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DUBLIN AIRPORT  
Response to the 2019 Draft Determination CP3/2019  
8 July 2019

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## 1. Synopsis

### Summary of Key Technical Issues

#### 1. Price Cap 2020-2024

A sudden 22% reduction (to an already low) charge is unprecedented, in our view unwarranted and will destabilise the business

#### 2. Capacity Development

The infrastructure programme to deliver capacity development cannot be sustainably financed. Between €500 million and €1 billion of approved infrastructure projects are not capable of progression

#### 3. Cost of Capital

The proposed Asset Beta is lower than any peer and does not adequately reflect Dublin Airport's upcoming risk exposure

#### 4. Operating Costs

The cumulative disallowance of €215m million in operating costs is excessive and not based on robust benchmarking

#### 5. Passenger Traffic

The unconstrained traffic forecast is aggressively high.

### 1.1 Introduction

Dublin Airport is one of the most price competitive large airports in Europe<sup>1</sup>. Nonetheless, the Commission for Aviation Regulation (the Commission or CAR) is proposing to reduce the maximum charge allowed per passenger by 22% from 2020. The consequences of such a decision would be against the interests of passengers, airlines and the national economy over the short and long term.

The key drivers underpinning the Commission's decision are a 31% reduction in the allowed cost of capital (WACC) and the disallowance of over €215 million of expected operating costs over the next control period. The extensive analysis and evidence contained within this document, augmented by a compilation of independent, expert reports, will explain in detail why the analysis underlying the proposed regulatory decision has significant shortcomings and is not a sound basis upon which to make a Final Determination.

The proposed sharp reduction in pricing creates an unsustainable level of risk for Dublin Airport, at a time when it proposes to embark on a €2 billion capital investment programme. Our

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<sup>1</sup> Dublin Airport's Charging Proposal, 02 May 2019;  
<https://www.aviationreg.ie/fileupload/2019/Draft%20Determination/2020-2024%20Dublin%20Airport%20Charging%20Proposal.pdf>

financial analysis indicates that in practice, the funding required for sizeable elements of the capacity development programme will not be achieved.

## 1.2 Dublin Airport's Investment Proposition

Dublin has quickly become a capacity constrained airport. Significant infrastructure investment is now urgently required to minimise congestion, facilitate further growth and improve the quality of service for passengers. We have carefully developed a balanced and sustainable capital investment programme (in consultation with all stakeholders) that requires an unprecedented level of debt financing to deliver. Unlike most European airports and regulated entities, we committed to fully deliver this €2 billion investment programme with no price increases for passengers or airlines, for the entire period out to 2024 (similar to London, where airlines are supportive of Heathrow's £13 billion expansion plan on the basis that airport charges will remain flat (Airlines UK CEO, Tim Alderslad).

Dublin Airport offers one of the lowest airport charges in its size category in Europe (c.30% lower than the average for large European airports). Airport charges have not increased for almost ten years and the 2014 Determination imposed a 16% cumulative reduction in charges. Our pricing strategy is to maintain highly competitive airport charges. A sustainable price cap is critical for delivering growth for all stakeholders, particularly during periods of intense capital development.

Based on the 2019 Draft Determination, the Commission clearly does not accept the flat charging proposition and instead, will deliver a substantial price reduction to airlines over the next regulatory period. The proposed 22% reduction in airport pricing from 2020 is alarming and will immediately compromise the financial viability of the investment programme. In 2020, the level of aeronautical revenue is expected to reduce by c.€50 million on 2019.

The Commission is tasked with setting a charge comparable to what would exist in a fully functioning competitive market. A unit rate of €7.50 is evidentially far lower than the current market pricing at large European airports (for example, Brussels Airport {similar size to Dublin} earns €14.30 aeronautical revenue per passenger<sup>2</sup>). The proposed 2020 price cap is also €1 lower than Dublin Airport's current operating cost per passenger, which implies that Dublin Airport will be heavily reliant on commercial revenue streams to deliver future earnings.

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<sup>2</sup> Latest Accounts for 2017.

<https://www.brusselsairport.be/uploads/media/default/0001/16/bf3923ed5b3b0024e6aeb48acfd91f0b0c6f487b.pdf>

The Commission claims that the proposed price reductions will be in the best interests of passengers. We strongly disagree and are extremely concerned that the Commission's desired outcome is not deliverable. In fact, consumer welfare will be harmed in the following ways:

- I. There is no evidence or guarantee that consumers will benefit from the proposed price cuts. Instead, the airlines will initially receive a windfall gain of over €350 million. In 2018, an ICF study<sup>3</sup> analysed the changes in airport charges, compared to changes in airfares. The conclusions supported the argument that reductions in airport charges are not necessarily passed to the air fare, as there is little relationship between changes in airport charges and changes in air fares. Furthermore, the Commissioner is unfortunately powerless to direct and/or verify that the proposed savings are passed onto consumers in the form of reduced ticket prices.
- II. The proposed infrastructure development programme cannot be sustainably financed and therefore, cannot be delivered in full. This means that between €500 million and €1 billion of endorsed capacity development projects are not capable of progression. Passengers will not experience the enhanced facilities. Instead of the proposed virtuous circle of investment, a vicious circle of denied investment will continue to constrain the airport and provide barriers to entry for new entrant airlines and service providers. A capacity constrained airport damages consumer welfare and limits choice.
- III. The proposed operating cost disallowances will require cuts to frontline services. The expected increases in passenger volumes will need to be supported by fewer customer service staff, which undoubtedly, will negatively impact the overall passenger experience at the airport.

The negative consequences of the draft regulatory determination are profound, not just for the national aviation agenda, but for the entire Irish economy and consumers in general. The National Aviation Policy (NAP) emphasises that the strategic importance of Dublin Airport extends far beyond its geographic catchment area and its future is critically bound up with the Irish economy. Dublin Airport supports a €9.8 billion contribution to Irish GDP (3.1% of national income in 2018<sup>4</sup>). The NAP (for which the Commission is legally mandated to have due regard for when determining a price control) explicitly states that the national objectives for aviation *'be facilitated by investment in new infrastructure to meet the needs of projected traffic growth'*. Unfortunately, the unsustainable charging glide-path that the Commission are

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<sup>3</sup> Identifying the Drivers of Air Fares, ICF Report for ACI Europe, May 2018, Exhibit 35: Changes in Airport Charges vs. Changes in Average Fares.

<sup>4</sup> Dublin Airport Economic Impact Study, Draft Report, InterVISTAS Consulting May 2019

proposing has required the immediate 'stand-down' of all activities related to the capacity development programme.

Two key national aviation objectives will be compromised;

- (1) Maximise the scale of the US preclearance facility and
- (2) Develop Dublin as an international hub

Dublin Airport will have to trade-off capacity and service at a lower level of resource and the result will be both less capacity and lower service. This will invariably act as a deterrent for new business and suppress future growth.

