelerated depreciation relative to the Draft Decision.

- The increase in the WACC generating a higher return.
- A number of smaller factors such as the increase in the opening RAB resulting from the correction of an error and a minor increase to HBS3 allowance, and Dublin Airport's improved 2023 opening net debt position.

12.37 Thus, with a combination of 80% of the capital costs of triggered projects entering the price cap the year after construction commences, and accelerated depreciation of €2.2m in 2024, Net Debt/EBITDA is 4.90 or less in each year under both the 'Triggered' and 'Untriggered' scenarios. This has the added benefit of further improving the key FFO: Net Debt ratio. It also improves the interest coverage ratios.

Table 12.6: Core Ratios, Targeting Net Debt/EBITDA of less than 4.90

	2023	2024	2025	2026
Untriggered Scenario				
FFO: Net Debt	18.3%	19.3%	19.5%	20.4%
Net Debt/ EBITDA	4.5	4.3	4.3	4.2
Triggered Scenario				
FFO: Net Debt	17.1%	16.6%	16.8%	16.4%
Net Debt/ EBITDA	4.8	4.9	4.8	4.9

Source: CAR. Nominal Applied Forecasts

12.38 As set out in Section 11, we assess that nearly all projects in the CIP are in the interests of airport users, provided that passenger numbers also broadly align with our forecasts. We consider that this increase in the regulated revenue stream to meet the target is not disproportionately high, relative to disallowing or reprofiling more of these projects.

12.39 We prefer accelerated depreciation to a methodology which would simply increase the price cap, because while the former also leads to higher Airport Charges in the current period, users should benefit from the infrastructure at relatively lower cost in future periods. However, relative to the Draft Decision, the decision on this point is of lesser magnitude, given that much less accelerated depreciation is required. We have accelerated €2.2m of depreciation into the period and to set the size of the 'A' triggers to 80% of capital costs to achieve more favourable financial ratios to underpin the rollout of the CIP.

Downside Scenarios

12.40 Achieving the above ratios requires Dublin Airport to achieve our targets on the building blocks, albeit on a net basis; for example, outperformance in relation to Commercial Revenues could be used to fund underperformance in Opex (as occurred over 2015-2019), and vice versa (as occurred over 2010-2014). We aim to set challenging but achievable targets.

12.41 Nonetheless, as noted by Centrus, there is a risk of company specific downsides which, if they were to materialise, may prevent Dublin Airport achieving the above ratios. We

have considered the sensitivity of the ratios to a number of different downsides, and how robust they are where we target Net Debt/EBITDA of less than 5. It is also important to consider the likelihood of such an event materialising, and the degree to which it is within the control of Dublin Airport and/or the effectiveness with which Dublin Airport could respond to it.

12.42 The model allows for testing of the following downsides:

- Passenger numbers overforecast
- Opex underforecast
- Commercial Revenue overforecast
- Capex overspend
- Cost of new debt increase

12.43 Of these downsides, we consider that passenger numbers not materialising as forecast is the most significant, with reference to impact, likelihood, and ability of Dublin Airport to control and/or respond. Table 12.7 sets out the impact of passenger numbers being 10% below our forecast in each year 2023-2026.

Table 12.7: Core Ratios, Passenger Traffic -10% in Each Year

	2023	2024	2025	2026
Untriggered Scenario				
FFO: Net Debt	15.8%	16.5%	16.4%	17.0%
Net Debt/ EBITDA	5.2	5.1	5.1	5.0
Triggered Scenario				
FFO: Net Debt	14.8%	14.2%	14.4%	14.1%
Net Debt/ EBITDA	5.5	5.7	5.6	5.6

Source: CAR. Nominal Applied Forecasts. Includes Year-on-Year compounding effect.

12.44 This assumes that Dublin Airport continues to spend the forecast level of Capex. Even under that assumption, given that we have targeted Net Debt/EBITDA of less than 5, FFO: Net Debt stays comfortably above 13%, while Net Debt/EBITDA stays below 6.0x in the event of a 10% traffic downside.

12.45 Such a scenario would likely be accompanied by a compounding reduction in some Commercial Revenues, but partially offsetting reduction in Opex would also be achievable. Furthermore, if passenger numbers were to be consistently below the forecasts in this manner, the immediate need for some of the projects in the CIP would reduce, thus reducing the debt requirement and improving the ratios. In this scenario, as we set out in the Draft Decision, the interests of future users would not be significantly harmed by postponing certain aspects of the CIP.

12.46 A 10% downside relating to Opex or Commercial Revenues has a similar impact to the passenger traffic scenario. However, we consider these scenarios to be both less likely and more within the control of Dublin Airport than a traffic downside, particularly on a net basis, i.e., when considering Opex, Commercial Revenues, and passenger numbers simultaneously.

- 12.47 We consider that a Capex overspend at programme level is unlikely, given that, as set out above, we consider that the timelines for delivering some of the projects remains ambitious. However, in the event of a 10% Capex overspend in each year 2023-2026, the FFO/Net Debt ratio stays above 14%, and Net Debt/EBITDA stays below 5.5x.
- 12.48 The impact of a cost of new debt increase is relatively small. For example, a further increase in the cost of new debt to even 6% sees the FFO/Net Debt ratio stay above 15%. The Net Debt/EBITDA metric is relatively insensitive to changes in interest costs.
- 12.49 As set out in Section 6, it should be noted that we are seeking to establish regulatory settlements which are robust and remain aligned with our Statutory Objectives in the context of reasonable changes relative to our forecast expectations. We are not seeking to make regulatory settlements which would be robust to all possible downside scenarios, such as the level of downside risk which materialised in 2020/2021.
- 12.50 As a result of the Covid-19 pandemic, it was necessary to re-open the 2019 Determination and revise the regulatory settlements for each of the years 2020-2024. Should such a scenario be repeated, we would expect a swift reaction from Dublin Airport to reduce costs and we would also expect that it may be necessary to carry out an Interim Review.

Submissions Received on the Draft Decision

Submissions received on the financeability adjustment

- 12.51 Emerald Airlines argues that airlines should not be required to pay for Capex projects until they are fully operational and available for use by airlines and their passengers.
- 12.52 Dublin Airport argues that the recurring requirement for a financeability adjustment suggests a problem with the other building block inputs. It states that this is the fourth straight Commission decision that has required a financeability adjustment, and that repeated financeability issues suggests that the WACC is understated, which is contributing to the need for adjustments.
- 12.53 Dublin Airport and ACI do not believe that accelerated depreciation is an appropriate mechanism for a financeability adjustment as it borrows from the future and as such is often discounted by borrowers and rating agencies. It requests that the Commission instead allow for a higher WACC, to correct the financeability issue without impacting future regulatory periods. ACI argues that a full building block review that provides adequate allowances would overcome the need for accelerated depreciation.
- 12.54 Dublin Airport believes that accelerated depreciation undermines the “users pay principles” and generates the need for a further adjustment in the future and that this RAB reduction will weaken financeability of future periods.
- 12.55 Dublin Airport is of the view that accelerated depreciation undermines the annuitized approach to depreciation in order to make the capital costs in each year of the asset life constant if the Cost of Capital remains the same. It believes that it is inconsistent that the Commission uses accelerated depreciation to address financeability issues

while at the same time using an approach based on annuities.

- 12.56 Ryanair is unclear why, given the change in the Statutory Objectives, we proposed to adjust depreciation to achieve what it believes are unnecessarily conservative financial ratios. It believes that this constitutes pre-funding and represents a transfer of value from current users to Dublin Airport. It believes that this is contrary to sound regulatory practice. It also argues accelerating depreciation to meet financial ratios is contrary to Thessaloniki Forum principles.
- 12.57 Ryanair argues that the Commission should not make financeability adjustments so that projects it has assessed as being in future users' interests can proceed. It believes this to be a breach of the Airport Charges Directive, which says investments decisions are between the Airport and Airport users and that it is not for the ISA to determine that a project is acceptable.
- 12.58 Ryanair rejects the argument that a financeability adjustment is needed due to the lumpy nature of airport investments, noting that the airport has experienced lumpy Capex in the past and that a period of reduced Capex now must begin while traffic recovers and grows into existing capacity.
- 12.59 Aer Lingus argues that improving the underlying building blocks should be a focus of the Commission in the Final Decision, rather than bringing forward revenues to address a problem that it believes is unlikely to occur. It also argues that the Commission should consider the trade-off between obtaining a higher investment grade credit rating and higher charges. It considers that this approach may lead to a slightly lower cost of debt, but also increases the likelihood of future financeability challenges. Aer Lingus nonetheless supports the proposed pre-funding approach with the 'A' triggers.
- 12.60 IATA states that if a financeability adjustment is unavoidable then it should be in the form of accelerated depreciation.
- 12.61 Dublin Airport is disappointed to see the return of triggers and believes this will hamper the delivery and development of infrastructure. It notes that it understands the drivers behind the triggers but proposes instead that 20% of the remuneration should be funded from the start of the period, with the Type A trigger being changed to 60% and the Type B trigger remaining at 20%. It states that the US Preclearance project should be removed from the list of triggers, as it is not subject to the infrastructure application planning process. It also believes that the underpass should not be triggered as it has a separate planning process.
- 12.62 IATA supports the use of Capex triggers. However, it states that remuneration at 80% when the planning permission is received is not reasonable and violates ICAO's cost-relatedness principle. It argues that only assets in use should enter the RAB and be remunerated and that all financing options should be exhausted before resorting to prefunding.

Commission Response

- 12.63 In response to Emerald Airlines and Ryanair, we note that ideally, we aim to align

capital cost remuneration to the timelines of project delivery. However, we consider that sticking to this principle in all circumstances is not always proportionate, and some degree of prefunding may be warranted to reasonably enable Dublin Airport to deliver the CIP, which is in the interests of users as set out above.

- 12.64 In response to ACI and Dublin Airport we note that the accelerated depreciation required is now just €2.2m. The requirement is linked to the size of the investment programme relative to the pre-existing RAB. The result of accelerating depreciation is that the RAB will be slightly smaller at the start of the next period. This simply means that Dublin Airport is remunerated in relation to €2.2m of depreciation immediately, rather than over the full asset life. Over the next period, we expect the RAB to grow overall, given the level of investment we have allowed.
- 12.65 We note that very little accelerated depreciation is now needed, and that if we used straightline depreciation there would be none needed. The financial ratios of future decisions will be determined by a range of different factors and can be dealt with appropriately at the time of those decisions. We agree with Dublin Airport that accelerating depreciation partly reverses our general approach (since 2009) of using annuities to calculate capital costs. Our 'baseline' approach is still to use annuities. That does not rule out the possibility of making a specific adjustment to that approach, where we consider such an adjustment to be warranted.
- 12.66 We note that there was no financeability adjustment in the 2014 Determination, and this decision relates in part to the same period as the original 2019 Determination, and is enabling, largely, the same CIP.
- 12.67 In response to Ryanair, as described above we assess that enabling the funding of the CIP better aligns with the interests of current and future users, compared to not enabling it. We assess that a high level of capital investment, relative to historic levels, is in the interests of current and future airport users, to prevent future capacity constraints or poor Quality of Service.
- 12.68 In response to Aer Lingus, we note that the building blocks are calibrated to balance setting ambitious targets for the airport to achieve, while also ensuring the provision of a high Quality of Service.
- 12.69 We note IATA's support for accelerated depreciation in the event that a financeability adjustment is required.
- 12.70 The main advantage of reprofiling revenues through accelerated depreciation, from an airport user perspective, is that the next period will start with a lower RAB, all else being equal. Therefore, while Airport Charges increase in the current period, users would benefit from the infrastructure at lower cost in future periods than would be the case if we chose a methodology which would simply increase the price cap. While we confirm our decision to reprofile depreciation, the amount brought forward is considerably lower than proposed in the Draft Decision at €2.2m. This will enable the airport to achieve favourable financial ratios and applies only to the price cap in 2024 as this is now the only year in which when the adjustment is needed.
- 12.71 This is approximately €59m less than was forecast in the Draft Decision. There are

various reasons for this change, the most impactful being the increase in inflation since the Draft Decision, as the entire RAB (including all historic Capex) will now be inflated by 14% next year instead of 6%, with future inflation then continuing to compound this adjustment. This is not the only contributor, however, as the increase in the WACC accounts for approximately €7m, with the remainder resulting from a correction to an error in our opening RAB calculations, Dublin Airports improved 2023 opening net debt position, and a minor increase to HBS3 allowance.

12.72 We do not accept the need for 20% initial funding for trigger projects, or that not providing for this will hamper delivery of the programme. We do not provide for pre-funding beyond the level which we assess to be required, either in terms of timing (i.e. no earlier than is required) or amount (no more prefunding than is required). There is no uncertainty over remuneration once the A and B milestones are met.

12.73 In response to IATA, we note that the A triggers do constitute a significant degree of pre-funding. While we agree that ideally the remuneration of an allowed project would align with the timing of delivery, in the absence of a degree of pre-funding, we would not be confident in the ability of Dublin Airport to fully finance the planned investment programme.

Submissions received on Dublin Airport's Financial Metrics

12.74 Joseph Ryan notes that Dublin Airport's debt has risen significantly in recent years. He believes that we should not push the airport to reach its upper borrowing limit by keeping price caps low.

12.75 Joseph Ryan asserts that we should target a zero net debt strategy for Dublin Airport in the medium to long term and allow it substantial cash reserves to deal with any downturns or crises.

12.76 Dublin Airport argues that given its increased debt levels, it is not appropriate to apply the same financial ratios in 2022 as were applied in 2019. It believes that a more robust and careful approach is required as debt levels are now much higher (and will continue to rise across the period) and because business risk is increased due to Covid-19. It notes the current context of higher interest rates, and the increased burden that construction inflation and sustainability requirements will have over the upcoming regulatory period.

12.77 Dublin Airport argues that its financial position has driven credit metrics to be out of tolerance levels for the "Intermediate" Financial Risk Profile (FRP) category that is required for the target standalone credit profile of BBB+ with its Net Debt/EBITDA forecast to be at 5.9x in December 2022.

12.78 Dublin Airport argues that the Commission may take reassurance from its ability to survive the post 2010 period, but that this is unrealistic. It argues that the airport was in a different situation in 2010 compared to where it is now, as no new debt was required between 2009 and 2016. This is no longer the case, as the current investment plan and existing debt will need to be refinanced in 2027 and 2031 at the latest.

12.79 Dublin Airport argues that there is no certainty of access to the market. It notes that

the investment grade market has remained volatile, with periods where the market has been closed even to the strongest borrowers and that this volatility is expected to remain.

- 12.80 Dublin Airport argues that it will enter 2023 with passenger levels approximately 20% lower than they were in 2019, against a backdrop of much weaker economic and consumer confidence than in 2019. It believes that the Decision must ensure that access to debt markets remains open to it by targeting a BBB+ credit rating with the correct ratios and thresholds as per rating agencies' guidance and by running sensitivity analysis which takes into account the current market trends and sentiments.
- 12.81 Dublin Airport request that a specific adjustment be included in the opening RAB for 2023 to allow for recovery of a portion of revenues lost to Covid-19 (2020-2022).
- 12.82 Dublin Airport recommends targeting a <4.0x Net Debt / EBITDA metric to protect the overall financeability of Dublin Airport against future increases in interest rates and aligns with peer airport targets which, it argues, have an average metric of 3.5x. It states that we have used an out-of-date nominal interest rate and applied an incorrect calculation for nominal interest within the financial model.
- 12.83 Dublin Airport argues that our sensitivity analysis is too simplistic and does not adequately address the risks that it identifies. It argues that a financeability assessment should not be applied solely to one financial variable at a time and should not be applied to the regulator's hypothetical version of the regulated entity. It also argues that we do not provide clear details of the sensitivity analysis we carried out. It has carried out a multivariable Monte Carlo risk assessment that shows that the draft pricing decision does not meet the financeability requirements in the mean scenario, and that pricing in line with the airport's original proposition is required to ensure a financeable price determination.
- 12.84 Ryanair argues that a number of airports have been able to raise debt with financial ratios weaker than that proposed by the Commission. It believes that our view on financial ratios is too narrow and needs to be adjusted for a post-Covid period.
- 12.85 Ryanair notes that we continue to allow for dividends in the base case at 30% of estimated post-tax profits. It argues that this represents an excessive transfer from users to the State and that dividends should remain suspended until the market recovery is assured, which would mean that accelerated depreciation is not needed.
- 12.86 Aer Lingus believes that the growth in RAB over the period of the review is funded by debt and that this is inappropriate as higher net debt worsens the ratios and creates a greater financeability challenge. It sees no reason why customers should face higher charges because Dublin Airport is unwilling to use equity finance.
- 12.87 IATA argues that our approach indicates that Capex financing must occur either through debt or retained earnings, and that equity injection is not considered at all. It believes that this is not reflective of what would happen in a competitive environment, especially as our approach assumes a dividend pay-out in the baseline scenario.

Commission Response

- 12.88 In response to Joseph Ryan and Aer Lingus, we noted in Section 6 that Dublin Airport would need to raise new debt to finance the full Capex programme, which we have assessed to be the interests of users. We set price caps aimed at enabling the airport to achieve financial ratios at least in line with a BBB+ credit rating. We follow Centrus' advice in doing so, for the reasons set out in Centrus' report. Thus we do not take the more conservative approach advocated by Dublin Airport, nor the more aggressive one advocated by Ryanair. The Final Centrus report addresses submissions from stakeholders on these points, but the final advice remains in line with the advice provided for the Draft Decision and also in 2019.
- 12.89 In response to Dublin Airport, we note that our financeability assessment accounts for forecast net debt levels and interest costs. We also note that Dublin Airport is fully protected against inflation risk, and that the Commission has proven that it is willing to reopen a determination when necessary.
- 12.90 Regarding Dublin Airport's current financial position, we expect this to have improved significantly by the end of 2022. We are now forecasting a Net Debt/EBITDA ratio of 5.0x and an FFO/Net Debt Ratio of 16.5% for 2022. We forecast passenger levels for 2023 at 4% below 2019 levels, in contrast to the 20% difference suggested by Dublin Airport, which is now outdated.
- 12.91 In response to Dublin Airport's submission on our draft interest rates calculations, based on more recent data we have updated the nominal interest rate in the model to over 4% and corrected the calculation error referenced by Dublin Airport.
- 12.92 Regarding a RAB adjustment, we note that in the first Interim Review of the 2019 Determination we made a RAB adjustment in the form of suspending the clawback of capital costs associated with unspent Capex in 2020 or 2021, which will benefit Dublin Airport over the period 2023-2026. We then made a similar adjustment in relation to 2022. We do not see that making a further RAB adjustment, which would further reallocate volume risk over the period 2020-2022, is required, or that it would be in the interests of airport users.
- 12.93 We do not agree with the Monte Carlo simulation approach to testing downside scenarios set out by Dublin Airport, which we do not believe provides for a reasonable downside testing analysis. Both we and Centrus have tested a range of downsides as described above. We note that Dublin Airport has used understated or outdated inputs for variables such as the CPI adjustment (even before our acceptance of Dublin Airport's revised approach to CPI indexation set out in Section 14) and passenger numbers. It also uses an Opex forecast which is significantly higher than the achievably efficient level forecast by us, as set out in Section 8.
- 12.94 In particular, we do not expect the airport to view any of the building blocks and the factors relating to its overall financial performance independently of each other and of the prevailing circumstances. For example, if passenger levels fall, we expect the airport to respond where necessary by, for example, reducing Capex.
- 12.95 In relation to the submission from Ryanair on dividend policy, we consider that

dividends should be payable in the base case, in line with Government policy that dividends be paid at a rate of 30% of post-tax profits provided the airport is still able to maintain its BBB+ credit rating. However, as in 2019, when considering reasonable downside scenarios, we assume that dividend payments would be suspended in a downside scenario to protect Dublin Airport's target credit rating while enabling allowed investment in the business.

12.96 We note that the 2009 Ministerial Direction set out that it is Government policy for daa operate the airport on a commercial basis without recourse to exchequer funding or an equity injection by the State.