As a key impacted stakeholder, we are duty bound to challenge the validity of the proposed regulatory control. We will set out, with what we believe is compelling supporting evidence, why this regulatory proposal does not achieve the Commission's statutory regulatory objectives:

- a) To protect the reasonable interests of current and prospective users of Dublin Airport*
- b) To facilitate the economic development of Dublin Airport*
- c) To enable daa to develop Dublin Airport in a financially viable manner*

Regulatory best practice in many sectors, such as telecommunications and the Government's Policy on Sectoral Economic Regulation (2013), require regulators to determine the impact of their proposed decisions on a wide range of stakeholders. The emerging external risks require prudent evaluation. The capability of financing the future of Irish aviation infrastructure cannot be borderline at best. A Regulatory Impact Assessment (RIA) should form an important part of the regulatory decision-making process. We see no evidence that the Commission has carried out a Regulatory Impact Assessment.

### **1.3 Debt Financing, Risk and Financial Viability**

Chapter nine comprehensively explains why the draft regulatory settlement does not provide a sustainable basis for funding the unprecedented levels of debt required to deliver the investment programme. As the proposed level of investment in the upcoming regulatory period is unprecedented, and as the Commission itself has identified that "*all capital projects in the CIP are in the interests of both current and future users*", appropriate, robust consideration and application of this objective is the only way that the Commission can achieve

its other two statutory objectives and allow for the future, sustainable development of Dublin Airport to proceed in line with user requirements and economic need over the next five years.

The Commission has focused solely on two financial metrics in determining the financeability adjustment required, has ignored the Business Risk Profile and has not taken into account wider debt market considerations or directly looked at how Dublin Airport will finance the €2bn of capital investment that is required. There appears to be no evidence that the Commission has performed a detailed and market focused financeability assessment or considered the State's approach to how state entities are permitted to borrow. The proposed regulatory settlement is already challenged under a 'normal base case' scenario and would cripple the development of the airport under a 'Hard Brexit or World Trade' shock scenario.

Assuming that Dublin Airport were to deliver the traffic targets and opex reductions as prescribed in the Draft Determination, the Commission's own analysis shows that Dublin Airport's earnings profile will deteriorate significantly over the next five years. In 2020 alone, EBITDA will reduce by c.€50 million on 2019. Key financial metrics, such as Net Debt: EBITDA will degrade from 2.2 times today, to [REDACTED] by 2024. Our analysis indicates that the debt cover ratio will increase beyond [REDACTED] times in the base case scenario, [REDACTED]. Furthermore, we strongly contend that the Commission's stated target of a BBB rating is incorrect and insufficient while highlighting that the Commission's targets metrics which do not in themselves achieve BBB, even in the Commission's base case, which includes an incremental €50m EBITDA target. Dublin Airport's mandate from the State reflects an 'imperative that Dublin Airport remain strong financially'. NewEra (advising the shareholder) considers a rating of BBB+ to be the minimum acceptable level for the business throughout the next regulatory control period.

In Chapter nine we set out in detail the factors that influence financeability in a cyclical industry and with daa's risk profile. There are many factors that require consideration in determining an entity's ability to access funding in the capital markets. Dublin Airport's financial performance is highly geared to the Irish economy and to conditions in the European airline industry, which is highly cyclical and volatile. The Commission have not considered the limitations on the company's ability to raise finance or to the implicit commitments from the shareholder, which impact funding, including forgoing of dividends, or the contingent ceding of control to lenders.

In our view, given the complexities of raising debt finance, the Commissioner needs to urgently engage a recognised expert which holds proven and current experience of the bond and financing markets (including for Irish infrastructure agencies) that Dublin Airport will be accessing, to consider this critical component and to undertake a detailed exercise on financeability. We say this in the context of being deeply concerned about the robustness of

the assessment the Commission has performed. External expertise can ensure that conclusions in this regard are reliable and fit for market.

#### 1.4 Operating Expenditure (Opex)

There is clearly a significant gap and a misunderstanding between the Commission's projections and the rationale behind Dublin Airport's submission. We do not understand how, based on the body of detailed analysis provided by Dublin Airport in its submission, the Commission concluded that Dublin Airport's current opex levels are manifestly inefficient.

Effective benchmarking analysis is required to determine the relative levels of operational efficiency. We have an issue with the scope of benchmarking the Commission has used to underpin their conclusions. Airport models vary and therefore opex per passenger is widely regarded as the most appropriate top-down metric for comparing relative cost efficiency. When benchmarked against a multitude of large European airports, Dublin Airport's opex per passenger ranks well below the median. In every year since the floor of the economic recession in 2012, Dublin Airport has achieved efficiency improvements in the opex per passenger metric. Opex per pax has reduced from €9.75 in 2012 to €8.51 in 2018. In real terms, this represents a 14% efficiency improvement over the period. Dublin Airport estimated that under a base case<sup>5</sup>, opex per pax would reduce further to █████. When all incremental (and new) costs are included, we projected a minimal █████ cost increase over the period. This includes initiatives to achieve €36 million in efficiency savings over the period.

Alternatively, industrial benchmarking, is a well-established practice for determining practical productivity targets for standard tasks in frontline operational areas (i.e. cleaning).

The Commission have conducted neither of the above benchmarking assessments. Instead, selective unit benchmarks have been used or referenced for specific areas (such as staff to passenger), with incorrect conclusions being drawn.

The Commission proposes disallowing €215 million of opex over the control period. The scale of the initial, baseline disallowance of █████ million in 2020 is exceptional; over ten times the baseline disallowance from the 2014 Determination █████. We fundamentally disagree that approx. 50% of the increase in expenditure over the current regulatory period (2015 – 2019) has been inefficient and warrants this level of penalty. Frontier Economics (as part of Dublin Airport's opex forecast) carried out an econometric exercise, which concluded that the clear majority of cost escalations in the current control period are directly related to the significant increases in airport activity.

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<sup>5</sup> Excluding incremental operating costs and the impact of CIP2020+

We suggest that this divergence may be attributable to a misunderstanding on the part of CEPA with regards to Dublin Airport's current cost base. In Chapter Five, we have therefore provided a full breakdown of the expected 2019 operating costs by category which amounts to an additional [REDACTED] compared to 2018. We urge the Commission to use this actual data as the baseline and carry out the efficiency assessment for future years from this level.

The Commission's future efficiency targets are unachievable, under any set of circumstances. Of most concern is the challenge to grow passenger numbers each year for the next five years, deliver the largest construction programme in the history of the airport, whilst also delivering a superior level of passenger service and simultaneously achieve a significant reduction in headcount and operating costs.

The requirement for Dublin Airport to reduce payroll costs by over €179 million, without making any allowance or put in place a mechanism for achieving the required reduction. The Commission's consultants have raised questions around outsourcing of roles, pay rates and pay increases (notwithstanding that such have been subject to labour court agreement, reflect contractual obligations and/or are comparable to agreements within our customer companies). It is highly concerning that the Commission's consultants have overlooked daa's statutory and contractual obligations in forming their estimates. Progressing these targeted cuts will undoubtedly set us on a major collision course with our staff and their representatives and to be frank, this course of action will inevitably result in major passenger and operational disruption.

Opex is a critical component in the overall calculation of the price cap (disallowed opex has a direct impact on the financeability of the investment programme). We have provided an extensive body of supplementary material, to firstly, correct errors and incorrect assumptions and secondly, to further explain the rationale and justification for the projections contained within Dublin Airport's original submission.