General Comments received on the Draft Decision

12.97 Ryanair supports the approach to depreciation being based on annuities rather than a straight-line approach, but believes that a unit-based approach to depreciation would be appropriate for the capital projects delivering long term capacity well above the capacity required during the period to 2026.

12.98 Ryanair expresses concern that the Commission has allowed non-triggered Capex to enter the RAB on an evenly spread basis over the 4-year regulatory period regardless of whether the amounts will be spent evenly over the period, which penalises users by increasing charges in the early years. It argues that as Capex is projected to be higher in later years, the timing of when the additional Capex enters the RAB should reflect the expected expenditure profile.

Commission Response

12.99 We have not adopted a unit-based approach to depreciation. We see some merit in this approach and have used it in the past for the initial years of remuneration of Terminal 2. However, this approach is only appropriate in certain circumstances, in particular where there are no financeability concerns. If we were to use unitisation, this would be offset by a greater requirement to adjust for financeability in line with Centrus' advice.

12.100 We can confirm that the profile of forecast expenditure on untriggered projects aligns with the profile of RAB entry for those same projects.

13. Quality of Service

- 13.1 The Quality of Service (QoS) system is in place to incentivise an appropriate balance between providing airport services at an efficient cost and meeting a suitable service quality for airport users (passengers and airlines).
- 13.2 Originally implemented in 2009, the QoS system incentivises Dublin Airport to maintain and improve its performance in relation to metrics which are important to airport users, through both financial and reputational incentives.
- 13.3 As part of the original 2019 Determination, we reviewed the existing 12 measures to assess whether they were still in line with airport user requirements. Each measure had a defined level of revenue at risk, with performance assessed and reported on quarterly.
- 13.4 A number of changes were made in 2019 to align with the desired outcomes of the QoS system. Performance against the targets is regularly published.⁶⁸ A key development was the establishment of a Passenger Advisory Group (PAG), consisting of members from a range of organisations spanning the diversity of passengers at Dublin Airport. We have continued to engage with the PAG as part of the process leading to this decision. Since the publication of the Issues Paper, we have held three meetings of the PAG to discuss our thinking on the QoS system to apply for 2023-2026. Notes from these meetings are published on the PAG page on our website.⁶⁹ In this review we are proposing some adjustments to certain metrics, based primarily on feedback from the PAG and some suggestions from Dublin Airport.
- 13.5 Following the onset of Covid-19, we suspended financial adjustments associated with service quality breaches for 2020 and 2021. Reporting and publication of performance continued, where possible. For 2022, a limited scope financial adjustment system was reintroduced.
- 13.6 In the Issues Paper, we proposed that a broader QoS scheme would be reinstated from 2023. This would draw on the scheme outlined in the 2019 Determination, adjusted where appropriate for developments following the pandemic. The Final Decision, as set out below, remains in line with that approach. The QoS scheme can broadly be split into four categories which are addressed in turn:
- Wait times at central search (security).
 - Wait times for passengers requiring additional assistance (PRMs).
 - Passenger satisfaction scores, based on survey data on a range of aspects of the airport experience.
 - Asset uptime and availability.
- 13.7 In summary, we proposed the following in the Draft Decision:
- The targets for queue times at security will be in line with the original 2019

⁶⁸ <https://www.aviationreg.ie/regulation-of-airport-charges-dublin-airport/quality-of-service-.820.html>

⁶⁹ <https://www.aviationreg.ie/regulation-of-airport-charges-dublin-airport/passenger-advisory-group.874.html>

Determination.

- The metric for PRMs will be adjusted to better capture the full PRM experience. The targets will be updated to reflect the up-to-date SLA between Dublin Airport and the service provider.
- The metrics and targets for passenger satisfaction scores will in most cases be aligned with the 2019 Determination, with some minor adjustments. As a change from 2019, we proposed that the system will also include bonuses for high levels of performance in relation to passenger satisfaction, rather than being solely a rebate-based system.
- Asset uptime metrics will be in line with the original 2019 Determination, with some minor adjustments to the targets based on recent performance.

13.8 Our Final Decision varies from the Draft Decision in the following ways:

- We implement a lower bound for the sample size required for the new PRM metric target to apply. This measures the time taken for PRMs to be assisted from an external campus point to the terminal.
- The methodology used to measure Ground Transport Upon Arrival will now involve an in-person survey as well as an online survey
- We have decided to implement a glidepath to achieve the target proposed in the Draft Decision for the metric Ground Transport Upon Arrival.
- The target of 99% uptime for AVDGS and FEGP will be delayed until Q3 2023.

13.9 Otherwise, our Final Decision is in line with our Draft Decision, as laid out below.

Security Queue Times

Draft Decision

13.10 In the Draft Decision, we proposed to retain the targets and financial adjustments for security queue times as set out in the original 2019 Determination. Queue times are a central element of the passenger experience and therefore it is important that there is an appropriate incentive in place to resource this function at a level which will deliver satisfactory performance.

Table 13.1: Maximum Security Queue Time Target Proposals for 2023-2026

Draft Target	Price Cap at risk
Breach if the security queue is:	Daily
less than 20 minutes for less than 70% of the time but less than 30 minutes 100% of the time	-€0.005
equal to or greater than 30 minutes but less than 45 minutes , at any time	-€0.01
equal to or greater than 45 minutes , at any time	-€0.02

Source: CAR

Submissions on Security Queue Times

13.11 Dublin Airport acknowledges the lengthy queue times experienced by passengers

throughout the summer period this year. It states that 29 May 2022 was the most impacted day and from this point the airport ramped up resources for security which included the deployment of a task force made up of administrative and management personnel taking on roles in the security process such as divestment, queue management and hygiene tasks. It also began a significant recruitment drive for security officers. Finally, an agreement was put in place with the Irish Defence Forces to have army personnel on standby if assistance was required. It notes that from May onwards, security queue times improved though remained volatile.

- 13.12 Dublin Airport further states that the onboarding of new personnel has challenges, with experienced officers being more efficient. Dublin Airport also states that the implementation of the new C3 security scanners will present challenges as staff and passengers will need time to adjust to the new technology and procedures involved. Based on the above points, Dublin Airport suggests that the target should be less than 30 minutes 95% of the time rather than 100%, and that it should be less than 30 minutes 95% of the time.
- 13.13 Emerald Airlines states that the performance of Dublin Airport in relation to security has caused reputational damage for the airline in its start-up phase.
- 13.14 Ryanair notes the importance of imposing penalties when targets are not met. It claims that the recent failure to impose penalties for security queue times has led to users losing confidence in the QoS regime, which we can restore by implementing an effective regime for 2023-2026.

Final Decision

- 13.15 There are no changes from the Draft Decision for security queue times. As stated in the Draft Decision, queue times are a central element of the passenger experience and therefore it is important that there is an appropriate incentive in place to resource at a level which will deliver satisfactory performance. As in 2019, we do not agree with Dublin Airport's proposal to lower the percentage of the time that queues are required to be a maximum 30 minutes. This change would represent a deterioration in service quality for passengers compared to the standard set in 2019, and while the airport has (like other airports) faced challenges in managing queues in 2022 for a variety of reasons, we would expect that it returns to the previous high performance in this area by 2023. This is critical as we assess that security queue times are a key driver of satisfaction for passengers.
- 13.16 The submissions by airlines mainly relate to the underperformance in 2022. We agree, as acknowledged by Dublin Airport, that performance in the first 6-7 months of 2022 fell far short of the expected standard, although we note it has improved significantly in recent months. Full rebates are now being reinstated for 2023. We believe that this will be effective in incentivising appropriate levels of resourcing to enable achievement of targets as we enter 2023.
- 13.17 In relation to Dublin Airport's claim that the introduction of the C3 scanners will cause difficulties in achieving the security targets, this is something we would expect it to be able to manage as the scanners are phased in. This is not something we would expect would warrant a diminution in service provision.

13.18 In its operating costs forecast, CEPA/TA has considered the queue time targets to determine the level of staffing required. The forecasts are based on a queue time of 10 minutes which allows a degree of headroom relative to the security queue targets in place. Therefore, the Opex allowances are consistent with meeting the service quality standard.

Wait Times for Passengers with Reduced Mobility (PRMs)

Draft Decision

13.19 In the Draft Decision, consistent with a change we already made for 2022, we proposed to adjust the targets for pre-advised and non-pre-advised departing and arriving passengers to align them with the targets defined in the SLA in place with OCS.

13.20 We also proposed to split the arriving and departing metrics into separate price cap adjustments to maintain independent incentives in the event of underperformance on either one. We proposed (based on a suggestion of the PAG) to adjust the departing passenger metric to encompass both assistance from the terminal reception point, and also assistance from an external point on campus to the terminal reception point.

13.21 Finally, we proposed a backstop target for pre-advised departing passengers, in the context of underperformance seen in 2022 relative to the SLA. This would maintain a secondary, escalated, incentive to keep performance at least in line with 2022 levels, in the event that the SLA target continues to prove challenging for this subset in particular.

Table 13.2: Maximum wait time for assistance for 2023-2026

Draft Target	Pre-advised	Non pre-advised	Price cap at risk
If a passenger presents for assistance at an external point within the airport campus they should be assisted to the appropriate terminal reception point as follows:	98% within 10 min	98% within 20 min	Annually
Breach if the percentage of passengers assisted from the terminal reception point is lower than the targets as follows:	95% within 15 min 98% within 20 min	95% within 20 min 98% within 30 min	-€0.01
Breach if the percentage of passengers that are assisted from aircraft to terminal holding point onwards is lower than the targets as follows:	93% within 10 min 98% within 15 min	93% within 15 min 98% within 20 min	Annually -€0.01
Backstop Target			
Breach if the percentage of passengers assisted from the terminal reception point is lower than the targets as follows:	90% within 15 minutes 91% within 20 minutes	None	Annually -€0.02

Source: CAR.

Submissions on Wait Times for Passengers with Reduced Mobility

13.22 Dublin Airport states that it recognises that the PRM SLA targets are challenging and there are penalties in place if OCS does not meet these standards. It states, however,

that these penalties are considerably lesser than those proposed in the Draft Decision. It further states that the challenges such as resource constraints faced by OCS have not been considered by the Commission in this decision.

- 13.23 In relation to the discussion in the Draft Decision on the stronger performance for non-pre-advised relative to pre-advised PRMs, Dublin Airport states that due to the unconventional nature of summer operations in 2022, the priority was that PRMs would not miss flights.
- 13.24 Concerning the target for the journey from an external point on campus to within the terminal, Dublin Airport notes that there is considerably lower levels of assistance requests from external points as a proportion of total PRMs. In July 2022, the number of passengers requesting assistance from external points was 0.14% of total requests. Due to this, it states that the chance of failure to meet targets is significantly higher and asks that discretion is demonstrated by the Commission in relation to this metric.
- 13.25 Dublin Airport further states that we failed to consider the developing landscape of the campus and how this may present operational obstacles for OCS.
- 13.26 Notwithstanding the above, Dublin Airport proposes no changes to the PRM metrics relative to those proposed in the Draft Decision.

Final Decision

- 13.27 We have decided to implement the PRM targets as proposed in the Draft Decision. There have been no changes specifically proposed by stakeholders, and the reasoning for these targets in the Draft Decision remains unchanged.
- 13.28 In relation to the comparison between the total rebate that would be payable by OCS to Dublin Airport, and the rebate payable by Dublin Airport in the event of underperformance, the latter will depend on passenger numbers. We do not see any compelling reason to reduce the rebates below the levels set out in the 2019 Determination. It is important that the rebate level provides a material incentive to meet the target.
- 13.29 We acknowledge the approach to triaging that led to the underperformance for pre-advised PRMs given the circumstances of summer 2022 and believe that this was a reasonable approach to take given the circumstances. We would expect that this trend will normalise as we move into 2023, as if this continues it may disincentivise pre-notification which could, in turn, make the effective planning of services for PRMs more difficult for OCS, leading to further delays for passengers.
- 13.30 In relation to the introduction of the new PRM target that measures the time taken for a PRM to be met at an external campus point and escorted to the terminal, Dublin Airport has pointed out that a very small percentage of PRMs use this service, approximately 0.14% in July 2022, which may affect the likeliness of failure. However, the metric is to be measured annually, not monthly, thus increasing the sample size. Furthermore, with the exception of May 2022, when there were operational issues experienced more broadly at the airport, the data shows that the airport is performing well in this area.

13.31 However, we have decided to implement a lower bound minimum sample size of 0.1% for this target to activate. This will require that PRMs using this service make up at least 0.1% of total PRMs for the target to apply, and should alleviate concerns regarding a disproportionate outcome in the event of a failure to meet the target for a very small number of PRMs.

Passenger Satisfaction Surveys

Draft Decision

13.32 In the Draft Decision, we proposed to maintain most of the passenger satisfaction measures implemented in 2019 generally unchanged, including associated financial adjustments and targets. The proposed metrics can be seen in Table 13.3 below.

13.33 We proposed to accept Dublin Airport's suggestion to change the 'walking distance' metric to 'ease of movement'. We accepted that ease of movement is a factor which the airport can influence more readily than walking distance and, in the context of Covid-19, it better captures the themes of personal space and social distancing. It encompasses a broader picture of moving through the airport than 'walking distance'.

13.34 Dublin Airport has been exploring alternative methodologies for 'Ground Transport on Arrival' as there are issues collecting data in person as passengers are focused on leaving the airport and do not generally dwell. There was a previous suggestion of an online survey which we suggested would be appropriate. We proposed that the target for 'Ground Transport on Arrival' is set at 8.0 for 2023, and 8.5 for 2024-2026. This will allow an initial adjustment period for the first year while the new measurement methodology is established.

13.35 We proposed not to implement a financial adjustment for the 'Sense of Safety for my Health' measure. We were not convinced that an additional financial adjustment for this metric would add value to the current QoS scheme. We will continue to monitor and report on this measure over the period.

Table 13.3: Proposed Passenger Satisfaction Measures and targets from Draft Decision

Metric	Departing	Departing with Assistance	Arriving	Transfer	Draft Target	Price cap at risk
Passenger Care						
Additional Assistance		Y			9.0	Annual -€0.01
Helpfulness of security staff	Y	Y			8.5	Quarterly -€0.01
Helpfulness of airport staff	Y	Y			8.5	Quarterly -€0.01
Cleanliness of terminal	Y	Y	Y		8.5	Quarterly -€0.01
Overall satisfaction	Y	Y	Y	Y	8.5	Quarterly -€0.01
Cleanliness of toilets	Y	Y	Y		8.5	Quarterly -€0.01
Departure gates	Y	Y			8.0	Quarterly -€0.01

Ease of Movement	Y	Y	Y		8.0	Quarterly -€0.01
Passenger information						
Finding your way around	Y	Y	Y	Y	8.5	Quarterly -€0.01
Flight information screens	Y	Y		Y	8.5	Quarterly -€0.01
Ground transport information on arrival			Y		2023 - 8.0 2024 to 2026 – 8.5	Quarterly -€0.01
Passenger facilities and services						
Facilities for Passengers who require additional assistance		Y			9.0	Quarterly -€0.01
Availability of trolleys	Y	Y	Y		8.5	Quarterly -€0.01
Satisfaction with Wi-Fi	Y	Y	Y		8.5	Quarterly -€0.01
Sense of safety for my health	Y	Y	Y		No target	None

Source: CAR. The maximum score for each metric is 10. Note that the rebates apply if there is a failure to achieve a target for any of the categories: departing, departing with assistance, arriving, and transfer passenger.

- 13.36 The PAG proposed that the target for cleanliness of toilets, previously 8.0, be increased, given the importance of this metric to passengers. Based on this suggestion we proposed a target of 8.5 in the Draft Decision.
- 13.37 We also suggested that the passenger satisfaction survey metrics may be suitable for a bonus for outperformance, with the same quantum of financial adjustment (i.e. €0.01 per relevant time period for each metric) when the bonus threshold is exceeded. This could encourage service levels to rise permanently over time, and in the future potentially sets higher service level expectations, ultimately benefitting the passenger. The bonus target levels set out in the Draft Decision were proposed as a step above previous high levels of performance, where data was available, and in other cases were an increment over the lower targets defined in the decision.
- 13.38 Table 13.4 below shows, for each measure, the target threshold, below which a reduction in the price cap is triggered, and also indicated the target bonus threshold, above which a price cap bonus is triggered.

Table 13.4: Passenger Satisfaction Measures – Proposed Bonus thresholds

Metric	Draft Target	Proposed Bonus Target	Financial Adjustment (+/-)
Passenger care			
Additional Assistance	9.0	9.5	Annual €0.01
Helpfulness of security staff	8.5	9.3	Quarterly €0.01
Helpfulness of airport staff	8.5	9.3	Quarterly €0.01
Cleanliness of terminal	8.5	9.2	Quarterly €0.01

Overall satisfaction	8.5	9.3	Quarterly €0.01
Cleanliness of toilets	8.5	9.2	Quarterly €0.01
Satisfaction with Departure gates	8.0	9.0	Quarterly €0.01
Ease of Movement	8.0	9.0	Quarterly €0.01
Passenger Information			
Finding your way around	8.5	9.0	Quarterly €0.01
Flight information screens	8.5	9.0	Quarterly €0.01
Ground transport information on arrival	2023 - 8.0 2024-2026 – 8.5	2023 - 8.5 2024-2026 – 9.0	Quarterly €0.01
Passenger Facilities and Services			
Facilities for Passengers who require additional assistance	9.0	9.5	Quarterly €0.01
Availability of trolleys	8.5	9.0	Quarterly €0.01
Satisfaction with Wi-Fi	8.5	9.0	Quarterly €0.01
Sense of safety for my health	No target	No target	Quarterly €0.00

Source: CAR

13.39 We proposed that the overall cap on the survey metric financial adjustments of €0.15, as established in 2019, is retained. This is subdivided as follows:

- Up to €0.07 for Passenger Care
- Up to €0.04 for Passenger Information
- Up to €0.04 for Passenger Facilities and Services

Submissions on Passenger Satisfaction

13.40 Dublin Airport welcomes the introduction of the ‘Ease of Movement’ metric in replacement of the ‘Walking Distance’ target, which it considers to be a superior measure and is highlighted as a key factor in the airport’s passenger satisfaction analysis. It states that it supports a high target for cleanliness of toilets and washrooms, but believes that a target of 8.5 in 2023 is unrealistic as the median score for the past 10 years has been 8.4. It suggests maintaining the target at current levels for 2023 with a review in 2024.

13.41 Dublin Airport proposes that the rebate associated with ‘Facilities for Passengers who require additional assistance’ is changed to an annual rebate rather than quarterly to align with the other PRM metrics.

13.42 In relation to the proposed target for Ground Transport Information Upon Arrival, Dublin Airport supports the target of 8.0 for 2023 but questions the increase to 8.5 in 2024. It states that this represents a considerable increase and is concerned that factors outside of its control may affect this metric. It suggests that the standards

should be raised when historical data is available for this metric as it is currently unsure of the achievability of the target. It proposes that the target for 2024 is finalised at a later date when it possible to review the performance relative to the target.

- 13.43 Dublin Airport suggests a dual approach to the measurement of the ‘Ground Transport Upon Arrival’ metric, which would include an online survey and a physical on campus survey, with a quality verification process. The online survey would be presented to passengers from the previous 2 months to ensure recency of experience. The on-campus survey would be located at arrival locations in both terminals and would be specifically aimed at non-Irish residents as they are less likely to participate in online surveys. It aims to supply quarterly results for this metric.
- 13.44 Dublin Airport states that there are numerous surveys which have shown passengers willingness to pay for better service quality at the airport. It particularly highlights the NERA Willingness to Pay Report commissioned by Dublin Airport during the 2014 Determination which assessed that passengers were willing to pay certain amounts for tangible improvements, though it varies depending on airline, reason for travel and party type etc.⁷⁰
- 13.45 Emerald Airlines states that the performance of Dublin Airport in relation to cleanliness has caused reputational damage for Emerald in their start-up phase. It supports the proposal to increase the cleanliness rebate target to 8.5.
- 13.46 Aer Lingus and Ryanair do not support bonuses. They consider that these would amount to a double charge on airport users for the additional operating costs required to overdeliver on QoS targets, and for the bonus payment. IATA, and Emerald Airlines similarly oppose bonuses. Emerald states that it does not agree with the use of bonuses at present due to ‘*poor*’ performance, but that bonuses should be applied after 24 months when the airport has demonstrated consistent outperformance of the target levels.
- 13.47 Ryanair claims that any assumption by us that passengers will value the ‘*over delivery*’, and therefore airlines can recover this cost, is inaccurate. It claims that airlines will be unable to recover this cost as the increased service quality would not be evident at the time of booking and further, there is no evidence that passengers are willing to pay more for a higher quality airport experience, but that given that Dublin Airport is a monopoly they will have no other choice. It refers to the IATA Level of Service concept which suggests that bonuses are equivalent to rewarding an airport for over-design which is not something that users should be expected to pay for.
- 13.48 Dublin Airport supports the introduction of bonuses. However, it suggests lower targets for several of the metrics. It suggests that these be set based on its highest performance for each metric to date. It also suggests lower targets for several of the survey metrics. These proposed changes are displayed in the table below.

⁷⁰ Available here: <https://www.aviationreg.ie/fileupload/2014ddresponses/2014-07-31%20DAA%20appendices.pdf>

Table 13.5: Passenger Satisfaction Measures – Dublin Airport’s Proposed Targets/Bonuses

Metric	Proposed Target	Proposed Bonus Target
Passenger care		
Additional Assistance	8.9(-0.1)	9.3(-0.2)
Helpfulness of security staff	8.5	9.1(-0.2)
Helpfulness of airport staff	8.5	9.2(-0.1)
Cleanliness of terminal	8.5	9.0(-0.2)
Overall satisfaction	8.3(-0.2)	8.7(-0.6)
Cleanliness of toilets	8.1(-0.4)	8.6(-0.6)
Satisfaction with Departure gates	8.0	8.7(-0.3)
Ease of Movement	8.0	8.9(-0.1)
Passenger Information		
Finding your way around	8.5	9.0
Flight information screens	8.5	9.0
Ground transport information on arrival	2023 - 8.0 2024-2026 – 8.0 (-0.5)	2023 - 8.5 2024-2026 – 8.5(-0.5)
Passenger Facilities and Services		
Facilities for Passengers who require additional assistance	9.0	9.5
Availability of trolleys	8.3(-0.2)	9.0
Satisfaction with Wi-Fi	8.5	9.0
Sense of safety for my health	No target	No target

Difference between draft target and Dublin Airport proposal in red

Source: Dublin Airport, CAR

Final Decision

- 13.49 We have considered these submissions but, in most cases, concluded that our Final Decision should remain in line with the Draft Decision proposals.
- 13.50 We have considered the request by Dublin Airport to retain the rebate target for ‘Cleanliness of toilets’ at 8.1 instead of 8.5. We discussed this with the PAG and they were particularly opposed to any reduction in what we proposed for this target, highlighting this metric as an important issue for passengers. Emerald also highlight issues in this area as being damaging to their reputation. Importantly, we note that Dublin Airport was meeting this level of service in 2019, with an average score of 8.6 for the year, and in line with our general approach to return service standards to those of 2019, we have decided to leave this target unchanged from the Draft Decision. Thus, given 2019 performance in this area and input from the PAG and users, we have decided to set the target at 8.5 as proposed.
- 13.51 We do find Dublin Airport’s proposal of a dual approach to the measurement of the metric ‘Ground Transport upon Arrival’ to be reasonable. However, we are unable to make changes mid-period to the targets as suggested by Dublin Airport for 2024. As an alternative and given that there is only one observation currently available on this metric, we have decided to implement a glidepath approach for this target. The target for 2023 is 8.0, with an increase to 8.3 in 2024, and 8.5 for 2025 and 2026. This should give Dublin Airport time to enhance focus on performance in this area, if required.

13.52 We have decided to retain a quarterly target for ‘Facilities for Passengers who require additional assistance’, as Dublin Airport has not provided any substantial reasoning for changing it to annual other than the other PRM targets being annual. If the goal is for all the PRM targets to be measured over the same time window, this could equally be done by making the other PRM target quarterly. In the absence of a compelling reason to make a change, we retain the approach as per the original 2019 Determination.

Table 13.6: Final Passenger Satisfaction Measures and targets

Metric	Departing	Departing with Assistance	Arriving	Transfer	Draft Target	Price cap at risk
Passenger Care						
Additional Assistance		Y			9.0	Annual -€0.01
Helpfulness of security staff	Y	Y			8.5	Quarterly -€0.01
Helpfulness of airport staff	Y	Y			8.5	Quarterly -€0.01
Cleanliness of terminal	Y	Y	Y		8.5	Quarterly -€0.01
Overall satisfaction	Y	Y	Y	Y	8.5	Quarterly -€0.01
Cleanliness of toilets	Y	Y	Y		8.5	Quarterly -€0.01
Departure gates	Y	Y			8.0	Quarterly -€0.01
Ease of Movement	Y	Y	Y		8.0	Quarterly -€0.01
Passenger information						
Finding your way around	Y	Y	Y	Y	8.5	Quarterly -€0.01
Flight information screens	Y	Y		Y	8.5	Quarterly -€0.01
Ground transport information on arrival			Y		2023 - 8.0 2024 - 8.3 2025 to 2026 - 8.5	Quarterly -€0.01
Passenger facilities and services						
Facilities for Passengers who require additional assistance		Y			9.0	Quarterly -€0.01
Availability of trolleys	Y	Y	Y		8.5	Quarterly -€0.01
Satisfaction with Wi-Fi	Y	Y	Y		8.5	Quarterly -€0.01
Sense of safety for my health	Y	Y	Y		No target	None

Source: CAR. The maximum score for each metric is 10.

13.53 In relation to bonuses, we disagree with airline submissions that their introduction amounts to a double charge between Opex and the bonus payment. We have not set Opex allowances with the goal of being consistent with the bonus target. As in 2019,

we have set Opex based on achieving performance at least in line with the rebate threshold. The bonus targets are challenging and would require a significant improvement over the current performance. We consider this to be an area where there is likely to be some divergence between passenger and airline interests.

- 13.54 In our meetings with the PAG, there has been clear support for bonus targets. An increase from 8.3 to 9.2 in ‘Cleanliness of Toilets’ would cost an additional 1c per passenger. Similarly, in 2019 ‘Overall Satisfaction with Departing Experience’ received a score of 8.6 which could be improved to 9.2 at a cost of 1c per passenger. The PAG was in agreement that these additional costs for service improvements would constitute good value, if Dublin Airport is able to deliver them. If the bonuses can incentivise Dublin Airport to deliver QoS improvements in a cost effective manner, they should be incentivised to do so. This will encourage efforts to drive proportionate improvements to passenger satisfaction levels, and in the future, set higher service level expectations, ultimately improving the passenger experience.
- 13.55 We do not agree with Emerald’s suggestion that the airport should improve performance before bonuses are considered. The bonuses will serve to further incentivise a speedy recovery in service quality performance at the airport. We do not see a rationale for delaying their introduction or why it would be preferable to wait until performance has already improved; in that case the rationale for the bonuses would be weaker.
- 13.56 IATA and Ryanair state that airlines do not require performance beyond what is allowed for in Opex. We agree that for some of the QoS metrics such as security queue times, incentivising outperformance (e.g. a queue time of zero) is likely to be inefficient in balancing the level of quality and costs. This is particularly the case for the objective metrics, as, for example, achieving a 100% uptime for assets would provide a level of performance that is not required, with additional costs. However, specifically in the case of the survey metrics, we consider that the inclusion of a combination of upward and downward adjustments can make a valuable addition to the QoS system as described above.
- 13.57 Dublin Airport suggests that we should align the targets with the highest performance yet achieved by the airport. We disagree with this; the purpose of the bonus scheme is to incentivise improved performance over and above that achieved previously. The bonus thresholds are intentionally set at a level which we expect would be very challenging for the airport to achieve. We do not expect Dublin Airport to achieve them quickly or consistently. We expect Dublin Airport to generally perform between the rebate and bonus thresholds, in which case there will be neither an upward nor downward adjustment to the price cap. We note that we do not, either, set the rebate threshold in line with lowest performance to date, so it would be inconsistent to set the bonus in line with the best performance to date.

Table 13.7: Passenger Satisfaction Measures – Bonus and Rebate Thresholds

Metric	Final Target	Final Bonus Target	Financial Adjustment (+/-)
Passenger care			
Additional Assistance	9.0	9.5	Annual €0.01

Helpfulness of security staff	8.5	9.3	Quarterly €0.01
Helpfulness of airport staff	8.5	9.3	Quarterly €0.01
Cleanliness of terminal	8.5	9.2	Quarterly €0.01
Overall satisfaction	8.5	9.3	Quarterly €0.01
Cleanliness of toilets	8.5	9.2	Quarterly €0.01
Satisfaction with Departure gates	8.0	9.0	Quarterly €0.01
Ease of Movement	8.0	9.0	Quarterly €0.01
Passenger Information			
Finding your way around	8.5	9.0	Quarterly €0.01
Flight information screens	8.5	9.0	Quarterly €0.01
Ground transport information on arrival	2023 - 8.0 2024 - 8.3 2025-2026 - 8.5	2023 - 8.5 2024-2026 - 9.0	Quarterly €0.01
Passenger Facilities and Services			
Facilities for Passengers who require additional assistance	9.0	9.5	Quarterly €0.01
Availability of trolleys	8.5	9.0	Quarterly €0.01
Satisfaction with Wi-Fi	8.5	9.0	Quarterly €0.01
Sense of safety for my health	No target	No target	Quarterly €0.00

Source: CAR. Note that the financial adjustments are symmetric, with an increase for achieving a bonus target, and a decrease for failing to meet the rebate targets.

Asset Availability and Baggage Handling

Draft Decision

13.58 We proposed to retain the main targets for the availability of assets and baggage handling belts at the levels set out in the original 2019 Determination. All targets were set in the 2019 Determination to be at 99% for 2022, with the exception of baggage which necessitates availability within 30 minutes 100% of the time for both outbound and inbound baggage. There are also exceptions for new FEGP and AVDGS units, which have lower targets for the first operational year.

13.59 For the baggage metric, Hold Baggage Screening Standard 3 (HBS3) has been implemented in T2 and should be fully implemented by the end of Q1 2023 in T1, which will shift the metric to one which is based on outcomes, which should better protect the interests of passengers and airlines. As this measure is not based purely on asset availability and allows for alternative methods of delivering baggage within the

timeframe, a 100% target remains appropriate.

Table 13.8: Availability of Baggage Belt and IT Systems- Draft Decision Targets

Baggage	Draft Target	Price cap at risk
3.Outbound	(Before the implementation of HBS3) Access to belts is available within 30 minutes of request	Per event -€0.01
	Outcome of delivering departing bags: available within 30 minutes of request	
4. Inbound	(Before the implementation of HBS3) Access to belts is available within 30 minutes of request	Per event -€0.01
	Outcome of delivering arriving bags: available within 30 minutes of request	

Source: CAR

13.60 In the case of Fixed Electric Ground Power (FEGP), the target of 99% set in 2019 was partly related to the level of uptime outlined by Dublin Airport during consultations for the investment in new solid state FEGP units. This rationale remains valid. However, we recognised that this is likely to be a challenging target for certain assets, and therefore we proposed to reduce the monthly price cap at risk from -€0.01 to -€0.005 if the availability falls below 99% but remains above 98%, and with anything below 98% incurring the full -€0.01 adjustment set out in 2019.

13.61 For new units in the first year, we proposed that the availability target remains at 93.5%. This is to account for snagging issues likely to be observed with newly installed units.

Table 13.9: Availability of Airfield and Terminal Equipment- Draft Decision Targets

Availability of:	Draft Target	Price cap at risk
5. Fixed Electric Ground Power (FEGP)	For new units, 93.5% available on average in the first year. For all other units, target of 99%	<98%: Monthly -€0.01 >=98% but <99%: Monthly -€0.005 All From Q1 2023
6. Advanced Docking Guidance System (AVDGS)	For new units, 93.5% available on average in the first year. For all other units, target of 99%	<98%: Monthly -€0.01 >=98% but <99%: Monthly -€0.005 From Q1 2023
7. Passenger-facing escalators, travellators and lifts in T2	99% average across units	<98%: Quarterly -€0.01 >=98% but <99%: Quarterly -€0.005 All From Q1 2023
8. Self-service check-in kiosks and bag drop machines	Average of 99% availability across units.	<98%: Quarterly -€0.01 >=98% but <99%: Quarterly -€0.005 All From Q1 2023

Source: CAR

Submissions on Asset Availability and Baggage Handling

13.62 In relation to 'Self Service Kiosks', Dublin Airport has suggested several additional exemptions on the basis that they are outside the airport's control. These are listed below:

- Allowance for planned and preventative maintenance to assets
- Allowance for pre-agreed works, upgrades, and relocation of assets with relative customers/ third parties
- Unavailability/Downtime due to activities which customers/third parties are responsible of such as paper loading, jams etc. is Business as Usual for Dublin Airport and should not be classified as downtime
- Unavailability/Downtime due to the misuse, abuse or malicious actions caused by customers/third parties
- Asset unavailability due to software/cloud-based issues provided by supplier or customer/third parties
- Unavailability/Downtime during a period of when faults are reported by customers/third parties, though when assessed by Dublin Airport engineer no fault is found
- Asset unavailability/downtime due to resource constraints inclusive of industrial action by personnel of customers including associated third-party service providers
- Unavailability/Downtime period will commence from the time Dublin Airport is notified by customer/third parties of an issue or when Dublin Airport identifies an issue with the relative asset(s).

13.63 For the metric 'Fixed Electrical Ground Power' (FEGP), Dublin Airport suggests a lower rebate of €0.005 compared to our proposal of €0.01 for availability of less than 98%, with an increase to 99% in Q3 2023. It states that they have faced numerous issues in September as there have been faults due to heavy rain and ground water ingress, which it is investigating to establish mitigations.

13.64 In relation to the metric 'Advanced Docking Guidance System', it agrees with the Draft Decision that the rebate for availability of less than 99% applies from Q1 2023, but suggests the removal of the rebate for performance of less than 98%. It states that there have been difficulties achieving the targets in this area for the last three months due to higher supplier response times than agreed in the SLA, and issues with fault diagnostic procedures.

13.65 For the metric 'T2 Passenger-facing escalators, travellers and lifts', it proposes a reduction from 99% average across units to 98% quarterly, and also requests a lower rebate of €0.005 compared to our proposal of €0.01. Further, it suggests that from Q3 2023, this target would increase to 99%, because it faces continued challenges in this area due to constraints on skills and labour. Due to issues such as aging, inherent

design flaws and operational constraints, it also requests the inclusion of an exemption for failures of gearboxes and bearings which are unforeseeable.

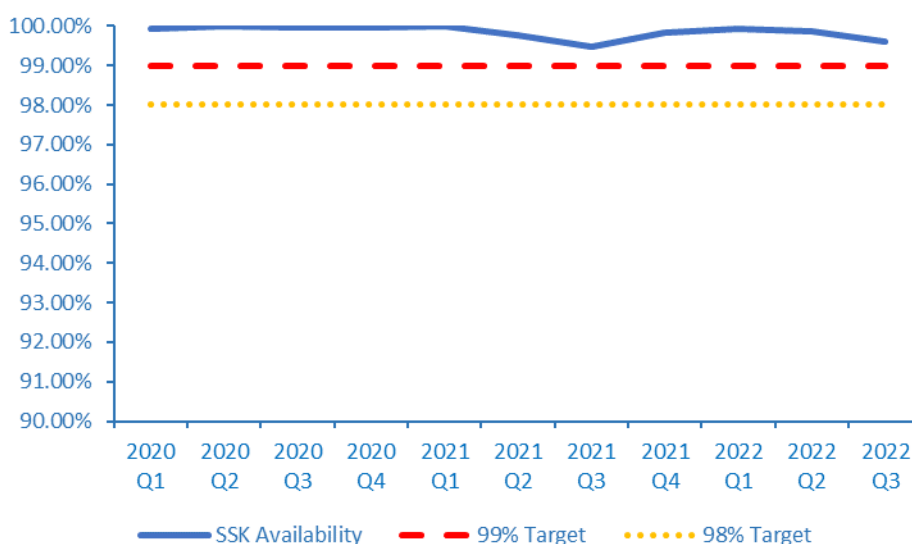
13.66 Overall, Dublin Airport states that it is making efforts to increase the efficiency and reliability of assets throughout the campus by continued upskilling, enhanced training, strengthening service level agreement performance, and optimising repair and maintenance periods during off-peak hours. It asks that allowance is made for the expenditure involved in these efforts.

Final Decision

13.67 We have further considered Dublin Airport’s submissions, as well as recent performance data, to assess whether our proposals strike a reasonable balance between challenge and achievability. We have decided to postpone the introduction of the higher 99% target for FEGP and lifts, travellers, and escalators until Q3 2023.

13.68 The list of new exemptions for the SSK performance that Dublin Airport proposed are in most cases duplicative of the exemptions provided for in the original 2019 Determination, which will continue to be in effect for the period covered by this decision. These are set out in Section 2. The differing exemptions largely refer to damages caused by passengers, which Dublin Airport has said is a rare occurrence. Given this, and the performance of Dublin Airport in this area which has exceeded the target since its introduction, we do not see any clear reasoning for the introduction of any additional exemptions.

Figure 13.1: SSK Performance Q1 2020 – Q3 2022



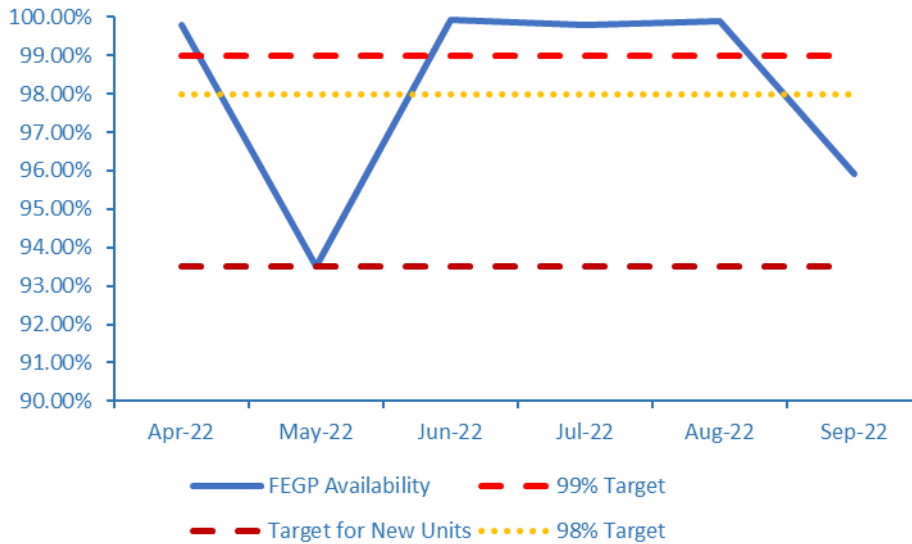
Source: Dublin Airport data

13.69 In relation to the issues listed by Dublin Airport with FEGP, we again note that a significant driver of the rationale for the investment in these units is their reliability, as described above.

13.70 Reporting on FEGP was due to begin in 2021, but due to delays did not begin until April 2022 so there is minimal data to review in relation to this target. Having reviewed the performance from April to September of this year, which shows challenges with

meeting the target for several months, we agree that the introduction of the 99% target can be delayed until Q3 2023, while the lower target of 98% will be in place from Q1 2023. However, we do not lower the rebate associated with this target as we see no clear reason or evidence as to why we should.