### 1.5 Cost of Capital

Dublin Airport engaged NERA to produce a detailed report on the computation of an appropriate Weighted Average Cost of Capital (WACC) for the next control period. NERA estimated a real pre-tax cost of capital range between 5.0 and 6.2%.

Irish and UK regulatory precedent generally sets the allowed return towards or even at the top end of the estimated range for the cost of capital (or "aiming up"). This approach recognises that there is significant scope for error in estimating cost of capital parameters. There are also far greater impacts of setting an allowed return that is too low to attract investment, in terms of an inability to maintain current infrastructure and fund capacity investments, relative to the cost of setting the cost of capital too high. The potential costs of setting an allowed return that



is too low is particularly acute for Dublin Airport at the forthcoming review, given the scale of the proposed capital investment programme. Therefore, we recommend the allowed return is set towards the top end of the range to address the asymmetric risk of setting an allowed return that is too low.

The Commission has proposed to set the forthcoming WACC at 4%; a level that is 31% lower than the current allowed rate of return. Dublin Airport dispute the proposed reduction in the Asset Beta from 0.6 to 0.45. A level of 0.45 is below the most recent regulatory determinations for Copenhagen (0.55), Auckland (0.60), Aeroporti di Roma (0.57), Brussels (0.59), Aeroports de Paris (0.58), Heathrow (0.50) and Gatwick (0.56). The use of the Hamada formula by Swiss Economics to deliver the betas is primarily used in continental Europe, but is rarely used by UK and Irish regulators.

It is inconceivable to suggest that Dublin Airport would attract a lower business risk profile than comparators such as London Heathrow and Gatwick airports. We are not aware of any direct evidence to support the hypothesis that daa's exposure to systematic risk has substantially reduced since the last determination. In fact, Dublin Airport's risk profile will be elevated further into the next control period, as an unprecedented level of debt funding is required to fund the largest capital investment programme in the airport's history.

It is vitally important that the Commission reviews and resets the low provisional WACC estimation. The currency of the final point estimate needs to hold for a considerable period until 2024 and ultimately underpins the business case for the €2 billion capital investment programme.

## 1.6 Passenger Traffic Target

Chapter three sets out Dublin Airport's annual constrained forecast of 2.1% for the next regulatory period.

In the 2019 Draft Decision, the Commission proposes to set an average annual target of 3.1%, which is over 40% higher than Dublin Airport's forecast. This proposed target is cumulatively 5.7m passengers higher than Dublin Airport's submission. The Commission's target is extremely optimistic for the period 2020-2024.

The Commission's traffic forecasting model requires the latest IMF GDP forecasts as a key input. The Draft Determination target is based on the October 2018 GDP forecast for Ireland.

The Irish Fiscal Advisory Council recently highlighted the unusually uncertain medium-term outlook for the Irish economy stating<sup>6</sup>: “*Consumer and producer sentiment indices have all reported significant declines in investor confidence about the prospects for the Irish economy*’. As the Final Decision is expected in late September, we suggest it would be prudent for the Commission to await the October publication of the IMF GDP forecasts for Ireland, before concluding the traffic forecasts for the next five years.

We believe the Commission’s approach to traffic forecasting is overly simplistic. The target is essentially an unconstrained demand forecast and assumes the airport has no capacity impediments for facilitating this growth. An unconstrained approach may be acceptable against a backdrop of significant capacity headroom, but this approach is fundamentally invalid when severe capacity constraints are present, which in Dublin’s case, will manifestly constrain the entire period out to 2023/24.

The Commission has requested comments from stakeholders as to how their forecast can be improved. With almost 50% of total traffic originating outside of Ireland, we have consistently flagged that solely relying on Irish GDP forecasts is crude and does not capture the unique traffic drivers in each of the foreign source markets. The use of blended GDP growth rates for the econometric model and separate analysis for transfer traffic, should lead to a more robust forecast. For Brussels Airport (similar size and market characteristics to Dublin), the Belgian regulator (BAC) uses GDP growth estimates based on a weighted average of GDP forecasts across markets served by the airport. For *Aéroports de Paris*, the French regulator uses forecasts that take account of GDP and population growth in destination markets.

In the 2019 Draft Determination, the Commission explains the continued non-consideration of a blended GDP growth forecast, on the basis that Ireland’s GDP is correlated to the GDP movements in the other key source markets. We disagree with the Commission that ‘Irish GDP serves as a reasonable explanatory variable for overall passenger growth’. In 2019, Ireland is expected to achieve the highest GDP growth of any European state for the sixth consecutive year. Ireland’s GDP forecast for the period 2020-2024 is estimated to be 76% higher than an average of the UK, US and EU forecasts. The Commission’s model essentially tasks Dublin Airport with growing half of its traffic (non-Irish originating) at the same record high levels as Ireland’s economic growth. In essence, traffic growth from the UK, Dublin Airport’s second largest passenger market (accounting for 20% of annual passenger volumes) is expected to grow at over 3% in 2020, despite expectations for the UK economy to only grow at 1.5% next year. This is manifestly inaccurate. In addition, the Commission does not take on board our proposal (to consider a blended forecast) claiming that it would add complexity. We would

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<sup>6</sup> Irish Fiscal Advisory Council – Fiscal Assessment Report June 2019  
(<https://www.fiscalcouncil.ie/fiscal-assessment-report-june-2019/>)

consider the weighting of four key GDP forecasts as a relatively straight-forward improvement to the model.

The most recent actual traffic data fully validates the proposed slowdown in growth. This month (July 2019), growth in passenger traffic is expected to slow to c.3% (slightly below the Commission's target for the next five years). ACL, the independent slot co-ordinator for Dublin, has just released the airline capacity filings for Winter 2019/20. Total passenger flight growth is recorded at only 1.1% ahead of last year and total seat capacity is 2.6% ahead of last year. Using a generous 80% passenger load factor assumption for Winter, would therefore equate to expected passenger growth of only 2.08% for Winter, which is 33% lower than the Commission's target. Industry analysts are suggesting that aviation could be pre-empting an economic slowdown. It is imperative that the Commission takes account of the evident trends in demand for 2020.

The primary explanation for the slowdown in growth is market maturity. At present, there is an over-capacity issue across the European network. Airlines will need to restrain capacity growth to focus on yield and profitability improvements in 2020. 2019 has already seen numerous airline profit-warnings and extensive price promotions throughout the Summer peak, which is highly unusual. The phenomenal growth experienced at Dublin from 2015 - 2019 has resulted in many routes and markets now being fully served. New aircraft orders are slowing; this year's annual industry meeting (Paris) produced the lowest level of firm orders since 2009.

Secondly, and increasingly significant, is the fact that Dublin Airport is now operating at maximum capacity for considerable periods of the year. The main runway is operating at the maximum declared capacity from 0600 to 1900 virtually every day throughout the summer season. In fact, the occupancy level of the main runway ranks Dublin as the fourth most capacity constrained airport in Europe<sup>7</sup>. Until the new runway is fully operational (summer 2022), growth will be constrained to load factor improvements (Dublin already operates at 90% load factors for the peak summer months) and upgauging of existing aircraft (standard evolution at capacity constrained airports). Upgauging to wide-body aircraft is now also constrained at Dublin Airport due to a further shortage of aircraft parking stands, which will only intensify over the first half of the next regulatory period.