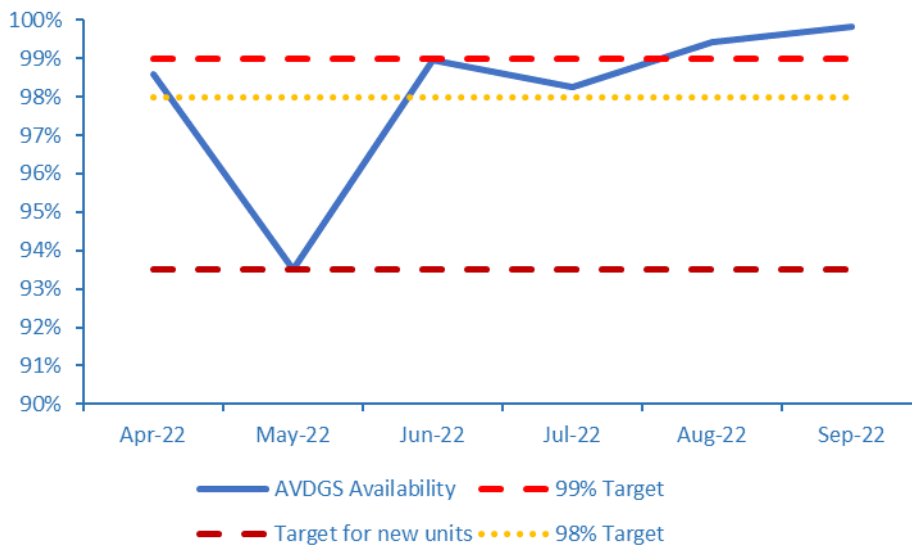
Figure 13.2: FEGP Performance for April – September 2022



Source: Dublin Airport data

13.71 For AVDGS, Dublin Airport lists issues with longer supplier response times relative to the SLA, as well as difficulties with faulty diagnostic procedures. This target was intended to be reported from 2021 but due to delays, was not reported on until April 2022. As such, there is limited data available to assess the performance relative to the target. While Dublin Airport was facing issues reaching the target in early 2022, the performance has exceeded the target since August. We retain the targets and rebates proposed in the Draft Decision.

Figure 13.3: AVDGS Performance April- September 2022

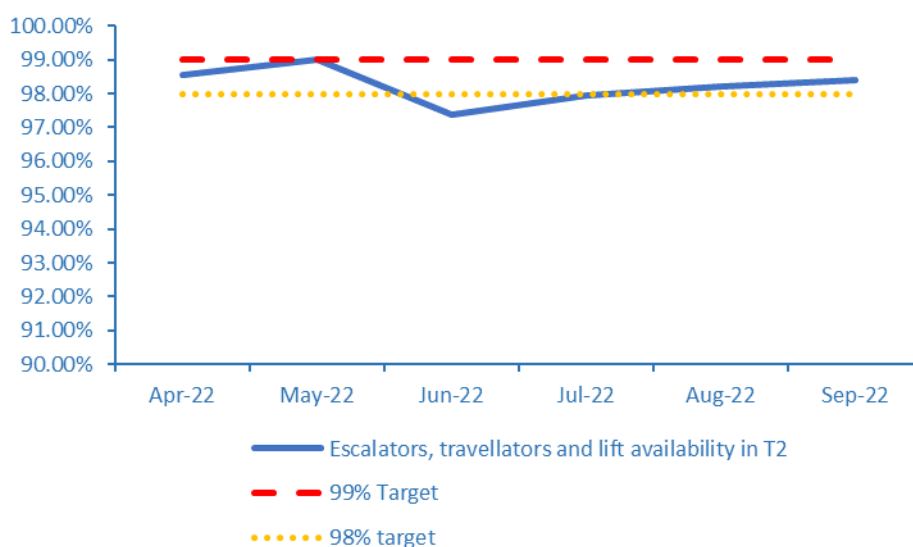


Source: Dublin Airport data

13.72 In relation to Passenger facing escalators, travellers, and lifts, we agree with Dublin Airport that this target may present challenges based on the performance this year which demonstrates underperformance on the target for the majority of the period between April and September, with the exception of May. This target was also intended to be reported on from Q1 2021 but due to delays was not reported on until Q2 2022, resulting in limited data on the performance in this area.

13.73 Given recent performance, we have decided to take a similar approach to FEGP and allow a target of 98% until the end of Q2 2023. From Q3 2023, the target will be increased to 99%. Dublin Airport also requested further exemptions for gearbox failures, which we have decided not to implement. We do not believe that an apparent design issue with the asset can be considered worthy of a specific exemption. Also, we note the infrequency with which this is occurring (less than twice per year). Thus, we do not allow for a specific exemption for gearbox failures.

Figure 13.4: Passenger facing escalators, travellers, and lifts performance April – September 2022



Source: Dublin Airport

Table 13.10: Final Decision on Asset Availability Targets

Availability of:	Final Target	Price cap at risk
9. Fixed Electric Ground Power (FEGP)	For new units, 93.5% available on average in the first year. For all other units, target of 98% until Q3 2023, target of 99% from Q3 2023	<98%: Monthly -€0.01 From Q1 2023 >=98% but <99%: Monthly -€0.005 From Q3 2023
10. Advanced Docking Guidance System (AVDGS)	For new units, 93.5% available on average in the first year. For all other units, target of 99%	<98%: Monthly -€0.01 >=98% but <99%: Monthly -€0.005 From Q1 2023
11. Passenger-facing escalators, travellators and lifts in T2	98% average across units until Q3 2023 99% average across units from Q3 2023	<98%: Quarterly -€0.01 From Q1 2023 >=98% but <99%: Quarterly -€0.005 From Q3 2023
12. Self-service check-in kiosks and bag drop machines	Average of 99% availability across units.	<98%: Quarterly -€0.01 >=98% but <99%: Quarterly -€0.005 All From Q1 2023

General Comments

- 13.74 Aer Lingus states that we should consider the inclusion of hub related metrics such as percentage of departures on stand and minimum connection times. It believes that this is in line with Dublin Airport's stated ambition and the National Aviation Policy to develop the airport as a hub. Further, it states that this will incentivise the timely delivery of hub infrastructure and avoid degradation of the transfer product at Dublin Airport.
- 13.75 Dublin Airport highlights the need for adequate allowances for capital investment and Opex to ensure that QoS returns to pre-Covid levels.
- 13.76 Emerald Airlines supports reporting QoS performance, including metrics which are for monitoring purposes only and do not result in price cap adjustments. It is particularly in favour of reporting of On Time Performance at the airport. Finally, Emerald states that it believes that the price cap at risk is too low to sufficiently motivate the airport to comply with the QoS targets.
- 13.77 IATA supports reinstating the full QoS regime for 2023. It also supports our decision to reword what were previously described as 'penalties' to 'adjustments' or 'rebates'. It states that the QoS scheme could be further improved with targets being reassessed to reflect changing processes and passenger expectations and a broader set of measures looking at other aspects of the passenger journey and airport operations for

monitoring purposes.

- 13.78 Ryanair considers it important that we do not build under-delivery into the QoS targets.

Commission Response

- 13.79 In relation to Aer Lingus' comment on the inclusion of hub related metrics, and Emerald airlines suggestion that we report On Time Performance as part of the QoS reporting, these are suggestions that we will consider. We intend to determine the content of the updated QoS reporting template next year and will consider all suggestions related to this at that point. However, we consider that it would be difficult to reasonably include price cap adjustments for measures such as OTP, given the limited extent to which this is within the control of Dublin Airport. It should also be noted that metrics such as stand availability are reported as part of the slot capacity declaration process and are likely best addressed as part of this process, rather than through the QoS system.
- 13.80 In relation to Dublin Airport's statement that we need to consider allowances for Capex and Opex to ensure that the QoS targets are achievable, this is considered in the Capex and Opex analysis. For example, as earlier described, the CEPA forecasts for security FTEs are developed assuming a 10 minute planned queue time. We are satisfied that we have put in place a regulatory settlement in which there is consistency across building blocks, including between QoS and cost allowances. It is then for Dublin Airport to ensure that it provides appropriate service standards.
- 13.81 Emerald has not provided evidence to support its comment that the level of rebates is too low to sufficiently motivate the airport to comply with QoS targets. We consider that the price cap at risk has worked sufficiently in the past to motivate Dublin Airport. Additionally, there is a significant reputational incentive. This could be seen in 2022, where we consider that the direct financial incentive was outweighed by the reputational impact of underperformance in areas such as security and cleaning.
- 13.82 Regarding IATA's suggestion that we should assess targets, to ensure that they are reflecting changing processes and passenger expectations, this aligns with the approach we have taken. The PAG has again been involved in the setting of the QoS targets and we have discussed and considered all suggested changes from a passenger experience perspective brought forward by them. This has resulted in higher targets for 'Cleanliness of Toilets' in the passenger satisfaction surveys as well as a newly introduced metric for PRMs as detailed above. There is also the new metric 'Sense of Safety for My Health' which was introduced in 2022 to provide a broader view of passenger experiences given the impacts of Covid-19. This measure will continue to be monitored going forward. We do expect to reassess the QoS system ahead of the next Determination and will remain open to any further suggestions on how it may be improved.

Exemptions

- 13.83 Generally, if Dublin Airport does not meet a QoS target, we will consider any evidence of extenuating circumstances that Dublin Airport may provide. The burden of proof

will lie with Dublin Airport in such instances, i.e. the presumption is that, where a target is not met, the rebate will apply, unless the existence of extenuating circumstances can be demonstrated. In such a case, the Commission will publish an overview of the circumstances and the rationale as to why they are considered extenuating.

All Airport Assets

13.84 Airport assets are: baggage handling systems, FEGP, AVDGS, passenger-facing lifts, escalators, travellers, self-service check-in kiosks and bag drop machines.

13.85 Exceptions apply if Dublin Airport consults with users on the following types of work and specifies the duration of the works in advance:

- Planned and preventative maintenance where it does not impact on operations.
- Mandatory inspections.
- Equipment taken out of service while a major investment project is undertaken in the vicinity.
- Equipment taken out of service for replacement or major refurbishment work.

13.86 The above works may relate to both fixed equipment or relevant IT systems provided either by Dublin Airport or a third party. If works extend beyond the consulted period, without reasonable justification, then the additional downtime will count against the target. Dublin Airport will not be required to notify users of urgent issues that require immediate intervention to prevent damage or disruption. For IT systems, we consider that security threats might be an example of urgent issues that require immediate action.

13.87 Other exceptions are:

- For the inbound-baggage system, if there are delays in passenger processing through immigration.
- For baggage systems, any delays to baggage process due to a third-party issue. Examples are bag tag quality issues or bag messaging and connectivity system failures caused by airlines.
- Closure of passenger-facing escalators, travellers and lifts in T2 immediately adjacent to security queues where it is considered by the relevant managers that their continued use is likely to lead to unacceptable health and safety risks due to increased congestion.
- In the event of fire-alarm activation, sprinkler activation, terminal evacuations, emergency-stop activations or maintenance to address pressing safety concerns. In the case of false alarms, the exception for each occurrence should be limited to an agreed time with users during which the assets should become available again;
- Equipment downtime due to damage, or misuse likely to have been caused by

airlines or their agents or where an airline or agent has accepted responsibility or where the users agree with Dublin Airport in writing that the likelihood is that the damage has been caused by an airline or its agent;

- If any fault or stoppage occurs as a result of any resource issue or industrial action by a ground handler or airline;
- Downtime where a fault has been reported by airlines or their agents, but, when the engineers attend the site, no fault is found, and the equipment is working;
- In the event of serious disruption caused by weather.

14. Other Issues

14.1 In this section, we consider aspects of the regulatory settlements which do not fall within one of the other sections.

Inflation

Submissions

14.2 Since the original 2019 Determination, and again since our Draft Decision, the inflationary environment has changed significantly, which has led to submissions on how inflation is treated within the price cap.

14.3 A number of stakeholders comment on the inflation mechanism and the manner in which the real price cap, calculated at the start of the period, is converted to a nominal price cap each year. To date, our approach to setting the nominal price cap in year n has been to apply October year-to-date CPI inflation in year $n-1$ to the real price cap for year n . For example, to set the nominal price cap for 2023, we would adjust for inflation up to October 2022, then publishing the provisional price cap for 2023 shortly before Dublin Airport sets its aeronautical charges for 2023. As has previously been demonstrated⁷¹, historically this approach has been a good proxy for inflation up to year $n-1$.

14.4 Emerald Airlines states that the price cap should not increase with inflation each year and that the inflation adjustment should be capped at the level at which inflation increases operating expenditure. Similarly, Ryanair states that the price cap being indexed to inflation insulates Dublin Airport from inflationary risks, which are all passed on to airlines. In addition, Ryanair states that, in the current high inflation environment, applying October year-to-date CPI inflation in year $n-1$ to the price cap in year n could overstate inflation if inflation were to subsequently fall relative to its current high level.

14.5 Dublin Airport proposes that the inflation adjustment mechanism be revised to an approach similar to that now used by the UK CAA at Heathrow airport; that is, forecast inflation for year n should be applied to the price cap for year n , with any over/under recovery due to the difference between forecast and actual inflation recovered/refunded using a true-up mechanism in year $n+2$.

14.6 Dublin Airport considers that while the approach we have used to date and the approach now adopted by the UK CAA would result in similar outcomes in a stable, low-inflation environment, they may yield materially different outcomes when inflation is high and volatile.

14.7 Based on stakeholder comments, there are three issues to consider:

- Whether CPI is the most appropriate measure to use for inflation with respect to the inflation of the real price cap;
- Whether the ex-ante inflation adjustment applied to the price cap in year n should

⁷¹ Varied Determination on the Maximum Level of Airport Charges at Dublin Airport 2020-2024 (July, 2020), page 149-150

be a forecast of the price base for year n (as suggested by Dublin Airport) or a to-date actual for year $n-1$ (as we have done previously); and

- Whether an ex-post true-up mechanism should be applied to account for the difference between the inflation rate used and the outturn inflation in year n .

14.8 Each of these points is discussed below.

Choice of Inflation Measure

14.9 The CPI represents a weighted basket of goods which reflects price changes across the entire economy for an average household. As noted by some stakeholders, this means that it may not be fully reflective of changes to costs and revenues for Dublin Airport. Were an inflation index to exist that had a clearer relationship with Dublin Airport's operating costs, there could be a case for using this to index the price cap instead of CPI. We have assessed other indices and, based on Dublin Airport's historic per-passenger operating costs and alternative measures of inflation, the inflation indexes compiled by the CSO⁷² (or any of the individual commodities within CPI) do not appear to be any more appropriate measures of inflation, relative to CPI, for Dublin Airport. We note that CPI is now the preferred measure for price cap indexation by UK economic regulators, including the CAA with Heathrow Airport and NATS.

14.10 More broadly, indexation of the price cap should be interpreted as an adjustment to be consistent with the general level of prices within the wider economy. Using a measure other than CPI, which is the primary measure of inflation used in Ireland, in addition to adding complexity, would likely create uncertainty around the level of the price cap and reduce regulatory stability and predictability for stakeholders, including for investors and creditors. Thus, given the lack of compelling evidence to support switching to a different index, we continue to use the CPI index.

Ex-Ante Inflation Adjustment

14.11 We consider that airline respondents are making a conceptual argument that inflation risk should be shared between them and Dublin Airport. Conceptually, the mere fact that inflation is higher than it was previously is not, in itself, a strong argument for changing the allocation of this risk. As suggested by Dublin Airport, this would have implications for its risk profile which we would need to assess, and would require various changes as to how we calculate the building blocks. This is one of the reasons why we reject Dublin Airport/NERA's generalised comparison with AENA/AdP, whose regulatory models do not provide for CPI indexation, as described in the Swiss Economics final report. Should stakeholders believe that the conceptual approach to the allocation of inflation risk should be changed, this would need to be considered carefully, ahead of the next determination.

14.12 On the other hand, Dublin Airport is making a technical point in relation to the conversion of the price cap from real to nominal prices. We consider that there is merit in Dublin Airport's argument. We agree with Dublin Airport that both approaches would yield similar outcomes in a stable, low-inflation environment. However, in a

⁷² [CSO Statistical Releases – Prices](#)

higher inflation environment, this lagged adjustment is likely to systematically understate the price base for the relevant year. Compared to previous determination periods, inflation is now higher and more uncertain, which means that using a forward-looking CPI forecast that takes account of the most recent developments is likely to be more accurate.

14.13 Importantly, we also note that certain components of the real price cap are deflated from nominal forecasts into real February 2022 prices without any lag. This point is also stated by the UK CAA, as referenced by Dublin Airport in its submission, as a reason to revise its approach used at Heathrow. Thus, if we were to continue our lagged approach to converting the real price cap to nominal prices, for consistency we consider that it would be appropriate to also lag the deflationary calculations by a year, thereby increasing the real price cap correspondingly.

14.14 We have therefore decided to adjust our approach in the manner suggested by Dublin Airport. To calculate the nominal price cap in year n , we apply the following adjustments to the real price cap (as calculated in a February 2022 price base):

- To bring the price level up to year $n-1$, as with our previous approach, we apply the change in CPI from February 2022 to October year $n-1$, as a proxy for the change in CPI from February 2022 to year $n-1$.
- To bring the price level up to year n , we then apply the forecast Year-on-Year inflation from year $n-1$ to year n , based on the most recent IMF forecast.⁷³

14.15 We reflect the revised approach in our financial model. As this adjustment applies across the full RAB, it increases Dublin Airport's nominal capital cost allowances, relative to our draft forecast. The upward pressure on the nominal price cap thus significantly reduces the required level of the financing adjustment set out in Section 12, all else equal. For each year, as part of the provisional price cap statement, we expect to use the most up-to-date forecast from the IMF. We currently forecast the following inflation adjustments to the real price caps, for each year 2023-2026.

Table 14.1: Forecast Inflation Adjustment from February 2022 Prices to Nominal Price Caps

	2023	2024	2025	2026
Forecast Inflation Adjustment (%)	14.4	17.9	20.2	22.6

Source: IMF October WEO, CAR Calculations

14.16 In the price cap determination set out in Section 2, these terms are CPI_{Historic} and CPI_{Forecast} , respectively. As the latest inflation forecast for 2023 is now known, the 2023 provisional price cap can be confirmed as €8.68.

Ex-Post True up Mechanism

14.17 The use of a CPI forecast for the nominal price cap in year n implies that there will be a difference between forecast and outturn CPI, and, given the uncertainty associated with the current inflationary environment, we agree with Ryanair that this difference may be material in some years. Thus, as also suggested by Dublin Airport, we have

⁷³ [International Monetary Fund World Economic Outlook](#)

added an adjustment term to correct for this difference. As part of the price cap formula, we therefore include a true up mechanism (the 'Z' factor) to account for the difference between forecast and outturn inflation in year n .

14.18 The Z factor will adjust the price cap formula in year $n+2$ to correct for the difference between the nominal price cap charged, based on the CPI forecast for year n , and the nominal price cap that would have been charged had outturn CPI been used. As this mechanism is introduced for the first time in 2023, the Z factor features in the 2025 and 2026 price caps.

14.19 Collectively, these adjustments ensure that Dublin Airport remains fully protected from inflation risk, which we believe contributes to a lower relative risk profile and improves its attractiveness to investors, particularly in a period of higher inflation.

Incentive Schemes

14.20 In the Draft Decision, we proposed to continue our current regulatory treatment of incentive schemes. The current treatment allows Dublin Airport to net off the rebates or discounts on Airport Charges, accrued in a given year and funded by Dublin Airport, against aeronautical revenues for that year.⁷⁴ Rebates or discounts should relate to schemes which have been subject to consultation with users and are published. This is in line with the 2018 recommendations of the Thessaloniki Forum of Airport Charges Regulators on how to assess non-discrimination of airport charges. The Forum recommends that, at annual consultations, airports should justify airport charging strategies, including incentive schemes, in accordance with the relevant articles in the Airport Charges Directive (ACD):

- Issues of public or general interest (Article 3),
- A common charging system in certain circumstances (Articles 4 and 5),
- Differentiation according to the cost, quality, or scope of services provided, or any other objective and transparent justification (Article 10).

14.21 The Forum recommends that it may not be necessary to consult on every element of the charging strategy at every consultation, but rather focus on elements which the airport is proposing to change, or existing elements specifically requested or questioned by users. Terms and Conditions attached to the charging strategy, particularly where any changes are proposed, should form part of the consultation.

Submissions

14.22 Submissions received in relation to incentive schemes were limited. IATA states the justification for an incentive scheme should demonstrate that the variation will lead to the intended objective, otherwise, the scheme will distort the market with no apparent benefit for the consumer.

⁷⁴ For the avoidance of doubt, this does not include any schemes which may be funded by Government or another third party.

Decision

- 14.23 We will continue with the current regulatory treatment of incentive schemes. The price cap applies to all airport charges liability accrued in a given year, and includes all elements of the pricing strategy, that is, list charges net of incentive scheme rebate liability accrued and funded by Dublin Airport. Dublin Airport is entitled to structure its pricing to incentivise particular outcomes, provided that the charging strategy complies with the Airport Charges Directive (ACD).
- 14.24 Any specific issues with particular schemes should, in the first instance, be addressed between Dublin Airport and airport users in consultation on the aeronautical charges as required by the ACD. Ultimately, a disagreement may be referred to us as the Independent Supervisory Authority (ISA) for the purposes of the ACD.

K Factor and Under/Over Collection

- 14.25 In our Draft Decision, we proposed to retain the K Factor to continue to allow for imperfect pricing by Dublin Airport, and to maintain the limit on the K Factor at 5% of the price cap.
- 14.26 As set out in the 2019 Determination, we will set a provisional K Factor as part of the provisional price cap statement, based on outturn passenger numbers and an updated forecast for passenger numbers ahead of the year in question. This would then be adjusted based on final outturns when the final price cap is calculated in the following year. This would work similarly to the adjustment for Quality of Service. This mechanism removes the volume risk from the K Factor, ensuring perfect recovery up to the limit on the K Factor.
- 14.27 In 2019 we determined that should Dublin Airport collect more than permitted, it shall arrange to rebate users within 90 days of the year ending a sum sufficiently large such that revenues collected, net of this sum, on a per passenger basis, do not exceed the maximum permitted yield per passenger. We noted that we did not intend to change this approach.

Submissions

- 14.28 Dublin Airport states that, given the current market instability, the level of the K-factor under-recovery cap of 5% does not provide enough confidence to optimally design and implement its pricing policy, and that leaving this unchanged may be detrimental for users and passengers, and lead to potentially sub-optimal pricing decisions.
- 14.29 In addition, Dublin Airport states that the current uncertainty characterising the aviation industry, the difficulties in estimating traffic reliably, and the changes in passenger behaviour are all elements that exacerbate the challenges faced by Dublin Airport in setting accurate charges. Given that the K-factor is the only means to ensure that Dublin Airport receives per-passenger revenues that are aligned with the regulatory settlement, Dublin Airport requests that the cap is increased from 5% to a minimum of 10% for the period 2023–2026.
- 14.30 Dublin Airport also notes that K-factor adjustments are neutral in net present value

terms and the regulatory model ensures that, should Dublin Airport collect more than permitted, it will rebate users for the amount exceeding the maximum permitted yield per passenger within 90 days of the end of the year. Dublin Airport agrees with this approach.

Decision

- 14.31 While we agree with Dublin Airport that the current period contains more uncertainty with respect to some areas such as inflation (for which we intend to introduce an adjustment mechanism, as described above), we do not agree that the K-factor under-recovery cap should be increased.
- 14.32 We consider that a higher cap on the K Factor would allow for significant reprofiling of revenues out of one year and into others within the period. The 5% cap allows for imperfect annual revenue forecasting by Dublin Airport, without allowing for a higher level of re-profiling which, in our view, would disproportionately erode the ‘user pays’ principle. If necessary, Dublin Airport can adjust its charging strategy in-year and/or rebate airport users of any overcollection in the manner prescribed. We note that overcollection is not, in itself, a breach of the determination, but rather failing to rebate users within the 90-day period is a breach of the determination. The K-factor under-recovery cap will therefore remain at 5%.

15. Appendix: Capital Project Allowances and Submissions

- 15.1 This appendix addresses more detailed submissions in relation to the need for and/or merits of allowed projects. In its role as the Independent Fund Surveyor (IFS) at Dublin Airport, appointed by us to provide advice in relation the efficient costs of capital project proposals, Steer has considered submissions in relation to project costings in its separate report published alongside this document. We continue to provide allowances for all projects for which we proposed to provide allowances in the Draft Decision.
- 15.2 The Draft Decision included an overview of our draft conclusion in relation to each of the assessed projects, which still stands unless amended below.
- 15.3 In line with the Draft Decision, we have not reassessed all of the Core projects as part of this review, which were already assessed in detail in the original 2019 Determination.

Core Projects

- 15.4 Dublin Airport's proposed approach for Core projects ahead of the Draft Decision was to maintain the scope as per the CIP from 2019, but to adjust the project costs for interim and forward construction inflation. The Core category consists of four groupings:
- Asset Care
 - IT
 - Security
 - 'Other' Projects.
- 15.5 Dublin Airport terms these the 'core' projects, on the basis that these projects are primarily intended to maintain the safe, secure and effective operation of the airport, rather than to enhance its commercial or aeronautical offering.
- 15.6 For the additional two years of this CIP period, Dublin Airport proposed the addition of four new Core projects and a pro-rata allowance of €39m per year for the extra two years, for minor "typical" projects. This approach differed to the one Dublin Airport proposed in the consultations on the draft CIP, which included a larger pro-rata allowance but not the four additional projects. We proposed in the Draft Decision to not include the additional pro-rata allowance but to allow for the 4 additional projects.

Submissions received on the Core projects

- 15.7 The Airport disagrees with our proposal to not allow for the pro-rata increase. It acknowledges that its 2020-2022 capital expenditure was lower than the pro-rata amount but argues that this was due to Covid-19 related savings.
- 15.8 Dublin Airport states that several projects envisaged for the pro-rata treatment have now crystallised. Dublin Airport has now submitted seven new and updated Core project sheets for consideration, at a total additional cost of €137m.

15.9 Ryanair has provided a range of comments on the Core projects included in the CIP.

Decision on the Core projects

15.10 We confirm our decision, in line with IFS advice, to include the four additional Core projects requested ahead of the Draft Decision and but not include the pro-rata additional allowance Dublin Airport requested for 2025 and 2026. As identified in the IFS report, the inclusion of the pro-rata allowance would bring average annual Core Capex for the period to almost €100m, which is twice the ten-year average for Core between 2010 and 2019 in real terms. While we expect that Core expenditure will likely need to increase relative to that decade, we consider that delivering the level of investment already allowed for by 2026 is already ambitious and that there are significant risks to the programme, as per the Steer report.

15.11 For this same reason, we have also decided not to allow €90.7m of the additional requested allowances. The only project we have allowed from this request is the reinstatement of the South Apron PBZ, which was originally included in 2019 and Dublin Airport now seeks to reinstate. Thus, it is not so much a new project as a scope adjustment to an existing Capacity project. We note that the Core categories were not reassessed for potential exclusion of any projects from 2019 which may no longer be required, or may be de-scoped, like the commercial and capacity categories were. It would not be appropriate to add further project allowances without also considering if others should be deferred or cancelled (thereby moving away from Dublin Airport's suggested approach to original Core projects).

15.12 In particular, we note the IFS' analysis of the historic run-rate and agree that actual required expenditure is likely to track closer to the allowances without the additional allowances in the grouped budget. We note that Dublin Airport has flexibility within these groupings which will enable it to cancel/defer/add projects as may be required. We also note that there are various mechanisms available to Dublin Airport later in the regulatory period should it consider that one or more of the grouped allowances is likely to be insufficient overall.

15.13 In response to Ryanair, as set out in the Draft Decision, we accept Dublin Airport's high level approach to reviewing these categories and are not reconsidering each project individually in this review, but are instead considering the overall reasonableness of the grouped allowances. These projects were considered in detail in 2019, see Appendix 2 of the 2019 Draft Determination and Appendix 1 of the Final Varied 2019 Determination.

15.14 We have also opted to change the Passenger Boarding Bridges project (CIP.20.02.004) from a partly Deliverable project to fully Flexible in recognition of the fact that the Deliverable elements of the project (the airbridges) may no longer be optimal given the current design of the West Apron underpass. This adds further flexibility to the asset care grouping. As noted in Section 11, we also combine the two asset groupings into a single grouping which will enhance Dublin Airport's budgetary flexibility.

Capacity Projects

15.15 This category of projects represents the investments intended to deliver infrastructure

to provide airport services to an increased volume of passengers. Consistent with 2019, the main objective of the capacity projects in the updated CIP is to develop the airport such that it can handle 40 million passengers per annum (mppa) at an appropriate level of service. In the context of a quick recovery in passenger numbers towards 2019 levels, we consider that this remains a reasonable approach to developing the required airport capacity in the interests of future airport users.

15.16 In the 2019 Determination, we allowed for all projects in this grouping. We assessed these projects in detail both individually and collectively in 2019, including commissioning simulation modelling of both the terminals, and the airfield, which confirmed that the planned future airport would allow for 40mppa at an appropriate service standard. Given that we expect passenger levels to reach 40 mppa by 2030, that analysis remains relevant.

15.17 The role of the IFS is to individually assess the proposed capacity projects for any costing or scoping inefficiencies. This analysis is set out in the IFS report.

Capacity projects

General Comments

15.18 Aer Lingus believes that delays in the development of the South Apron hub infrastructure (for example the lack of peak time stand availability) is constraining growth at the airport, and that there will not be enough stands available to accommodate Summer Season peak-day traffic by 2026. It suggests that we set minimum stand availability levels at peak times and minimum availability of overnight stands on the North and South Aprons. It also argues that the planned CIP programme will increase inefficiency at the airport and will constrain the growth in traffic that justifies the proposed CIP.

15.19 Aer Lingus supports the development of the South Apron infrastructure which, it argues, will increase capacity, and facilitate hub operations through the expansion of pre-clearance facilities and the development of Pier 5.

15.20 We note Aer Lingus' comments in relation to the longer timeline now envisaged for the South Apron hub development. This is not something which is within our direct control. We note however that the triggered approach to the South Apron projects provides a strong incentive for these to be delivered as soon as possible, and we note Aer Lingus' support for the triggered approach on that basis.

15.21 Ryanair believes that investment in projects such as the expansion of US Preclearance facilities (CIP.20.03.030), enhanced facilities for transfer passengers (CIP.20.03.072), and T2 early bag transfer facilities (CIP.20.03.028) are unnecessary in light of Aer Lingus commencing transatlantic services from the UK, and the establishment of competing pre-clearance facilities in Brussels, and potentially elsewhere in Europe.

15.22 We forecast an increase in USA departing passengers from 2023 over 2019, with continuing growth to the end of the period, making these projects necessary. These forecasts are unchanged from the Draft Decision. Ryanair's views suggest that Dublin Airport is subject to considerable competition from other European Airports. We

reiterate our view from the approach section of this paper that we have not undertaken a market power assessment as part of this review and are operating under the findings of the previous market power assessment from 2016. If Ryanair believes that Dublin Airport is now subject to considerable competition it can outline its views in response to any Market Power Assessment as provided for in the ANTB.

Gate Post 9 Expansion (West Lands) (CIP.20.03.004)

15.23 Ryanair does not support this project as it believes that passenger facilities to the west are not required within this period.

15.24 This project is in fact complete and has entered the RAB. We allowed this project as it will increase the capacity for security checked vehicular access to the western campus development.

Terminal 1 Central Search – Relocation to Mezz Level (CIP.20.03.012)

15.25 While Ryanair supports this project in principle, it argues that insufficient information has been provided to justify the 56% increase in cost and notes that the requirement for increased capacity in T1 has not changed.

15.26 Comments on the cost of this project has been considered in the IFS report.

15.27 We continue to allow for this project, as we believe it is in the interests of future airport users to provide a facility in a location which can accommodate 40mppa and beyond. We note continued stakeholder support for this project. The cost and scope of this project can be considered further through the StageGate process, in particular after phase 1 is completed and before the execution of phase 2. This project faces extended timeline and associated planning risk, we have therefore opted to make this a trigger project as set out in Section 11.

Terminal 1 Departure Lounge (IDL) Reorientation and Rehabilitation (CIP.20.03.013)

15.28 Ryanair states it is unclear why the project cost has increased by 66%. It considers this to be a commercial project and that it is an inefficient investment based on the costs and revenues cited. It argues that any necessary reconfiguration should be absorbed into the scope of the T1 Security project and that overall costs should be reduced unless there is a clear and demonstrable benefit to users in terms of revenues exceeding costs.

15.29 Comments on the cost of this project are addressed in the IFS report.

15.30 As set out in Section 9, we do not include an uplift for the additional retailing space which will be provided through this project as we believe that an increase in the size of the T1 IDL, a core centralised facility, is likely required to maintain historic elasticities despite increased passenger numbers. This project is also needed to facilitate CIP.20.03.012. We continue to allow for this project but have made it a trigger project as the need for this project is closely linked to T1 Central Search Relocation (CIP.20.03.012). A further reason to trigger this project is outlined in the IFS report, which notes that the conclusions of the sustainability feasibility study could potentially have an influence on the asset life of Terminal 1 and its associated facilities and

therefore refurbishments, upgrades or expansions of T1 may be impacted by the outcome of the study, which is expected in Q2 2025.

Terminal 1 Baggage Reclaim Upgrade & Alterations (CIP.20.03.015)

15.31 Ryanair argues that this project is over-scoped based on the Helios analysis from 2019. It questions whether the projected demand within this CIP period outstrips the current capacity such that the project is fully justified. It also questions if this is a capacity project or 'look and feel' enhancing project. It asks that the need for this project and the costs within the period be reviewed and that a detailed justification be provided.

15.32 The 2019 Helios modelling indicated that only overall space per passenger is at 'overdesign', however, as noted in 2019, this is largely a function of the current size rather than due to this project. This project reconfigures the existing hall, providing increased belt lengths, additional queuing space, and improved circulation. We have reviewed evidence from Dublin Airport that clearly identified a shortfall in capacity in this processor to service the 40 mppa schedule.

15.33 In this context we continue to allow for this project and make the allowance flexible.

Terminal 1 Shuttle, bus lounges and injection points (CIP.20.03.017)

15.34 Ryanair believes that this project is needed to facilitate the operation of Module 1 as part of the North Apron development, but questions whether the bus lounges are required given the increase in walk out stands as part of the North Apron M1 development.

15.35 Dublin Airport notes that the existing bus injection point is inadequate for the anticipated bussing demand and frequency of buses dropping off at any one time, and that this project both improves the capacity and aesthetics of the entrance while providing improved weather protection and way finding. It notes that during CIP construction a number of contact gates and stands will need to be temporarily closed to facilitate phased construction and that the reinstated bus gates will contribute to temporary remote operations during such closures. It also notes that in the medium term up to 40 mppa, a number of stand allocation scenarios show significant remote operations at peak times from Apron 5G, and that some operators may be able to tow while others will prefer to bus. It argues that the reinstated bus gates provide operational flexibility.

15.36 We continue to allow for this project and make the allowance flexible.

Terminal 1 Immigration Hall (CIP.20.03.018)

15.37 Ryanair argues that this project is over-scoped based on the Helios analysis from 2019. It questions whether the projected demand within this CIP period outstrips the current capacity such that the project is fully justified. It asks that the need for this project and the costs within the period be reviewed and that a detailed justification be provided.

15.38 Ryanair also argues that this project constitutes a complete reconfiguration at a time where there would be other cheaper solutions like utilising spare space.

15.39 We do not agree with Ryanair's interpretation of the Helios analysis. The Helios terminal capacity report in fact found that queue time would become suboptimal during the late arrivals peak at 40 mppa. Detail on the cost assessment carried out on this project can be found in the Draft Steer report from 2022 and in the CIP material provided by the airport before and after the CIP consultation. We also disagree that this project simply constitutes a reconfiguration and point out that fourteen new booths are to be added, as well an additional e-gate.

15.40 We continue to allow for this project and to consider it Flexible.

Terminal 2 Check-In Area Optimisation (CIP.20.03.020)

15.41 Ryanair argues that there have been no material scope changes to this project and that the increased cost is related to inflation. It argues that the construction costs have fallen for this project, but that it is still costing more overall. It questions why the Helios findings have not been taken into account so that scope could be reduced, arguing that the project will provide substantial overcapacity for the period 2028-2030.

15.42 IALPA argues that this area is currently used for overflow queueing for Check in desks 29-56 and that the proposed relocation of airline customer service will clog the central space raising safety and crowd control issues.

15.43 In response to Ryanair, we agree that the increased costs are not related to scope changes but are entirely related to escalation resulting from the extended delivery timeline, which is expected to be reflected in construction costs. We also do not agree with this interpretation of the Helios analysis; we consider that the analysis suggests this processor is ideally sized to deliver the 40 mppa schedule.

15.44 In response to IALPA we direct the to the analysis undertaken by Helios in 2019, which found that following the development of the CIP projects this processor should be able to handle the expected levels of traffic within IATA Level of Service standards.

15.45 We continue to provide a flexible allowance for this project.

Terminal 2 Central Search Area Expansion (CIP.20.03.021)

15.46 Ryanair argues that based on the information provided in the CIP clarifications consultation document, this project is not required in the period 2023-2026 and should be deferred.

15.47 This project is needed to service the 40 mppa schedule and is planned to be delivered in Q4 2026. Furthermore, our final passenger forecast is considerably higher than the forecast used by Dublin Airport for the capacity assessment in the clarifications. The processor is now expected to be nearing capacity by the time the project is delivered.

15.48 In this context we continue to provide a Flexible allowance for this project.

Terminal 2 Early Bag Store and Transfer Lines (CIP.20.03.028)

15.49 Ryanair argues that the need for this project on the timescale has not been justified as no indication is given of current and projected future levels of bag transfers. It argues

that the project should be omitted, as the commencement of Aer Lingus UK transatlantic operations is likely to reduce the level of passengers transferring through Dublin.

- 15.50 The project Ryanair refers to has changed in the final CIP since it was originally proposed in the draft CIP, which does not appear to be reflected in Ryanair's submission. That project had a cost of €4.78m and had removed the Early Bag Store component of the project. This was added back in for the final CIP following support from Aer Lingus.
- 15.51 Dublin Airport has demonstrated the need for this project to address what would otherwise be a shortfall in Make Up Positions (MUPs) to service the 40 mppa schedule, in particular given the expected growth in traffic to the USA. The current three transfer input lines will be increased to four to meet projected passenger traffic at 40 mppa. It also provides for an additional inter-terminal transfer line. We believe that this project is critical to avoid die-back in the baggage system.
- 15.52 We also note that Ryanair's suggestion that passenger levels will decrease has not been justified. Aer Lingus is supportive of this project and the suggestion that there will be fewer transfer passengers travelling through Dublin Airport is not aligned with either Dublin Airport's or Aer Lingus's business strategies.
- 15.53 In this context we continue to allow for this project and to include it in StageGate.

New Pier 5 (T2 and CBP Enabled) (CIP.20.03.029)

- 15.54 Ryanair believes the cost increase for this project represents significant gold plating, and cites increases for aesthetic treatment of the roof when visible from the apron. It argues that a value engineering exercise is needed to assess the costs and is concerned that 'gold plating' elements were not challenged by Steer. It argues that Dublin Airport has built piers for a fraction of this cost and that any additional costs associated with meeting the specific needs of the cargo operators should be met by those who have asked for different arrangements and should not be passed on to other users.
- 15.55 Ryanair asks us to investigate the need for apron level bussing as Terminal 2 already has bussing gates and believes it may be more economical to reconfigure those gates. It believes that removing the bussing option would allow for a 2-storey building rather than 3. Ryanair also argues that the removal of Commercial Revenues related to the relocation of Cargo facilities is unacceptable.
- 15.56 IALPA believes that the Pier 5 current design prevents Terminal 2 phase 2 expansion and hampers long term competition. It requests that the Commission condition Pier 5 development on a Ministerial and Airport Board Directive clearly stating that Dublin Airport has no intention of ever expanding Terminal 2, and that Pier 5 should proceed as planned.
- 15.57 IALPA believes that the Pier 5 project necessitates relocating existing Airline Cargo and Irish Customs facilities. It argues that it is apparent from the CIP that precise replacement facilities land and airside elude Dublin Airport. It argues that customs are a vital State service and therefore Pier 5 should possibly warrant an additional trigger,

in that any relocated Cargo and Customs facilities should be built first.