Dublin Airport's latest forecast for 2020 anticipates growth of 2.44%, which equates to 33.34m passengers. In the first year of the new regulatory cycle, Dublin Airport would be unable to meet the Commission's passenger target, with a material shortfall of 260,000 passengers (c.€2

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<sup>7</sup> Mott MacDonald Technical Report (attached), June 2019

million aeronautical revenue deficit), which carries through per annum to the end of the regulatory period.

To support Dublin Airport's detailed traffic submission, we have requested an independent assessment. Mott MacDonald's report (attached) independently verifies that the Commission's traffic targets are not achievable and have failed to demonstrate how an unconstrained demand target can be accommodated in a severely capacity constrained environment. Mott recommend that the target should be reset to a challenging but achievable, constrained growth rate of 2.76% for the next regulatory period, with phasing adjustments to the heavily constrained early years in the next cycle.

### 1.7 Capital Investment

Over the past eighteen months, we have received strong calls from stakeholders to progress significant infrastructure investment. Capacity development is now urgently required to facilitate further growth and opportunities into the next decade. We have produced a substantial capital investment programme, in full consultation with all airport stakeholders. We appreciate the acknowledgement from the Commission that the level of engagement with stakeholders has been extensive and productive.

We fully support the Commission's decisive decision to approve all the proposed projects, discontinue the problematic trigger mechanisms and consider the introduction of the Stage Gate process, which if developed correctly, can deliver significant benefits for all stakeholders. We strongly encourage the Commission not to overly prescribe this process and to minimise the administrative burden supporting the process. To augment the Commission's progression of this initiative, we have developed a detailed proposal for how this process should work for all users. We request that the Commission give our proposal detailed consideration.

We need to strongly challenge the Commission's decision to disallow over €60m of necessary capital expenditure in the current regulatory period. In Chapter seven we provide extensive explanations as to why a small number of complex and challenging projects required mandatory additional expenditure to complete the project deliverables. In many cases, the additional expenditure was required to remedy unforeseen issues, which were only discovered when construction had advanced. Disallowing necessary and efficiently incurred capital expenditure is fundamentally at odds with the principles of economic regulation. In this regard, the Commission are not adhering to their own principles and guidelines for capex remuneration.

The Commission (upon advice from their cost consultants) propose to disallow over €150m of capital expenditure on the proposed future projects, which we fundamentally disagree with. We welcomed the recent opportunity to discuss the rationale behind each of the variances with Steer; this engagement showed that incomplete explanations may have led to incorrect

assumptions, which we will specifically clarify and rectify in Section seven of this document. We trust these detailed explanations will support the subsequent approval of the necessary full allowances.

### 1.8 Service Quality Targets

The Commission intends to radically intensify the level of penal scrutiny with regards to passenger service monitoring.

In March 2019, Dublin Airport received the Airports Council International (ACI) World Airport Service Quality (ASQ) Award for European Airports between 25-40 million passengers per year. Against this backdrop of independent acknowledgements for service quality excellence, the Commission appears to believe that the existing regime is inadequate and therefore needs to substantially expand on the monitoring targets. We believe there is no compelling evidence to substantiate this view. In Chapter four, we detail why this proposal is excessive, unjustified and overly complex.

We support the Commission's consideration for an amendment to the airport's queuing times for Central Search (Security). However, upon detailed review, we believe that the proposed amendments are unnecessarily complex, will require an increased level of administrative burden to support, will require a substantial increase in security staff costs and will drive an additional requirement for immediate infrastructure enhancements. Furthermore, the new targets, if implemented against the actual queue times in 2018, would result in numerous breaches and incur c.€5 million in financial penalties. Clearly, in the period 2020 onwards, this would not be an effective challenge, rather an instantaneous set of metric failures. We have conducted further analysis since our initial submission and on balance, we now suggest that the target percentage could be decreased to 97% of all passengers in less than 30 minutes, which would provide a balance between excluding momentary breaches, which can result from unexpected passenger presentation profiles, special events etc, but continue to capture the legitimate queue breaches over sustained periods of time throughout the day.

We fully support the Commission's requests for improving passenger engagement and in response we have participated fully with the work and meetings of the newly created Passenger Advisory Group.

In our submission and during the consultation, we flagged an issue with the current service monitoring regime, in that it is one dimensional; i.e. it only ever penalises the airport for breaches. We suggested that passengers would equally value excellent customer experiences and that the Commission should consider an incentive mechanism for exceptional service quality, well in excess of the targets. We commend the Commission for considering such a

mechanism, but unfortunately, the proposed amendment is essentially a waived penalty, as opposed to a genuine, incremental, financial incentive.

### 1.9 Commercial Revenue

The Commission's targets are significantly higher than our submission, as the Commission is assuming unachievable annual passenger volumes.

When rebased downwards to reflect the constrained demand estimates, at a high-level and in isolation, the targets for commercial revenue are challenging, but also reasonably achievable, with the exception of the carparking targets. Cumulatively, over the control period, the Commission has tasked Dublin Airport with delivering carparking revenue that is ■ higher than our submission (even after flexing for comparable passenger numbers). This equates to a shortfall of c.€25million over the period. Our ability to substantially increase carparking revenues into the future is constrained by significant challenges; obtaining the required planning permissions to increase carparking capacity, improved alternative modes of travel to/from the airport and our price proposition remaining attractive in an increasingly competitive environment (taxi, bus, offsite carparks).

It is important to flag that the Commission's targets for enhanced commercial revenue very much depend on the expedited delivery of a key number of infrastructure projects. As highlighted at the outset, the €7.50 price cap proposal now compromises the capital funding for many of the capacity development projects. The incremental commercial revenue expected for the next control period will become unachievable, if the capacity alleviating infrastructure projects cannot ultimately be financed by the overall price cap.

We are opposed to the proposed removal of the commercial revenue rolling schemes. Under the single-till model, commercial revenue outperformance delivers significant follow-on benefits to consumers, through lower future airport charges. Therefore, incentives to deliver strong commercial performance should be encouraged and protected. Removing this mechanism will stifle the attractiveness and progression of new commercial within a control period.

We strongly support preclearance revenue remaining as a commercial revenue stream. The preclearance service is entirely optional for airlines. Of course, the airport should be encouraged to maximise preclearance revenue, as the benefits ultimately return to all passengers in the form of lower overall airport charges under the single till model. Competitor airports across Europe have long sought the approval of a US preclearance facility. The business cases for such a facility require considerable investment, therefore, maximising revenue from the facility is critical to the approval of the original business case.

The Commission has set challenging unit revenue targets for preclearance, without allowing for any uplift in costs to fund the additional officers (required to process the increased levels of activity).

### 1.10 Conclusion

The Commissioner has delivered an extremely concerning regulatory decision.

The 2019 Draft Decision as prescribed, is incapable of progression. No responsible business could countenance an immediate 22% shock to their earnings, as a prelude to embarking upon an unprecedented level of capital investment.