- 15.58 IALPA believes that Dublin Airport should pause Pier 5/South Apron design and concentrate on advanced options by Q4 2023 for a new Pier 3 design incorporating the Underpass and APM cell.
- 15.59 IALPA states that Taxiway Romeo eliminates the 404C Wide Body stand (unless Dublin Airport can reproduce a Wide Body replacement abeam 403C), and that the extended CBP Eastern facility eliminates the 409C WB stand. It argues that post construction, Piers 4 and 5 shall only have net 2 Wide Body contact stands, and the loss of 3 Narrow Body Stands.
- 15.60 In response to IALPA we note that this project is compliant with Dublin Airport's masterplan. We also refer to the Capex section, where we note that it is not our role to design the airport in terms of developing capital projects which are different to those proposed by Dublin Airport, such as an alternative location for Pier 5 or other projects. We note flexibility in the regulatory model for the Capex programme to develop or be adjusted within the period.
- 15.61 Dublin Airport notes that Terminal 2 has four active bus gates sized to accommodate ATR aircraft and are fully utilised throughout the day. It also notes that at peak times the current available gates are at capacity with no feasible space to expand into. It says that airline stand requirements will exceed the capacity afforded by the South Apron development at peak times, and that the proposed Pier 5 bus gates at apron level provide a cost effective and efficient means to provide the additional bus gate capacity. It says that the new Pier 5 bus gates will provide additional capacity and flexibility and that this additional capacity must be integrated into the Pier 5 design.
- 15.62 Comments related to the cost of this project are addressed in the IFS report.
- 15.63 We note the continued support for this project to be progressed quickly among some airport users. This project is a key contributor to facilitating the 40 mppa passenger airport. It is also a key part of the development of the south apron as a secondary hub, in line with the 2015 National Aviation Policy.
- 15.64 For these reasons we continue to allow this project. This is a trigger project and will go through the StageGate process.

Expansion of US Pre-Clearance Facilities (CIP.20.03.030)

- 15.65 Ryanair argues that clarity is needed on the business case justification for adding a first floor to the facility. It considers that the commercial justification for this project will not become clear until after 2026, thus the project must be deferred until the commercial justification is clear and the business case scrutinised by users and omitted from current CIP.
- 15.66 Aer Lingus argues that Dublin Airport's US Preclearance capacity will constrain transatlantic volumes unless this project is delivered. It believes there is scope for using new technology to reduce the airport's (and specifically the CBP's) infrastructure footprint. It suggests that screening technology could reduce the footprint of the expanded pre-clearance facility and could allow TSA screening for North American

flights to take place in the central search area. It argues that this could lead to better passenger flow management and double handling within T2, as well as increased stand availability. It asks that the Commission consider an efficiency dimension to the existing project governance.

- 15.67 IALPA says that were Pier 5 to fail to proceed, Dublin Airport should expand the US Preclearance facilities west of Pier 4 to initially allow Bussing to the West Apron and eventually tie into an Automated People Mover (APM) facility. It argues that the concept of using a refurbished Pier 3 for cleared passengers should be abandoned.
- 15.68 Dublin Airport believes that this project should not be triggered as it is not expected to form part of the Infrastructure Application.
- 15.69 In response to Ryanair, we note that this project is needed to serve the 40 mppa schedule and is planned to be delivered in Q4 2027. Furthermore, our final US departing passenger forecast is higher than the forecast used by Dublin Airport for the capacity assessment in the clarifications.
- 15.70 Regarding Aer Lingus's point on the application of new technology, as noted in the Capex chapter, Dublin Airport says that it has ongoing engagement with US CBP Port director and external specialists. It believes that while technology advances may in future reduce its infrastructure footprint, this is not deemed possible at this time. Regarding Aer Lingus's comment on North American flights, Dublin Airport confirms that it investigated the feasibility of making central search TSA compliant and eliminating the need for a separate TSA security screening process.
- 15.71 In response to IALPA and as noted in the Capex chapter, the Commission does not have a role in designing the airport and can only assess the projects that are proposed to us by Dublin Airport.
- 15.72 We note that this project is part of the StageGate process and is triggered, meaning that there is considerable flexibility regarding timing of remuneration and the scope of this project should it become possible to reduce infrastructure footprint. While not expected to be part of the infrastructure application, it is still a complex project with other timeline risks which could lead to mismatch with remuneration in the event of a delay. If it progresses in line with Dublin Airport's expectations, this will already be accounted for by the earlier activation of the trigger allowances.
- 15.73 We also note that Aer Lingus is supportive of this project. We continue to provide an allowance for this project.

South Apron Expansion (Remote Stands, Taxiway and Apron) (CIP.20.03.031)

- 15.74 Ryanair supports this project but argues that the timing should be revisited following the pandemic and in consideration of its affordability. It believes that the project changes outlined in the updated CIP do not justify the construction cost increase of nearly 140% (especially following the omission of the PBZ). It questions how the justifications given by Dublin Airport for the changes in scope, namely diversion of Cuckoo Stream, attenuation control and storage, demolition of ancillary building and additional GSE parking could account for such a sizeable increase in cost. It is also

unclear on why the cost of an additional de-icing facility has not been included in the newly added project CIP.20.03.076 which aims to consolidate the airport wide de-icing solution.

- 15.75 Dublin Airport notes that it has been requested to integrate a replacement PBZ adjacent to the relocated remote stands along the southern edge of the apron. A high-level concept has been prepared since the CIP2020+ Review Consultation and has been positively presented to the main airlines using the South Apron. This project would require the demolition of the existing PBZ.
- 15.76 IALPA says that we should only allow for B737/A321 capable narrow body stands. It that if Dublin Airport constructs a remote South Gate PBZ then it may lie within the Runway 28L protection zones and or public safety zone, which it believes would become a problematic/limiting factor.
- 15.77 IALPA says that the Commission should halt all South Apron funding and await an IAA SRD decision on what can be safely built with respect to the B1 taxiway South Apron wide body egress to the R28L LVP hold, Runways 28L arrival / 10R departure flight strip protection and public safety zones.
- 15.78 IALPA requests that we ask Helios to simulate the agreed South Apron design and carry out revised flows patterns allowing for realistic time to push off stand to taxi off from an Engine Start Position (ESP).
- 15.79 In response to Dublin Airport's request for the inclusion of a new PBZ, we have chosen to reinstate this element into the project scope of South Apron Expansion (Remote Stands, Taxiway and Apron) (CIP.20.03.031) following support from the main South Apron using Airline.
- 15.80 In response to IALPA, we note that the detailed design in relation to stand dimensions and South Gate PBZ (which is now back in the planned programme) location will be completed in consultation through the StageGate process. We also note that these are trigger projects, so in line with IALPA's suggestion, no remuneration will commence until the project is actually on site.
- 15.81 In response to IALPA we note that we can commission Helios to run simulations of a detailed design (once available) either as part of the StageGate process, or the Capacity Declaration process.
- 15.82 Comments related to the cost of this project are addressed in the IFS report.
- 15.83 We note the continued support from some users for this project. We continue to allow for this as a triggered project which will go through the StageGate process.

Enablement of Pier 3 for Pre-cleared US bound passengers (CIP.20.03.033.1)

- 15.84 Ryanair believes that the need for this project is unclear if the number of US bound transfer passengers from the UK decreases. It argues that the Commission should also verify if the US authorities will allow this from a security perspective, as pre-cleared passengers must generally be segregated from others.

- 15.85 As stated in the Capex and Passenger Forecast chapters, we are predicting that USA departing passengers will be broadly similar to 2019 levels in 2023, with continuing growth to the end of the period. This project is necessary to facilitate development of a 40 mppa airport. In this context we continue to provide an allowance for this project.
- 15.86 In response to Ryanair's comment we note that this project provides for full passenger segregation in Pier 3 and we understand that Dublin Airport has been successful in proposing operational concepts to enable US Preclearance flights to depart from locations other than Pier 4.
- 15.87 We note the continued support from some airport users for this project. We continue to provide a Flexible allowance for this project.

Pier 3 Immigration (Upgrade & Expansion) (CIP.20.03.034)

- 15.88 Ryanair argues that this project is over-scoped based on the Helios analysis from 2019. It questions whether the projected demand within this CIP period outstrips the current capacity such that the project is fully justified.
- 15.89 We do not agree with Ryanair's interpretation of the Helios analysis, which shows that waiting times may be suboptimal. Furthermore, based on our current passenger forecasts and Dublin Airport's capacity analysis, this processor is now expected be over capacity by the time the project is delivered.
- 15.90 In that context we continue to allow for this project and to make it a Flexible allowance.

North Apron Development - Pier 1 Extension (Module 1) (CIP.20.03.036)

- 15.91 Ryanair supports the Module 1 project but would also like to see the Module 2 project included, to ensure an acceptable level of contact service is provided in Terminal 1. It believes the cost of these projects is excessive. It argues that the South Gates project in 2018 was €22m and delivered the same number of gates. It cites examples of airports that have delivered similar projects at lower cost.
- 15.92 Ryanair questions the need to rescope this project to include '*Level uninterrupted departures access from the Skybridge*'. It argues that passengers will ultimately need to walk to ground level to reach the aircraft, and that this is unnecessary expenditure.
- 15.93 Ryanair also questions the proposed glass façade, arguing that glass is expensive and has poor insulation meaning more air conditioning in summer, and more heating in winter which goes against the airport's sustainability objectives and increases Opex.
- 15.94 Dublin Airport argues that many airlines use airbridges, which it argues provide a better level of service and passenger experience. It notes that a key strategic decision of the project was to develop fully flexible infrastructure that can accommodate all operators. It also notes that the change in Module 1 design allowed it to omit the disruptive retrofitting of airbridges to the existing Pier 1 which will minimise operational impact on Ryanair.
- 15.95 Dublin Airport also notes that modern glazing systems and architectural curtain walling are well engineered to conform to and exceed insulation requirements defined by

Building Regulations. It notes that the glazing also provides day light efficiency, which reduces lighting requirements. It also notes that it is required to provide an architectural design that is complimentary to the existing and adjacent terminal development. These submissions on costs of this project are assessed in the IFS report.

15.96 We believe that the scope of this project is sufficient to deliver the desired outcomes, and that this project is in the interests of users broadly. We do not agree that the South Apron PBZ is comparable as there are many factors other than a simple comparison between the number of gates which affect the cost of infrastructure.

15.97 We continue to allow for this project and have made it a trigger project which will progress through StageGate which provides further opportunity to refine the scope.

West Apron Vehicle Underpass - Pier 3 Option (CIP.20.03.051.2)

15.98 Ryanair does not support this project. It argues that this project will only have limited benefit to users of the eastern campus and does not meet our tests for acceptability as only the small group of cargo operators support it.

15.99 Ryanair also argues that the cost burden of additional journey time will be negligible as most vehicular trips will be during the night when the North Runway will also not be in use and that 16/34 could be fully utilised during this timeframe. It believes the works are premature as demand for passenger operation on the West Apron will not materialise by the time the project is completed. It believes Dublin Airport will need to further increase the project scope as they have not included a contingency middle tunnel.

15.100 Ryanair believes that our acknowledgement of the delay risk for the project means that users will be paying for an expensive project that is unlikely to be delivered and that if the project is to be allowed for it should at least be triggered.

15.101 Aer Lingus believes that the proposed development of the West Apron is premature, and we should exclude the West Apron developments from the RAB to incentivise the airport to expand capacity on the east side. It argues that Dublin Airport should consider alternatives for the 'small' level of integrator traffic that uses the West Apron, rather than delay the development of the South Apron.

15.102 Aer Lingus considers that the West Apron Underpass is being prioritised ahead of the South Apron development. It argues that the underpass offers no additional efficient operational stands, and that Dublin Airport's masterplan suggests that existing terminals should be fully developed before exploiting other areas of the airport.

15.103 IALPA argues that there is a long-term requirement to construct a satellite pier on the Western campus. It requests that provision be made for a 3rd cell incorporating a future proof Automatic People Mover (APM).

15.104 We are not persuaded to disallow this project. Enabling the airport to develop beyond 40 mppa requires reliable and efficient access to the West Apron into the future. This project is a necessary first phase in opening up the western campus for passenger operations which the eastern campus users would benefit from. We note that there is therefore a circularity in Ryanair's point on demand as reliable and efficient access to

the western campus is in fact a prerequisite for passenger operations.

15.105 Regarding Ryanair's point on Runway 16/34, we note that the ability to use the level crossing is time limited. We also note that northern part of RW16/34 will now be used more frequently as a taxiway, making this approach more challenging from a safety perspective.

15.106 We also disagree with Aer Lingus's assertion that the development of the West Apron Vehicle Underpass has impacted on the timelines for the South Apron developments, or that delaying the Underpass will positively impact on the South Apron delivery timelines. The main factor impacting the delivery of the South Apron infrastructure is the achievement of planning permission, which cannot be incentivised by delaying other projects. These are two distinct issues.

15.107 We have not received any evidence to suggest that the underpass in being prioritised ahead of the South Apron development, and so do not believe that disallowing this project would work to incentivise delivery of those projects. We assessed that both of these projects are in the interests of airport users but serve separate purposes. It would not be appropriate to condition West Apron Underpass on the South Apron just to add an additional incentive for the latter, to the potential detriment of users who require the West Apron underpass.

15.108 Regarding the support for this project, we note that it has strong support from the cargo operators and IALPA, and while the direct benefits for airlines operating on the eastern campus may be relatively limited in the short term compared to the cost of the project, the same can be said of the north apron/south apron/terminal capacity projects for those who operate on the West Apron. As in 2019, we continue to assess that the development of reliable, safe, and efficient east-west connectivity is in the interests of airport users.

15.109 IALPA makes several suggestions for developing the West Apron, however, we can only assess the projects submitted to us by Dublin Airport, who have not included any such projects in the CIP. Again, we note that the regulatory settlements afford flexibility for the design of the project to be adjusted, if required.

15.110 As noted in the Draft Decision, we have reviewed the ARUP/Ricondo report (April 2022) which considers the dual/single cell options. This report concludes that the dual cell configuration is required, and that a single cell configuration can be ruled out on the grounds of safety, regulatory compliance, and operational effectiveness.

15.111 We do agree that this project faces phasing and deliverability risks. Given the cost of the project, this risks significant misalignment with remuneration profiles if the project is included in the base price cap allowances. We have therefore opted to trigger it and to make it a StageGate project.

Transfer Immigration Booths - Pier 4 and T2 (CIP.20.03.072)

15.112 Ryanair believes that the need for this project is unclear if the number of US bound transfer passengers from the UK decreases.

15.113 As stated in the Capex and Passenger Forecast chapters, we are predicting that US

departing passengers will be broadly similar to 2019 levels in 2023, with continuing growth to the end of the period. This project is necessary to facilitate development of a 40 mppa airport. In this context we continue to provide a Flexible allowance for this project.

Taxiway R widening (CIP.20.03.074)

15.114 Ryanair supports the need for this project but questions the timing if the main driver is to enable expansion of the south apron, which will not be delivered until after 2026.

15.115 IALPA notes that were this project to be constructed as it designed, it would face a high collision risk which may have been undetected by the airport and IAA SRD, i.e., when both Widebody Code E aircraft bypass each other at the head of Pier 4.

15.116 In response to Ryanair, we note that this project is due to be delivered in Q3 2025, which is the point at which works on the South Apron Expansion begin.

15.117 Regarding IALPA's point, Dublin Airport notes that Full Code E - Code E aircraft clearance will be maintained at the head of Pier 4. The Airport says that it will, in conjunction with the IAA, undertake risk assessments of this new infrastructure to reduce any conflicts in this area, as far as reasonably practical. It also notes that if Taxiway R is not delivered this will create a bottleneck in the taxiway infrastructure at the end of Pier 4.

15.118 We note the support from some airport users for this project. Our simulation modelling has previously shown the benefit of unrestricted dual code E taxiways between the north and south aprons. We are satisfied that this project is in the interests of users and continue to provide an allowance for this project and to include it in StageGate alongside the other taxiway projects.

15.119 As noted in the Capex chapter, the asset life of this project has been reduced from 30 years to 20 years.

Fuel Hydrant Network Works (CIP.20.03.075)

15.120 Ryanair supports this project in principle but wishes to understand the commercial justification and the implications for fuel costs, along with any Opex savings. It asks that a business case be provided demonstrating the benefits to users before the project is allowed.

15.121 Dublin Airport has stated that it cannot provide any future forecast in relation to fuel costs and/or Opex savings as it believes this is an airline/Into plane relationship. It also notes that there is a sustainability and safety benefit to the airport of this project as it reduces the amount of airside bowser movements. This project is due to be completed outside of the regulatory period, therefore no Commercial Revenue or Opex impacts can be applied.

15.122 We agree that the provision of fuel hydrants in place of the existing tanker arrangement will allow for more environmentally friendly, fast, and reliable refuelling, while reducing the number of vehicles on the apron. We also note that this project has support from some users. We continue to allow for this as a StageGate project.

De-Icing Consolidation (CIP.20.03.076)

15.123 Ryanair supports this project in principle if it ensures winter operations are more resilient.

15.124 We believe that this project will support the passenger experience, especially during severe weather events. This project also has support from some airport users. Within this context we continue to allow for it and to categorise it as Flexible.

South Apron Airside Support Centre (CIP.20.03.077)

15.125 Ryanair argues that as this development is stated as providing longer term spare capacity, the scale of the immediate development should be scaled back to minimise costs to users during the Covid recovery period.

15.126 The project is needed to provide new ground handler facilities that have sufficient capacity for future growth in close proximity to the South Apron Hub. It is also needed to facilitate South Apron construction works. It will provide accommodation for a construction management compound and welfare facility in the heart of the South Apron site during its construction, thus offsetting site set up and management costs. It is expected to be delivered shortly before construction works commence and will then subsequently provide the ground handler accommodation.

15.127 We continue to provide an allowance for this project but given the extended timeline and associated planning risk with the South Apron projects, we continue to make it a trigger project and categorise it as StageGate.

Pier 4 De-Flex (CIP.20.03.078)

15.128 Ryanair claims that current need for this project is unclear as no forecasts have been provided on the number of occasions that CBP operations would block the pier. It believes further information is required to justify this expenditure within the period.

15.129 In 2019, 16% of departures to the US departed >30 minutes after their Standard Time Departure (STD), with 9% departing >45 minutes after STD. We note that having this infrastructure in place would enable more flexibility and an optimised flights schedule for non-CBP flights from Pier 4.

15.130 We agree that this project enhances the flexibility of Pier 4 and we therefore continue to provide a Flexible allowance for it.

Code E Engine Test Facility (CIP.20.03.079)

15.131 Ryanair wishes to understand the cost of alternative options considered before commenting on this specific proposal. It also seeks reassurance that Code C engine testing will not be restricted during the construction period. It notes that the airport only built the Code C facility 10 years ago and that this facility is only required once every 6 weeks and has a lifespan of 20 years.

15.132 Dublin Airport confirms that in the early stages of the North Runway project, the West Apron was identified as an alternative option, but that this option was dismissed due

to the impacts on existing stand capacity and fire station. The airport also confirms that during the construction period, alternative Code C engine testing locations will be identified on adjacent taxiways, as a temporary solution.

15.133 We acknowledge that the existing code E engine testing location will no longer be available following the introduction of the North Runway earlier in 2022 and its associated planning conditions. We accept that there is a need to replace this facility and that the proposed project is in the interests of airport users who operate code E aircraft. We continue to provide an allowance for this project and categorise it as StageGate.

10L/28R Taxiway Exit AGL (CIP.20.03.080)

15.134 Ryanair notes that it is not clear whether this project is required at this time and that it is not possible to comment without the costs and benefits being fully set out.

15.135 We note that significant levels of information on the costs, benefits and timelines of this project are outlined in the material provided to users by Dublin Airport both pre and post CIP, and in the Steer report. This project is in the interests of users as it ensures compliance with relevant EASA codes. We continue to allow for this project and designate it as Flexible.

Apron 5H & North Apron Taxiway Rehabilitation (CIP.20.03.081)

15.136 IALPA note that if the airport has plans for intensive Apron 5H passenger operations then the south apron cul-de-sac may become a constraining factor.

15.137 The Airport states that Apron 5H is required for additional remote parking stands to support North Apron operations and additional parking on the East Apron. The Airport notes that its primary focus for passenger operations is on contact stands due to the available infrastructure and supporting passenger facilities. It says that in future CIP cycles it intends to extend the triple taxiway but will require future apron pavement expansion along the southern edge once space becomes available.

15.138 We note the increased importance of this project given that the Apron 5M project has been deferred. We continue to provide a Deliverable allowance for this project.

Commercial Projects

15.139 The projects in this category are intended to improve Dublin Airport's commercial offering and maintain or enhance Commercial Revenues. Most of these projects were included in the original 2019 Determination. Several additional projects have also been proposed.

15.140 We confirm our decision to allow for nearly every proposed project, with the exception for 'Drop off/Pick Up' (CIP.20.04.032) which we do not believe is in users interests.

General Comments received on the Commercial projects

15.141 Ryanair argues that it has not received information from Dublin Airport on the Commercial Revenue uplifts, and that several commercial projects do not provide

beneficial revenue uplifts, such as Car Park Management System (CIP.20.04.001), Car Hire Consolidation Centre (CIP.20.04.002), Digital Advertising (CIP.20.04.004) where it argues that the revenue uplift is nullified by an assumed change in the contract terms. It also highlights the Commercial Property Refurbishment (CIP.20.04.025), Office Consolidation and Refurbishments (CIP.20.07.010) and OCTB Refurbishment (CIP.20.04.34) where it argues that a negative financial contribution is projected. Ryanair believes there is no business case for these projects, and that they should not be allowed as they are not in the interests of users.

15.142 Business cases relating to commercial projects were provided through the CIP consultation, and in the published CIP document. We also provided detail on all of the uplifts we included in our Draft Decision document and model, and have again done so for this decision. We note that Car Hire Consolidation Centre (CIP.20.04.002) has a positive business case with CIP uplifts included in the model from 2026, as does Digital Advertising (CIP.20.04.004). The baseline adjustment in advertising is unrelated to this project and is discussed further in the Commercial Revenue section.

15.143 Regarding Office Consolidation and Refurbishments (CIP.20.07.010), we have included Commercial Revenues of approximately €0.3m per year, as well as Opex savings in the CEPA/TA model. Since the Draft Decision, Dublin Airport has suggested that the floor space to be refurbished was previously significantly understated in its cost assumptions. For the purposes of internal consistency, we have chosen to retain the Draft costing together with the other elements of the business case previously outlined, as agreeing to the airport's request would give the project a negative business case. We therefore also include this project in StageGate, which will allow for reassessment of the project/ business case for this project in the context of this updated information.

15.144 Finally, we have now included Commercial Revenues for OCTB Refurbishment (CIP.20.04.34) of approximately €1.3m per year from 2024. This project has a positive business case and our inclusion of the incremental revenue is linked to CEPA/TA allowing for additional rental costs for the Regulated Entity associated with Dublin Airport City, as set out in the CEPA/TA report.

Car Parking Management System (Maintenance & upgrade) (CIP.20.04.001)

15.145 Ryanair believes that the cost of this project requires further justification in terms of revenue generation.

15.146 As set out in 2019, this project is needed to maintain Dublin Airport's car parking operations. As explained in the Draft Decision, this is intended to replace existing end of life assets. We continue to allow for this project. More information on the decision to not apply a revenue uplift is provided in Section 9.

Car Hire Consolidation Centre (CIP.20.04.002)

15.147 Ryanair argues that the scope of this project has increased, with the number of spaces provided increasing by 33%. It finds the proposal to increase spaces unusual and questions whether there has been an increase in demand for car hire. It says that the overall project cost has risen by 142% and notes that contingency has risen from 5%

of the project cost to 30% (€10m) for a project that it believes is relatively simple in terms of design and construction. It believes that the costs should come down as the scope and design detail become better understood. It notes that Dublin Airport highlights car hire operator demand as driving increased costs but argues that the CIP is not a wish list for commercial firms that do not pay passenger charges and that Dublin Airport should push back on these demands.

15.148 Car Rental Council of Ireland (CRCI) welcomes the project and requests that these projects be delivered without delay and with ongoing consultation with CRCI and involved companies.

15.149 Regarding the scope change, Dublin Airport has stated that following detailed engagement with the car hire companies in late-2021, and in recognition of increased demand for car hire (especially from growing passengers numbers from North America), a unanimous agreement on the need for increased car park spaces at the expense of customer facing facilities in the Eastlands village was made which reduced the customer facing elements of the project and added a net 1,000 spaces (3,000 to 4,000) in the same facility footprint.

15.150 The revenue uplift associated with this project is discussed in further detail in Section 9. We note here that the additional revenues resulting from this project are forecast to reduce Airport charges across the life of the project.

15.151 We acknowledge the Car Rental Council of Irelands support of the project and suggest that it liaise with Dublin Airport to discuss delivery timelines. We continue to provide a Deliverable allowance for this project.

Digital Advertising Infrastructure (CIP.20.04.004)

15.152 Ryanair argues that further information is needed to justify the increased cost of this project and the additional revenues that it will generate.

15.153 The revenue impact of this project is discussed in Section 9. Business case information was provided for this project in the revised CIP documents and in the slides from the CIP consultation. The project has a positive business case. We continue to provide a Flexible allowance for this project.

Long Term Car Parking - Eastland's (2000 spaces) (CIP.20.04.005)

15.154 Ryanair argues that further information is required on the timing of this project relative to levels of longer-term car park demand and public transport use. It also asks that the impacts of this project on Commercial Revenues and Airport Charges be explained.

15.155 Dublin Airport laid out the positive business case for this project in the CIP consultation, based on its anticipated demand. We reflected this business case in the regulatory settlement. Given that this project is not anticipated to be delivered until 2029, there is no relevant revenue uplift by 2026, and the expenditure is also profiled to enter the RAB in 2029. Thus, there is no impact on Commercial Revenue or Aeronautical Revenue for 2023-2026. We also note that Ryanair's apparent suggestion of weaker car parking demand is inconsistent with its arguments as to why our

carparking forecast for 2023-2026 is understated, as set in Section 9.

15.156 We continue to allow for this project and consider it flexible.

Terminal 1 Multi - Storey Car Park Block B (480 spaces) (CIP.20.04.006)

15.157 Ryanair notes that it could support this project but argues that insufficient cost information was provided by Dublin Airport, who have deferred this project due to future metro works which have not materialised. Ryanair argues that it delivers the majority of traffic to Dublin Airport and operates from Terminal 1, so it would make sense to reconsider this project subject to a detailed cost justification instead of deferring the project.

15.158 As noted in the Capex chapter, the Commission does not have a role in designing the airport and we have not made allowances for projects which were not included in Dublin Airport's final CIP. Dublin Airport has significant Capex flexibility and so could decide to pursue this project if it wished.

Terminal 2 Multi - Storey Car Park (680 spaces) (CIP.20.04.007)

15.159 Ryanair argues that further information is required on the timing of this project relative to levels of longer-term car park demand and public transport use. It also asks that the impacts of this project on Commercial Revenues and Airport Charges be explained.

15.160 Dublin Airport laid out the positive business case for this project in the CIP consultation, based on its anticipated demand. We reflected this business case in the regulatory settlement. The project is expected to be complete within 2025. We continue to provide a Flexible allowance for this project. Given the timeline for this project, we profile remuneration in full from 2026, and also include a carparking revenue uplift of €1.4m in 2025 and the full uplift of €2.9m in 2026.

Staff Car Park (CIP.20.04.009)

15.161 Ryanair supports this project as it believes additional staff car parking is required to ensure that delays do not arise from lack of space. We continue to allow for this Flexible project.

Platinum Services Upgrade Works (CIP.20.04.016), Airline Lounges - Expansion, Upgrade & New (CIP.20.04.017), and Fast Track Improvements (CIP.20.04.018)

15.162 Ryanair argues that 50% of the cost increase for these projects relates to scope increase, and that further justification is required regarding their scope and revenue generating potential. It further notes that the business cases for these works are not clearly set out and finds it unlikely that regulations and standards could drive a 25% cost increase overall. It believes there is no justification for these works during the Covid recovery period.

15.163 Ryanair believes there is no need to upgrade premium services, lounges and platinum services for the benefit of a small number of passengers when the cost impact will affect all airport users, particularly where the upgrading of Pier 2 and Pier 3 has been deferred and will be of greater benefit to more passengers and users. It believes the

associated Commercial Revenue uplifts do not justify a need for such expenditure to be borne by all airport users.

15.164 The costs of these projects are assessed in the IFS report.

15.165 Uplifts for these projects are discussed further in the Commercial Revenues chapter. We note here that these projects have positive business cases, and that the additional revenues resulting from this project will reduce airport charges across the lives of the projects. We continue to provide Flexible allowances for these projects.

New Food & Beverage Fit out (T1X) (CIP.20.04.003) and Food & Beverage Provision & Fit Out - Post CBP (CIP.20.04.023)

15.166 Ryanair argue that it is not acceptable that the costs for these projects have increased above the levels previously allowed by the Commission. It argues that Dublin Airport should not add back in inefficient costs that the Commission previously removed.

15.167 This comment is addressed in the IFS report. We continue to provide Flexible allowances for these projects.

New Kitchen in Terminal 2 (CIP.20.04.030)

15.168 Ryanair understands that this project has been completed. However, it believes that the justification for the cost increase demonstrates Dublin Airport's inefficiency and therefore believes that the increased costs should not be allowed into the RAB.

15.169 The costs of this project are assessed in the IFS report. We continue to provide Flexible allowances for this project.

Commercial Property Refurbishment (CIP.20.04.025) and Fuel Farm Welfare (CIP.20.04.031)

15.170 Ryanair argues that insufficient information on the business case to users has been provided.

15.171 The Commercial Property project is discussed further in the Commercial Revenues section. We note here that Business Case information was provided for these projects in the revised CIP documents and in the slides from the CIP consultation. Further information on the costs could have been obtained upon request from Dublin Airport. We continue to provide Flexible allowances for these projects.

Drop off Pick Up (CIP.20.04.032)

15.172 Dublin Airport states that we should allow for this project as it will improve the efficiency of the departure roads, and will also have the added benefit of reducing Airport Charges.

15.173 Dublin Airport has simply restated the concept of this project but not provided further evidence or rationale. As set out in the Draft Decision, we have not been provided with evidence to suggest that this project is in the interest of users, therefore we continue not to make an allowance for it.

Car Valet Product (Concierge) (CIP.20.04.033)

15.174 Ryanair argues that the business case for this project needs to be fully set out before the project is included in the capital programme.

15.175 We note that this project was not included in the final revised CIP 2020+. We have made no allowance for it, nor did we propose to in the Draft Decision.

OCTB Refurb (CIP.20.04.034)

15.176 Ryanair notes that it is unclear why this project is a priority at this time. It believes the costs would only be justified if there is a high likelihood that the accommodation will be occupied from an early date. It asks how likely this is in post-Covid-19 recovery with increased remote working. It also argues that no business case justification is provided to verify the likely take up.

15.177 We note that Business Case justification was provided for this project in the revised CIP documents and in the slides from the CIP consultation. In the Commercial Revenue chapter, we noted that in line with the approach now taken by CEPA/TA, we have added an uplift of €1.3m per year for this project for each year 2024-2026. This is also discussed further in the CEPA final report 'rent and rates' section. We continue to provide a flexible allowance for this project.

Metro Development and Interface (CIP.20.04.035)

15.178 Ryanair argues that it is not acceptable that no information is provided on this project and that no indication of the costs have been given. It also asks why Transport Infrastructure Ireland is not funding this project.

15.179 This project is not included in the Final Revised CIP, and no allowance has been made for it.

Office Consolidation & Refurbishment (primarily Level 4 & 5, Terminal 1) (CIP.20.07.010)

15.180 Ryanair argues that €3.5m worth of adjustments to the costs made by the Commission in 2019 have been added back into this project. It believes this is unacceptable unless the increase is clearly justified in terms of additional incremental revenues.

15.181 The assessment of proposed costs for this project is detailed in the IFS report. As set out above, Dublin Airport has requested a change in the cost of this project from €19m in the Draft Decision to €40m to reflect an error in its initial level 3 costings. We have not chosen to increase the scoping assumption for this project as the higher cost would result in a negative business case for the project. Instead, we have opted to include this project in StageGate, where the costs and scope of this project can be further scrutinised.

Retail Refurbishments, Upgrades and New Developments (CIP.20.08.001), and Retail Marketing & Media Installation (CIP.20.08.002)

15.182 Ryanair argues that no business case information was provided for these projects and

that no explanation has been provided for the increase in cost. It does not accept these projects on that basis.

15.183 The costs of these projects are assessed in the IFS report. Business case information was provided for these projects in the Final revised CIP documents and in the slides from the CIP consultation. These projects have positive business cases which are reflected in our Opex and Commercial Revenue forecasts. We continue to provide Flexible allowances for these projects.

Sustainability Projects

15.184 The Sustainability projects are intended to facilitate Dublin Airport in reaching its goal of becoming a net-zero carbon emissions airport by 2050 and a 51% reduction in emissions by 2030 in line with regulatory requirements.

15.185 Dublin Airport's sustainability plan has three phases. Phase 1 aims to achieve reductions through replacing old infrastructure, developing a solar farm and progressing small energy efficiency projects. This phase also assumes anticipated improvements in national grids energy efficiency. Phase 2 encompasses projects which will assist in achieving the emissions reduction target. Phase 3 will aim to set a path to reach net-zero emissions by 2050.

15.186 In the Draft Decision we agreed with Dublin Airport that the Sustainability projects should predominantly be considered StageGate projects. As noted in the Capex chapter, we confirm this position. The early stage of design of these projects means they will require further consultation to deliver the required project outputs most efficiently.

15.187 The primary purpose of this category of expenditure is to enable Dublin Airport to meet its sustainability requirements and obligations. This aligns with our objective in relation to government policy described in Section 5. However, some of these projects also provide Opex and Commercial Revenue benefits. To the extent possible currently, we have sought to reasonably capture these impacts in our Opex and Commercial Revenue forecasts.

15.188 We confirm our position in the Draft Decision to profile the allowances for these projects over the five years 2023-2027, given our expectations around the timeline for delivery of the programme. We prefer this approach to using triggers for these projects as they are general modular, thus they will be delivered in phases rather than discretely.

15.189 The exception is CIP.20.03.052 (Surface Water Environmental Compliance), which is profiled over 4 years. It is not a new project but has been rolled forward from the original 2019 investment programme.

General comments received on the Sustainability projects

15.190 Aer Lingus supports initiatives that will help reduce carbon emissions and increase sustainability but argues the importance of investments being in the interests of users and having a positive impact on Opex. Aer Lingus believes that the StageGate process

is not sufficient to ensure that the proposed projects are an efficient way of addressing Dublin Airport's sustainability obligations. It asks that the Commission work to enhancing governance processes to help optimise both the decarbonisation and economic benefits of sustainability projects.

15.191 Aer Lingus requests full transparency on the extent to which the sustainability Capex is driven by mandatory sustainability obligations and is supported by airlines, rather than its own voluntary initiatives.

15.192 IATA states that the new suite of sustainability projects should be targeted and effective and held to the same standards and scrutiny as capital spending plans to ensure best results.

15.193 Shannon Airport Group welcomes the allowance of the sustainability Capex projects.

15.194 Ryanair supports appropriate investment in sustainability projects, where required, but it argues that Dublin Airport has not demonstrated that these projects are those required or that they are appropriate to deliver those aims. It believes that Dublin Airport has presented a number of projects as being under the sustainability heading, and added sustainability related costs to other projects, for the sole purpose of inflating the overall size of the CIP.

15.195 Ryanair believes that Dublin Airport should be required to set out the measurable benefit of each project or cost increase, including the potential reduction in Opex related to energy saving initiatives, and any uplifts from Commercial Revenues arising from the projects. It specifically notes that the Airport charging (CIP.20.09.001) and FEGP (CIP.20.09.005) projects should have revenue streams; and that Photovoltaics (CIP.20.09.006) should have either a revenue stream and/or a demonstrable reduction on energy costs.

15.196 It urges the Commission to re-examine the list of sustainability projects and to ensure that users are not paying unnecessarily for the cost of initiatives that should be funded elsewhere (i.e., through state aid programmes) or be self-funding.

15.197 Ryanair believes that the sustainability projects should be made the subject of triggers as the need for these is unproven and the business case not justified.

15.198 It also argues that given the initiatives being taken at a national level, the need for specific action by Dublin Airport to reach a 51% reduction target by 2030 would be minimal.

Commission response

15.199 As part of the StageGate process, Dublin Airport will be required to outline the initial environmental impacts of Sustainability projects, as well as any expected changes in the impacts, and the legislative obligations driving the projects. Users will have the opportunity to scrutinise the projects as they are developed to ensure they are meeting Dublin Airport's obligations. As such, we are confident the StageGate process will be crucial in ensuring that the Sustainability projects meet their intended outcomes.

15.200 We have sought to reasonably capture the cost savings relating to these projects. For example, the Photovoltaic Farms and Anaerobic Digestion projects, combined, reduce our Opex forecast by €1.2m in 2025 and €1.7m in 2026. Further Opex impacts resulting from other sustainability projects in the future are likely, such as from the Terminal 2 Sustainable Upgrade, however, as the benefits will occur outside the regulatory period they are not included in our forecasts for this period.

15.201 Regarding Aer Lingus comments on the Sustainability projects legislative drivers, we note that these are detailed in the Sustainability section of Dublin Airport's final Revised CIP 2020+. We also note that even if they were not all driven by legislative obligations many of these projects, such as Sustainable Aviation Fuel enablement and campus mobility improvements are, in our view, still in the interests of users, and/or in alignment with the Commissions other objectives such as Government policy.

15.202 In response to Ryanair, we note that a number of these projects are still at a high level and at this time we are necessarily relying on early design, but centreline, cost estimates. These estimates have been assessed by the IFS. However, while the project outputs are not yet fully defined, sufficient detail on the scope, purpose, and cost assumptions of the relevant projects have been provided to enable us to assess that including the projects within the regulatory settlement, especially with our sustainability policy objective, better aligns with our statutory objectives than not doing so. Furthermore, detail has been provided to the IFS to enable it to make a preliminary cost assessment. Dublin Airport's Final Revised CIP document also details the legislative requirements driving each project, as well as their non-legislative expected benefits.

15.203 Regarding further detail on the measurable benefits of the Sustainability projects, these will need to be demonstrated as part of the StageGate process and users will have the opportunity to engage with Dublin Airport on these impacts.

15.204 As set out above, we continue to refrain from triggering any of the Sustainability projects and instead confirm our decision to remunerate the projects over 5 years, which, in our view, is likely to better align remuneration with delivery.

15.205 Meeting Dublin Airport's emissions targets will require direct action from the airport. The State's success in achieving its overall emissions targets relies on all state bodies achieving theirs. It is therefore unrealistic to believe that Airport can achieve this through minimal action, and at a high level, we consider the proposed sustainability investment programme to be reasonable.

Surface Water Environmental Compliance (CIP.20.03.052)

15.206 Ryanair argues that this project has been taken out of Capacity Projects and moved into Sustainability Projects, and that the CIP does not contain sufficient detail to justify how new regulations translate into a 75% construction cost increase.

15.207 The cost of this project is assessed in the IFS report. In line with our 2019 assessment, the output of this project remains necessary to meet regulatory requirements and continue to allow for this project and to include it in the StageGate process.

Airport Charging (CIP.20.09.001)

15.208 Ryanair believes that this project ought to be revenue earning and treated as a commercial project. It also argues that no business case has been shared with users and so the project should be rejected until the business case is proven.

15.209 The question of potential net revenue which may be generated by this project is discussed in Section 9. This project facilitates the change to electric vehicles for both Dublin Airport and third parties, which is important for meeting the airport's sustainability goals and is therefore in the interests of airport users. We allow for this project and include it in the StageGate process.