Stakeholders expect the Commission to provide a compelling justification for how a price reduction of 22% can fund a record €2 billion capital investment programme; one grounded in the specifics of debt financing for Dublin Airport. The Commission appears to have landed on a flat €7.50 price cap for the next five years and then attempts to force-fit a financeability assessment to justify this number.

If the Commission pursues the proposed price reductions, there will be consequences for Dublin Airport, for the aviation sector in Ireland and the Irish economy, which will take many years to reverse or indeed, future developments may make a recovery impossible. This unnecessary price reduction opens the door for competing airports, in other jurisdictions, with local, supportive, regulatory frameworks, to overtake Ireland in the pursuit of aviation development.

At the request of the Commission, we have supplemented our earlier submission with a body of new information and further evidence for detailed consideration. We believe that the additional data will assist the Commission in forming the conclusion that the opex and traffic targets are unachievable, the WACC is set below our peer group and ultimately, the draft price cap is not capable of sustainably financing the full portfolio of capacity development infrastructure.

We note the Commission's expectation that the proposed price will change between now and the 2019 Final Determination, as it updates its proposals. In the long-term interests of all stakeholders, the final determination should be reasonable, balanced and realistically deliverable.

## 2. Introduction

### 2.1 Introduction

Dublin Airport welcomes this opportunity to comment on the 2019 Draft Determination published by the Commission for Aviation Regulation (“CAR” or “the Commission”). This document is Dublin Airport’s response to the Commission request for submissions in relation to the 2019 Draft Determination CP3/2019.

In replying to the 2019 Draft Determination, Dublin Airport requests that the Commission also pays due regard to the company’s previous formal submissions – its response to the Commission’s Issues Paper dated 13th July 2018 and the suite of documentation provided as part of its Regulatory Proposition on 6th February 2019.

Dublin Airport would like to note that it has focused its response on what it believes are the key areas of importance in the 2019 Draft Determination. A short summary of our response to the Commission’s proposals regarding each of the regulatory building blocks is set out below. 2.

### 2.2 Traffic Performance and Projected Passengers

In chapter 3 of this response document, Dublin Airport discusses the Commission’s proposed passenger projections for 2020-2024. Dublin Airport looks at the Commission’s approach to passenger forecasting where it focuses on simplicity and transparency as opposed to robustness and accuracy in setting its traffic targets. Dublin Airport highlights how the Commission’s passenger targets are based on unconstrained demand forecast and this is unachievable at Dublin Airport given the capacity constraints that will be faced over the next regulatory determination period.

### 2.3 Service Quality

In chapter 4 of this response document, Dublin Airport discusses the service quality measures put forward by Commission and their implications for Dublin Airport going forward. Dublin Airport recently won an award for service quality, attaining joint winner in its category of European Airports that have 25-40 million passengers per year in the Airports Council International (ACI) World Airport Service Quality (ASQ) Awards.

### 2.4 Operating Expenditure

In chapter 5 of this response document, Dublin Airport discusses the operational allowance proposed by the Commission based on the operating cost assessment of Dublin Airport carried out by CEPA/Taylor Airey. We look at CEPA/Taylor Airey’s use of benchmarking where Dublin Airport was compared to other comparator airports. Dublin Airport examines the approach to payroll unit costs taken by CEPA and adopted by the Commission. Dublin Airport highlights a



number of flaws in the assumptions relating to both payroll and non- payroll costs set by CEPA/Taylor Airey and adopted by the Commission.

## 2.5 Commercial Revenue

In chapter 6 of this response document, Dublin Airport discusses the commercial revenue allowance proposed by the Commission based on our projections of commercial revenues over the period 2020-2024. Dublin Airport looks specifically at the treatment of future car parking revenues based on the passenger elasticity of demand. We highlight a number of operational and economic factors that need to be considered by the Commission when finalising its commercial revenue projections.

## 2.6 Capital Expenditure

In chapter 7 of this response document, Dublin Airport discusses the Commission's proposed treatment of capital projects from the 2015 Capital Investment Programme (CIP2015) and the 2017 Programme of Airport Capacity Enhancement (PACE), the Commission's recommendations and observations on the 2020 Capital Investment Programme (CIP2020) and proposed new regulatory treatment of large capex projects in CIP2019.

The initial section, treatment of capital projects in CIP2015 and PACE, focuses particularly on the Commission's proposal for the non-remuneration of 5 key capex projects; 2 delivered in the interests of critical passenger and operational safety with another 3 delivered to support key user needs at Dublin Airport. The CIP2020 section focuses on the respective projects that have been incorrectly earmarked by the Commission for receiving partial allowances and increased asset lives, while the latter section focuses on the regulatory treatment for all CIP2020 projects with particular emphasis on the proposed new StageGate process.

## 2.7 Cost of Capital

In chapter 8 of this response document, Dublin Airport discusses the cost of capital allowance proposed by the Commission based on a report prepared by Swiss Economics. Dublin Airport comments on a number of flaws and errors in the assumptions used by Swiss Economics specifically in regard to the calculation of the asset beta and the cost of debt. We emphasise the importance of the inclusion of an aiming up allowance by the Commission going forward given the risks around a potential underestimation of the cost of capital for Dublin Airport in the next regulatory determination period.

## 2.8 Financeability

In chapter 9 of this response document, Dublin Airport discusses the implications of the proposals contained in the 2019 Draft Determination for the financial viability of Dublin Airport over the period 2020-2024. We specifically look at the likely financial ratios for the company emerging from the Commission draft proposals particularly given the Commission's statutory

duty regarding financial viability. We emphasise the potential repercussions these regulatory proposals could have in regard to the progression of CIP 2020+.

## 2.9 Other Issues

In chapter 10 of this response document, Dublin Airport responds to the other issues raised by the Commission.

## 2.10 Response to the 2019 Draft Determination

Dublin Airport's response to 2019 Draft Determination should be considered in conjunction with the detailed appendices which accompany this document. Details of these appendices are provided in the table below.

Appendix	Name	Topic	Source
<b>Appendix 1</b>	Commission for Aviation Regulation Traffic Forecast Review	Passenger Forecast	Mott MacDonald
<b>Appendix 2</b>	Passenger Forecast Methodology and Market Outlook	Passenger Forecast	Dublin Airport
<b>Appendix 3</b>	A Peer Review of CEPA & Taylor Airey's Efficiency Assessment	Operating Expenditure	Frontier Economics
<b>Appendix 4</b>	Operating Expenditure Evidence	Operating Expenditure	Dublin Airport
<b>Appendix 5</b>	Strategic Employment Relations & Rights Issues Review	Operating Expenditure	Stratis Consulting
<b>Appendix 6</b>	Technical Notes	Capital Expenditure	Dublin Airport
<b>Appendix 7</b>	Asset Life Assessment	Capital Expenditure	Dublin Airport
<b>Appendix 8</b>	Cost of Capital for Dublin Airport for 2019 Determination	Cost of Capital	NERA

### **2.11 Confidential Document**

This document contains some confidential information, but a separate redacted non-confidential version of the Dublin Airport response document can be provided.