Alternative Fuels (CIP.20.09.002)

15.210 Ryanair questions the need for the airport to be investing in research into alternative fuels, as it considers this an industry matter.

15.211 Dublin Airport notes that this project is critical to assisting it and airlines in reaching sustainability targets, and to gaining regulatory planning approval to increase the airport's passenger cap. It argues that while the Alternative Fuels project does not directly reduce its carbon emissions, it will be facilitating sustainable air traffic growth over the longer-term. It also cites the Fit for 55 EU Commission Alternative Fuels Directive as an example of legislation driving this project.

15.212 We recognise the importance of facilitating the increased use of Sustainable Aviation Fuel at Dublin Airport. Thus, this project is in the interests of airport users. We allow for this project and include it in the StageGate process.

Anaerobic Digestion (CIP.20.09.003)

15.213 Ryanair says that it is not clear why this project is required now and that it should be deferred on affordability grounds.

15.214 Dublin Airport has a requirement to reduce carbon emissions within the decade and this project would make a significant contribution towards achieving these legally mandated emissions reductions. We also note that an estimated Opex saving of €0.3m from 2026 from this project has been included in our forecast which reflects the reduced requirement for fossil-fuel based energy. We allow for this project and categorise it as StageGate.

Sustainable Fleet (CIP.20.09.004)

15.215 Ryanair argue that the airport should consider deferring this project on affordability grounds, arguing that the average cost to replace a vehicle (€423k) appears excessively high. It asks if Dublin Airport has considered converting current vehicles to electric power.

15.216 The costs of this project are assessed in the IFS report.

15.217 We confirm our Draft Decision position that Dublin Airport needs to transition to sustainable fleet vehicles. We also note that, all else equal, this project will reduce

required forward expenditure within Asset Care CSF, further reducing the need for increasing the overall allowance for that grouping as suggested by Dublin Airport. We allow for this project and categorise the allowance as Flexible.

Fixed Electrical Ground Power Phase 3 (CIP.20.09.005)

15.218 Ryanair argues that the cost of this project should be reviewed. It also argues that given the revenue earned from FEGP, the costs and benefits of the project need to be made clear to users.

15.219 The cost of this project has been reviewed by the IFS. Revenues associated with this project are discussed in Section 9. As in 2019, we continue to support the installation of FEGP at the remaining stands at Dublin Airport, and as such we continue to provide an allowance for this project and categorise it as StageGate.

Photovoltaic Farm Phase 2 (CIP.20.09.006)

15.220 Ryanair argues that the Photovoltaic Farm projects should be treated as commercial projects given the prospects of revenue generation. It also argues that a business case needs to be presented.

15.221 As noted above, this project will have an impact on Opex from the year it is delivered, which has been included in the Opex forecasts. We recognise that Dublin Airport has a requirement to reduce carbon emissions as well as the contribution the phase 2 project would make towards achieving legally mandated emissions reductions. We therefore continue to allow for this project and include it in StageGate.

Mobility Improvements (CIP.20.09.007)

15.222 Ryanair argues that this project does not appear a priority in the short term and that it should be deferred until after the recovery from the pandemic.

15.223 This project is expected to assist Dublin Airport in reaching its climate targets and to facilitating a cleaner and more sustainable airport. We note that this project will enter the StageGate process, where it will be required to demonstrate the environmental benefits of this project. We continue to provide a Flexible allowance for this project.

Terminal 2 Sustainable Upgrade (CIP.20.09.008)

15.224 Ryanair argues that €72m in construction fees is exceptionally high and unjustified for an upgrade to a terminal that is only 12 years old. It further notes that if it is required, then this is further evidence of Dublin Airport's inappropriate and inefficient capital spend historically. It believes that the costs need to be reviewed and reduced to an affordable level.

15.225 Comments on the costs of this project are addressed in the IFS report. We expect that this project would deliver significant Opex benefits, although these are likely to materialise in the next regulatory period and as such have not been captured in our model. We continue to provide an allowance for this project and categorise it as StageGate, to allow for the scope of the project to crystallise in a consultative manner.

Terminal 1 and Campus Sustainability Feasibility CIP.20.09.009

15.226 Ryanair believe this project should be deferred until the following regulatory period.

15.227 This project is expected to assist Dublin Airport in reaching its climate targets by furthering its understanding of where sustainability improvements can be made. We note that this project will enter the StageGate, where it will be required to demonstrate the environmental benefits of this project. We continue to provide an allowance for this project.

Further Comments

Terminal expansion

15.228 IALPA argues that Dublin Airport should review its existing T2 expansion design to cater for its 40mppa + scenarios. It says that a Western expansion of T2 should consider a centralized T1/T2 transfer/security/passport control prior to APM feed to the West Campus Satellite WB Pier.

15.229 We refer IALPA to Capex chapter, where we note that it is not the Commission's role to design the airport, but rather we assess projects that are submitted to us by Dublin Airport.

Cancelled Projects

15.230 Ryanair believes that projects for which there is a need for have been cancelled and that prime amongst these is the Airside GSE Charging Facilities project. It believes these facilities are immediately needed.

15.231 IALPA asks if the airport availed of any direct Metrolink co-ordination with Transport Infrastructure Ireland in the period 2019-2022.

15.232 IALPA argues that it is Dublin Airport's responsibility to protect and maintain future Terminal expansion, Hangar relocation, and the APM boarding/tunnel position between piers 3&4 with respect to the Metrolink Tunnel. It further believes that any future Dublin Airport Metro Development and interface issues with Terminals 1 & 2 must also not impede road traffic / pedestrian free flow within the Ground Transport centre.

15.233 IALPA argues that given Apron 5H/Metrolink planning issues, Dublin Airport should ensure that the Metrolink tunnel never restrict Terminal expansion or redevelopment, Hangar relocation and, any future APM operations serving the Western Campus from a centralised passenger T1 & T2 processing/immigration facility between Piers 3 &4.

15.234 We note that the planned Metro Development and Interface project (CIP.20.04.035) has been postponed and will commence at a later date.

15.235 As noted in the Capex chapter, the Commission does not have a role in designing the airport and can only assess the projects that are proposed to us by Dublin Airport.

Hangars

15.236 IALPA endorses the Commissions stance to protect Dublin Airports MRO business.

15.237 IALPA notes that it is unaware of any Dublin Airport MRO long term policy but recommends the following Masterplan Objective: The MRO Building line shall aligned no further than the front of Hangar 6 with a replacement programme commencing West of Hangar 6 as Hangars East of Pier 1 are demolished in sequence 1,2,3 etc.

15.238 We note that Dublin Airport has committed to progressing with replacement hangars. We expect that this will be progressed as part of the StageGate process for the North Apron Development – Pier 1 Extension (Module 1).

Pre-existing projects

15.239 IALPA has made several technical/operational points in relation to a number of pre-existing PACE projects from the 2014 Determination which are not being reassessed from an economic regulation perspective in this interim review. These projects are Foxtrot inner, the Dual Code E bypass at Bravo 1/Zulu, and Runway 16/34. Some of these projects are expected to come to StageGate 1 soon and will be subject to consultation. Thus, they are out of scope of this review but will fall to be considered shortly in a separate process which focuses more on the detailed design.

Table 15.1: Allowed Capex projects summary (€m, real February 2022 prices)

CIP.20	Project	Final Allowance (€m)	Asset Life	Treatment
Asset Care- Civil, Structural, Fleet				
01.001	Southern Runway 10/28 Delethalisation	2.5	20 years	Flexible
01.002	Apron Rehabilitation	47.6	20 years	StageGate
01.003	Airfield Taxiway Rehabilitation	18.2	20 years	StageGate
01.004	Apron Road Rehabilitation	5.3	20 years	Deliverable
01.006	Airfield Southern Perimeter Road Upgrade	4.5	15 years	Flexible
01.008	Runway Approach Lighting Mast Improvement	13.0	20 years	Deliverable
01.009	Aerodrome Ground Lighting (AGL) Improvement	5.2	15 years	Deliverable
01.010	Airfield Lighting Control Management System Improvement	5.2	10 years	Deliverable
01.012 (Completed)	AGL Substation T Development	3.4	30 years	Deliverable
01.015	High Mast Lighting Improvement	1.0	15 years	Flexible
01.016	Airfield Maintenance Base Improvement	5.1	20 years	Flexible
01.018	Campus Buildings Critical Maintenance	1.7	15 years	Flexible
01.020	Terminal 1 Façade, Roof & Spirals	30.9	20 years	Flexible
01.022	Terminal 1 Storm Water Drainage System	1.3	15 years	Flexible
01.023	Piers & Terminals Critical Maintenance	1.8	15 years	Flexible
01.024	Skybridge Rehabilitation	1.3	20 years	Deliverable
01.034	Campus Roads Critical Maintenance	6.5	15 years	Deliverable
01.039	Airport Roads Critical Maintenance	5.8	15 years	Deliverable
01.046	Staff Car Parks Critical Maintenance	1.2	15 years	Flexible
01.049	Public Carpark Critical Maintenance	2.8	15 years	Flexible
01.056 (Completed)	Campus Facilities & Landside Snow Base Upgrade	2.8	20 years	Flexible
01.065	Airport Heavy Fleet & Equipment Replacement	12.3	7 years	Flexible
01.069	Airport Light Vehicle Fleet Replacements & Augmentation	3.0	5 years	Flexible
01.071	Electric Charger Network Facilities	1.9	10 years	Flexible
01.074	Advanced Visual Docking Guidance System	6.3	10 years	Deliverable
01.087	AGL Fibre Optic Communication Network Improvement	2.5	20 years	Deliverable
01.099	RWY 16/34 Lighting for Low Visibility Procedures (LVP)	6.5	10 years	Deliverable
07.013	Airfield Redesignation	1.7	15 years	Flexible
07.032	ULD Storage	6.0	15 years	Flexible
Mechanical and Electrical				
02.001	Medium Voltage (MV) Electrical	7.0	20 Years	Deliverable

	Network			
02.002	Second Medium Voltage (MV) Connection Point	1.3	5 Years	StageGate
02.004	Passenger Boarding Bridges (Maintenance & Pier 3 Enhancement) & FEGP	18.0	15 years	Flexible
02.005	Lift Upgrade Programme- Terminal & Multi-Storey	6.9	20 Years	Flexible
02.006	Airport Water & Foul Sewer Upgrade	5.5	25 years	Flexible
02.007	Life Safety Systems (LSS) Upgrade	11.6	10 years	Deliverable
02.008	Terminal Buildings- HVAC Upgrade	20.6	20 years	Flexible
02.009	Campus Buildings: Mechanical, Electrical & LSS Upgrade	10.6	15 years	Flexible
02.010	Pier 3 Life Extension Works- Mechanical, Electrical & Foul Drainage	15.8	15 years	Deliverable
02.013	Small Energy Projects	5.9	15 years	Flexible
07.030	Large Energy Project – Photovoltaic Solar Farm	10.3	25 years	Deliverable
Capacity				
03.004 (Completed)	Gate Post 9 Expansion (West Lands)	7.7	20 years	Completed (Flexible)
03.012	Terminal 1 Central Search-Relocation to Mezzanine Level	45.5	15 years	StageGate
03.013	Terminal 1 Departure Lounge (IDL) Reorientation & Rehabilitation	34.7	15 years	StageGate
03.015	Terminal 1 Baggage Reclaim Upgrade & Alterations	22.9	15 years	Flexible
03.017	Terminal 1 Shuttle, bus lounges & injection points	3.8	15 years	Flexible
03.018	Terminal 1- Immigration Hall	2.0	15 years	Flexible
03.020	Terminal 2 Check-In Area Optimisation	15.3	15 years	Flexible
03.021	Terminal 2 Central Search Area Expansion	5.4	15 years	Flexible
03.024	Terminal 2 Immigration Hall Reorientation	2.3	15 years	Flexible
03.028	Terminal 2 Early bag store & transfer lines	33.7	10 years	StageGate
03.029	New Pier 5 (T2 and CBP Enabled)	298.0	28 years	StageGate
03.030	Expansion of US Pre-Clearance Facilities	74.9	25 years	StageGate
03.031	South Apron Expansion (Remote Stands, Taxiway and Apron, PBZ)	199.6	34 years	StageGate
03.033A	Enablement of Pier 3 for Precleared US bound passengers	8.2	15 years	Flexible
03.034	Pier 3 Immigration (Upgrade & Expansion)	10.0	6 years	Flexible
03.036	North Apron Development- Pier 1 Extension (Module 1) & Apron 5H PBZ	210.9	32 years	StageGate
03.051B	West Apron Vehicle Underpass- Pier 3 Option	239.2	50 years	StageGate
03.072	Transfer Immigration Booths – Pier 4 and T2	0.6	10 years	Flexible
NEW PROJECT 03.074	Taxiway R widening	6.1	20 years	StageGate

NEW PROJECT 03.075	Fuel Hydrant Network Works	30.8	20 years	StageGate
NEW PROJECT 03.076	De-Icing Consolidation	1.3	20 years	Flexible
03.077	South Apron Airside Support Centre	10.9	20 years	StageGate
03.078	Pier 4 De-Flex	4.1	20 years	Flexible
NEW PROJECT 03.079	Code E Engine Test Facility	14.8	20 years	StageGate
NEW PROJECT 03.080	10L/28R Taxiway Exit AGL	4.5	15 years	Flexible
NEW PROJECT 03.081	Apron 5H & North Apron Taxiway Rehabilitation	97.4	32 years	StageGate
Commercial Revenues				
04.001	Car Parking Management System (Maintenance & upgrade)	3.8	10 years	Flexible
04.002	Car Hire Consolidation Centre	33.3	20 years	Deliverable
04.003	New Food & Beverage Fit-out (T1X)	2.6	10 years	Flexible
04.004	Digital Advertising Infrastructure	8.0	5 years	Flexible
04.005	Long Term Car Parking- Eastland's	12.1	20 years	Flexible
04.007	Terminal 2 Multi-Storey Car Park	19.6	25 years	Flexible
04.009	Staff Car Park	7.1	20 years	Flexible
04.016	Platinum Services Upgrade Works	7.3	10 years	Flexible
04.017	Airline Lounges- Expansion, Upgrade & New	16.8	12 years	Flexible
04.018	Fast Track Improvements	7.1	7 years	Flexible
04.021	West Apron- Accommodation & Welfare Facilities	3.3	25 years	Flexible
04.023	Food & Beverage Provision & Fit-out- Post CBP	2.7	10 years	Flexible
04.025	Commercial Property Refurbishment	6.7	7 years	Flexible
04.030 (Completed)	New Kitchen in Terminal 2	2.3	10 years	Flexible
NEW PROJECT 04.031	Fuel Farm Welfare	2.5	20 years	Flexible
04.032	Drop off/ Pickup			Disallowed
NEW PROJECT 04.034	OCTB Refurb	8.8	20 years	Flexible
07.010	Office Consolidation & Refurbishment (primarily Level 4 & 5, Terminal 1)	18.9	25 years	StageGate
08.001	Retail Refurbishments, Upgrades and New Developments	11.3	5 years	Flexible
08.002	Retail Marketing & Media Installation	1.9	5 years	Flexible
IT				
05.001	Airfield Optimization	5.8	5 years	Flexible
05.002	Digital Passenger Experience	1.8	5 years	Flexible
05.003	Integrations and Data	5.4	5 years	Flexible
05.004	Baggage Systems	1.4	5 years	Flexible
05.005	Business Efficiency	6.6	5 years	Flexible
05.006	Commercial Systems	2.4	5 years	Flexible
05.007	Reliability, Safety, Security & Compliance	8.7	5 years	Flexible
05.008	Operational Devices (Support & Maintenance)	1.9	5 years	Flexible
05.009	Network Components- Lifecycle & Growth	7.3	5 years	Flexible

05.010	Passenger Processing (excl. Security Screening)	11.5	5 years	Flexible
05.011	Security Technology Innovation (Biometrics & FOD Detection)	5.2	5 years	Flexible
05.012	Servers and Storage- Lifecycle & Growth	4.9	5 years	Flexible
05.014	User Devices (Desktops, Mobile, Telephone, Radio)	3.9	5 years	Flexible
05.015	New Data Centre Hosting Location	4.2	15 years	Flexible
05.016	Microsoft Enterprise	6.2	3 years	Flexible
05.020	Innovation Fund	4.2	5 years	Flexible
Security				
06.001	Cabin Baggage X-Ray Replacement & EDS Upgrade	18.8	7 years	Flexible
06.007	Full Body Scanners	2.4	7 years	Flexible
06.009	ATRS- Additional Lane in Terminal 1	0.6	7 years	Flexible
06.014	Screening and Logistics Centre	15.2	15 years	Deliverable
06.015	Intrusion Detection Systems for Dublin Airport Boundaries	4.0	7 years	Flexible
06.016	Surface Road Blockers & Temporary Mobile Barriers	1.2	7 years	Flexible
06.022	Redevelopment of Training Facility (ASTO)	1.5	15 years	Flexible
06.025 (Completed)	Detection: Explosive Detection Dogs (EDD) and Mobile X Ray Unit	0.2	6 years	Completed
06.030	VCP Automation to Enable Remote Screening	0.8	7 years	Flexible
06.031	Autopass – T1 Replacement & T2 Install	2.1	7 years	Flexible
06.036	TSA- X-Ray & FBSS Replacement	0.4	7 years	Flexible
06.041	Security Screening Equipment- End of Life	5.9	7 years	Flexible
06.042	ATRS- Central Search Areas (T1 and T2)	13.0	7 years	Flexible
06.044	Replacement of T1 Controllers for Access Control System	0.4	7 years	Flexible
07.031/033 (complete)	HBS3- T1 and T2	224.8	15 years	StageGate
NEW PROJECT 06.045	Security Scanners	28.2	8 years	Flexible
NEW PROJECT 06.046	Terminal Kerb Security Mitigation	11.5	20 years	StageGate
SUSTAINABILITY				
03.052	Surface Water Environmental Compliance	85.4	20 years	StageGate
NEW PROJECT 09.001	Airport Charging	73.9	15 years	StageGate
NEW PROJECT 09.002	Alternate Fuels	1.7	20 years	StageGate
NEW PROJECT 09.003	Anaerobic Digestion	9.1	15 years	StageGate
NEW PROJECT 09.004	Sustainable Fleet	17.5	5 years	Flexible
NEW PROJECT 09.005	Fixed Electrical Ground Power Phase 3	12.0	15 years	StageGate
NEW PROJECT 09.006	Photovoltaic Solar Farm Phase 2	37.4	25 years	StageGate

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NEW PROJECT 09.007	Mobility Improvements	13.6	5 years	Flexible
NEW PROJECT 09.008	Terminal 2 Sustainable Upgrade	100.8	15 years	StageGate
NEW PROJECT 09.009	Terminal 1 and Campus Sustainability Feasibility	5.6	15 years	StageGate
Other				
07.001	Programme Management	4.9	5 years	Flexible
07.002	Minor Projects	15.3	7 years	Flexible
07.014	Terminal Operations Improvement Projects	4.7	5 years	Flexible
NEW PROJECT 07.035	MV Resilience Substation	54.5	15 years	StageGate
NEW PROJECT 07.036	Upgrade to Hold Baggage Sortation Equipment	40.6	15 years	StageGate
Deferred				
03.006	T1 Kerbs			
03.011A	T1 Check-In (Partial Shoreline)			
03.016	T1 Rapid Exit Arrivals			
03.043A	T1 New Airbridges			
03.049	De-Icing Pad at Runway 10R			
03.054	Apron 5M			
03.057	Airside GSE Charging Facilities			
03.071	Piers 1 and 3 Hydrant Enablement			
04.006	T1 Multistorey Car Park Block B			
Cancelled				
03.043.1	Terminal 1 Pier New Airbridges			
03.057	Airside GSE Charging Facilities			
03.071	Hydrant Enablement – Pier 2 and 3			

Source: CAR

Above allowances all stated in real February 2022 prices. Actual nominal expenditure will be reconciled against nominal allowances as per Financial Model Column I, and IFS report.