### 3. Traffic Performance and Projected Passengers

#### 3.1 The Commission's Forecast Analysis

3.1 The Commission's 2019 Draft Determination proposed a passenger forecast for Dublin Airport of 3.1% CAGR, reaching 37.8m by 2024. There are numerous factors that lead Dublin Airport to believe this forecast is too optimistic, which will be expanded upon in this chapter. They are:

- The simplistic nature of the model used by the Commission
- Brexit uncertainty
- Fuel prices and yield pressure
- Global economic slowdown
- Weakening aviation industry
- Growth decline in Dublin Airport
- Infrastructure constraints at Dublin Airport
- Dublin Airport high load factors
- The Commission not supporting growth

3.2 Since the 2019 Draft Determination, Dublin Airport and the Commission have reviewed the elasticity calculations used in the Commission's model, resulting in a revised CAGR of 2.99%. Based on a starting point of 32.4m passengers in 2019, this will reach 37.55m by 2024. The difference in total passengers in the 5-year period is c. 0.7m.

3.3 However, as Dublin Airport is slightly adjusting the forecast for 2019 to 32.5m, if the Commission continued to apply the same methodology (which is not recommended by Dublin Airport), the Commission's revised forecast will culminate with a passenger number of 37.7m in 2024 based on the new elasticity assumption – a decrease of 0.09m in 2024.

#### **Simplistic Model used by the Commission**

3.4 The Commission's model is too simplistic to be used as the basis for the passenger forecast for the next Determination as it only uses one variable, Irish GDP, to derive its output. While economic performance in Ireland is related to passenger performance, focusing on a single variable and using passenger numbers at the highest level indicates that it will not give a robust view of global economic performance and will not respond to any strengths, weaknesses or threats that may arise which could affect Irish traffic.

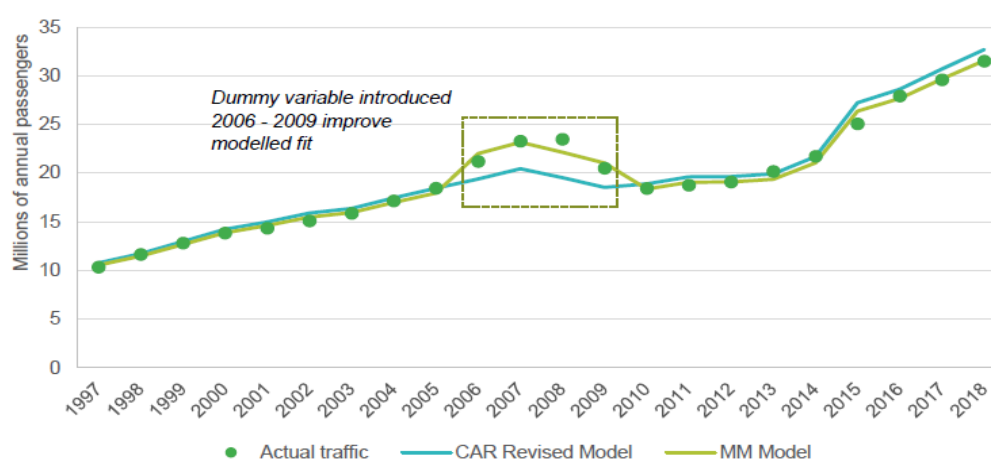
3.5 Dublin Airport commissioned Mott MacDonald to undertake a review of the Commission's traffic forecast<sup>8</sup> (the results of which are summarised in section 3.3 of this chapter), this report can be found in Appendix 1. Mott MacDonald highlighted that while

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<sup>8</sup> Commission for Aviation Regulation Traffic Forecast Review, July 2019. Mott MacDonald

the Commission's model follows the general trend in passengers, as can be seen in Figure 3.1, it over-forecasted passengers over the last 9 years. This may be due to factors such as the collapse of domestic traffic at the beginning of the decade and the cessation of growth into the UK over the last couple of years. This over-forecasting does not convey an appropriate balance of risks for Dublin Airport going forward. Similarly, the model doesn't reflect the sudden very positive trends in 2006 and 2007 and the very negative shifts that were seen in 2008 and 2009.

**FIGURE 3.1 GOODNESS OF FIT REGRESSION MODEL (SOURCE: MOTT MACDONALD)**



### **Brexit Uncertainty**

- 3.6 Brexit remains a clear and present danger to traffic in Dublin. The UK is a significant market for Dublin Airport. In 2018, 32% of passengers were travelling on flights to/from the UK, while a little under 17% of the airport's passengers resided in the UK. Brexit has already influenced demand to/from the UK even before the UK formally leaves the EU. A decline in the value of Sterling and increased uncertainty are the biggest drivers of this current trend and it is generally accepted that this will worsen as other parts of the economy in both islands are affected and increased regulatory obstacles emerge.
- 3.7 While economic forecasts have been adjusted because of this Brexit effect, aviation has been disproportionately affected by this development. Table 3.1 compares economic growth in Ireland and the UK with Dublin-UK traffic. Traffic has been relatively flat over the last three years, while economic factors were much more positive. This relatively stagnant performance from 2017 to 2019 for Dublin-UK traffic compares to an average growth rate of 7% between 2010 and 2016.

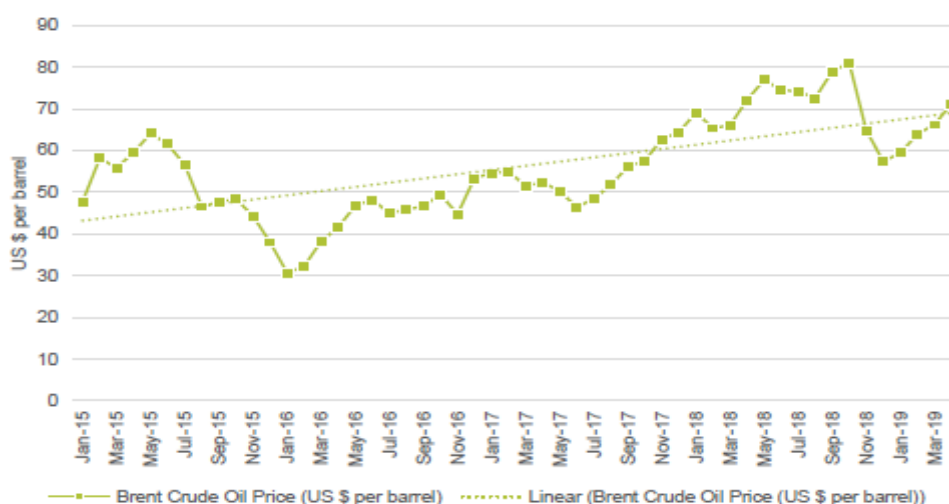
**TABLE 3.1 ECONOMIC GROWTH VERSUS PASSENGER GROWTH<sup>9</sup>**

Year	Irish GDP	UK GDP	Dublin-UK Passengers
2017	7.2%	1.8%	0.6%
2018	6.8%	1.4%	1.0%
2019 Exp	4.1%	1.2%	1.0%

3.8 There is a general consensus among economic bodies that Brexit will have a further negative impact on demand, while the central bank warns that “a disorderly, no deal scenario would have very severe and immediate disruptive effects, with consequences for almost all areas of economic activity”<sup>10</sup>. The Irish Fiscal Advisory Council has also highlighted the uncertain medium-term outlook for the Irish economy as they state that “Brexit presents an elevated risk to medium-term economic growth in Ireland”<sup>11</sup>.

**Fuel prices and yield pressure**

**FIGURE 3.2 BRENT CRUDE OIL PRICES JANUARY 2015-APRIL 2019**



Source: Energy Information Administration, accessed June 2019

3.9 The Energy Information Administration (EIA) currently predicts that while Brent crude oil prices will be at an average of \$69.64 per barrel in 2019 and \$67 per barrel in 2020, this is higher than levels seen during much of the last four years. Similarly, the FAA<sup>12</sup> released its 20-year forecast in May 2019. It predicted that fuel would remain relatively constant

<sup>9</sup> Source: IMF World Economic Outlook Apr 2019 + Dublin Airport Passenger Statistics

<sup>10</sup> Central Bank: Quarterly Commentary Q2 2019, April.

<sup>11</sup> Irish Fiscal Advisory Council – Fiscal Assessment Report June 2019 (<https://www.fiscalcouncil.ie/fiscal-assessment-report-june-2019/>)

<sup>12</sup> [https://www.faa.gov/data\\_research/aviation/aerospace\\_forecasts/media/FY2019-39\\_FAA\\_Aerospace\\_Forecast.pdf](https://www.faa.gov/data_research/aviation/aerospace_forecasts/media/FY2019-39_FAA_Aerospace_Forecast.pdf)

in real terms over the next 5 years, but this would still be 34% higher than the levels found in 2015. Airlines will continue to experience pressure from a combination higher fuel prices and lower fares. There have been several European airline collapses during the last 18 months - flybmi, Monarch, Cobalt and WOW Air. Flybmi attributed its failure to factors such as recent spikes in fuel and carbon costs and the uncertainty created by the Brexit process<sup>13</sup>.

### **Global economic slowdown**

3.10 Economic indicators are weak across Europe. In June 2019, the DG ECFIN flash estimate of the consumer confidence indicator dropped in both the Euro area and the European Union (by 0.7 points in both cases)<sup>14</sup>. In Germany, the IFO Business Climate Index<sup>15</sup> (June 2019) showed that there is further negative sentiment among German company managers, with the index falling from 97.9 points in May to 97.4 points in June, which is the lowest level since November 2014. In manufacturing, the business climate index fell further, attributed to the decline in new orders. The sub-index fell from 3.9 to 1.5. In June 2018, the sub-index stood at 24.2.

3.11 In its World Economic Outlook April 2019<sup>16</sup>, the IMF announced that it was projecting a decline in global growth in 2019 for 70% of the global economy, downgrading its global growth forecast for 2019 from 3.6% in October 2018 to 3.3% in its April 2019 update, a decrease of 0.3%.

3.12 The OECD produced its latest forecast a month later<sup>17</sup> in May and this indicated a further slowdown in growth, with it suggesting 3.2% growth in 2019 (versus 3.3% from IMF) and 3.4% in 2020 (versus 3.6% from IMF). Ireland was also affected, as it predicted 3.9% growth in 2019 and 3.3% in 2020 (compared to 4.1% and 3.4% respectively from the IMF). Key risks include:

- A prolonged period of higher tariffs between the US and China
- New trade barriers between the US and EU
- A sharper slowdown in China
- Prolonged sub-par growth in Europe
- Financial vulnerabilities from high debt

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<sup>13</sup> <https://www.theguardian.com/business/2019/feb/16/flybmi-collapses-blaming-brexit-uncertainty>

<sup>14</sup> [https://ec.europa.eu/info/sites/info/files/fcci\\_2019\\_06\\_en.pdf](https://ec.europa.eu/info/sites/info/files/fcci_2019_06_en.pdf)

<sup>15</sup> <https://www.ifo.de/en/node/43224>

<sup>16</sup> <https://www.imf.org/external/pubs/ft/weo/2019/01/weodata/index.aspx>

<sup>17</sup> OECD (May 2019), OECD Economic Outlook, Volume 2019 Issue 1

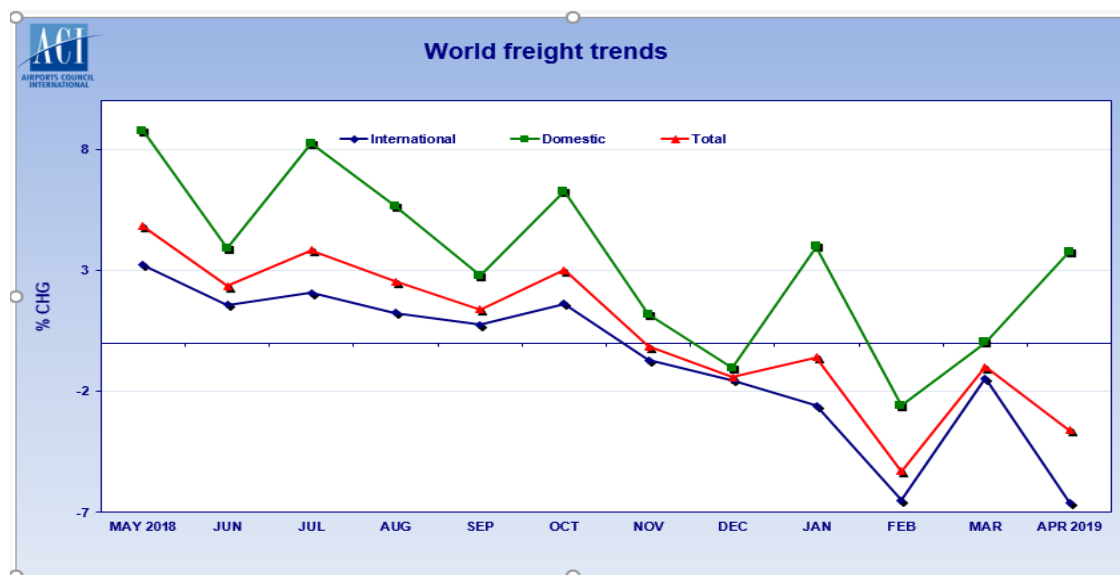
3.13 The latest ESRI forecast<sup>18</sup> in June 2019 predicted 4.0% growth in 2019 and 3.2% growth in 2020. While the 2019 forecast falls in between the OECD and IMF forecasts, the 2020 forecast is lower than both, again suggesting that as the year progresses, positivity around the global and Irish economy reduces. The ESRI also noted that “*these forecasts for 2019 and 2020 are subject to the technical assumption that the UK’s continued membership in the EU will effectively remain in place after October 2019*”, which suggests that there is a downside risk associated with this forecast.

3.14 The Commission will base their forecasting on the April 2019 IMF forecast. This remains a risk, as the IMF will release its latest forecast in October 2019 and all the signs outlined above indicate that this be weaker than the April 2019 forecast.

**Weakening Aviation Industry**

3.15 As there are signs of global economic slowdown, there have also been clear signals that the aviation industry is weakening. 2018 was the worst year for profits since 2014 and 2019 is forecasted to be even worse<sup>19</sup> due to fuel prices and downward pressure on yields. Cargo trends is often a precursor of passenger trends and, as can be seen in Figure 3.3, this began to decline in November 2018 and continued into the early months of 2019.

**FIGURE 3.3** EVOLUTION OF CARGO DATA<sup>20</sup>



<sup>18</sup> ESRI, Quarterly Economic Commentary, Summer 2019

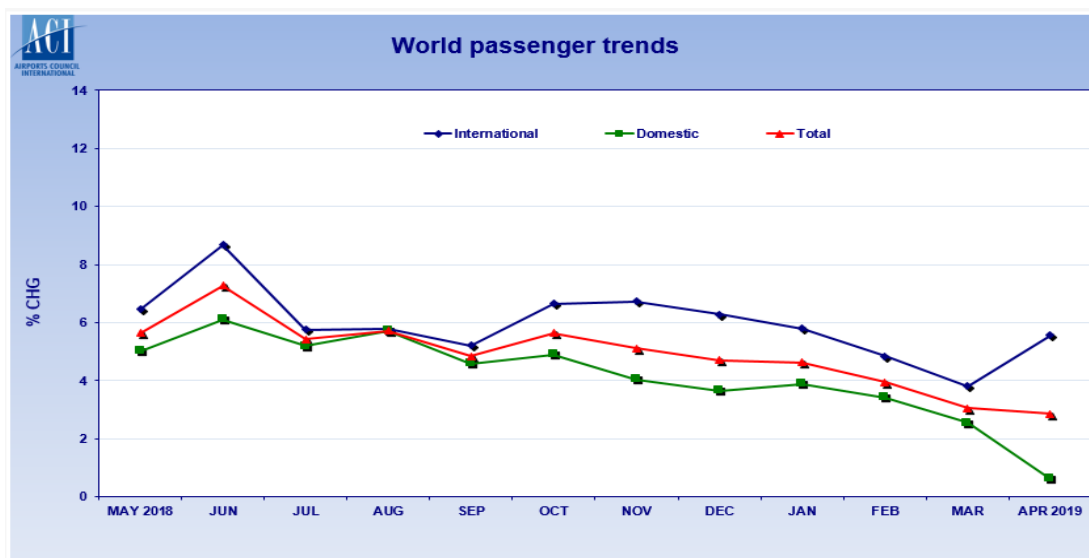
<sup>19</sup> <https://www.iata.org/pressroom/pr/Pages/2019-06-02-01.aspx>

<sup>20</sup> ACI Worldwide Airport Traffic Report, Feb 2019.



3.16 While still positive, Figure 3.4 shows that passenger trends are following the same curve. Growth was circa 6% last year and has now steadily reduced to circa 3%. Cargo growth was circa 5% last year and is now declining by 4%. International passenger traffic improved in April because of the timing of Easter but overall traffic continued to trend downwards.

**FIGURE 3.4** EVOLUTION OF PASSENGER TRENDS



3.17 Dublin Airport's largest airline, Ryanair, reported its lowest profit in four years for the year ending March 2019. This was attributed to falling air fares and higher fuel costs. Ryanair expects further falls in air fares in 2020, citing risks such as Brexit developments, ATC disruption and security events.<sup>21</sup> Historically, Ryanair has reported greater margins than the rest of Europe's airline groups so its cautionary profit guidance for 2020, coupled with Lufthansa's profit warning issued in June 2019, signals a more general downturn in airline profitability.

3.18 IATA has also downgraded its 2019 outlook for the global aviation industry from a \$35.5 billion profit forecast, as of December 2018, to a \$28 billion profit forecast as of June 2019, citing rising fuel prices and a weakening of world trade as key reasons<sup>22</sup>. According to IATA, Europe is one of the more exposed regions to weaker international trade. HSBC released analysis in June 2019 outlining that the "problem is with demand". They state that, even with "the benefit of Easter and European capacity growth of only 4%, the lowest seen in Europe since the Global Financial crisis...we conclude the problem is not excessive

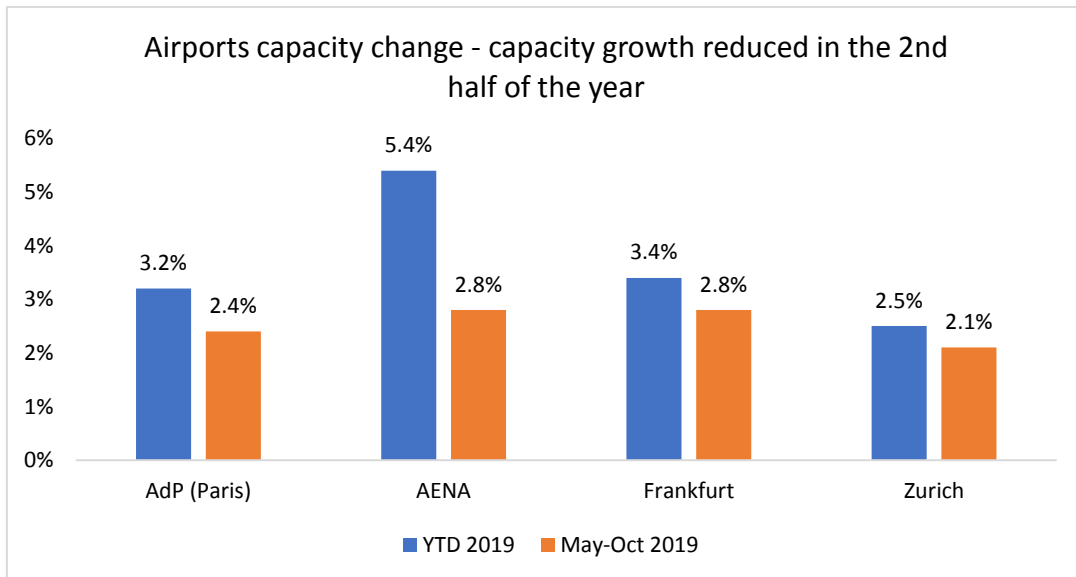
<sup>21</sup> <https://investor.ryanair.com/wp-content/uploads/2019/05/FY19-Ryanair-Presentation.pdf>

<sup>22</sup> <https://www.iata.org/pressroom/pr/Pages/2019-06-02-01.aspx>

*supply, but rapidly weakening demand...primarily driven by consumer confidence, with environmental sensitives and the memory of last year’s hot summer playing supporting roles.”<sup>23</sup>*

3.19 On 27<sup>th</sup> June 2019, HSBC released a paper analysing European Airport capacity<sup>24</sup>, where they noted the slowdown in capacity growth across major European Airports, of which Dublin Airport is not immune, as referenced in the next section “Growth Decline in Dublin Airport”. The HSBC paper states that “*the traffic-GDP multiplier seen in recent years sits above the typical range for developed market. We expect the multiplier to compress whilst economic growth is slowing*”. Figure 3.5 shows the slowing of growth between the first and second half of the 2019 for some of the major European airports.

**FIGURE 3.5 AIRPORTS CAPACITY CHANGE (SOURCE: HSBC)**



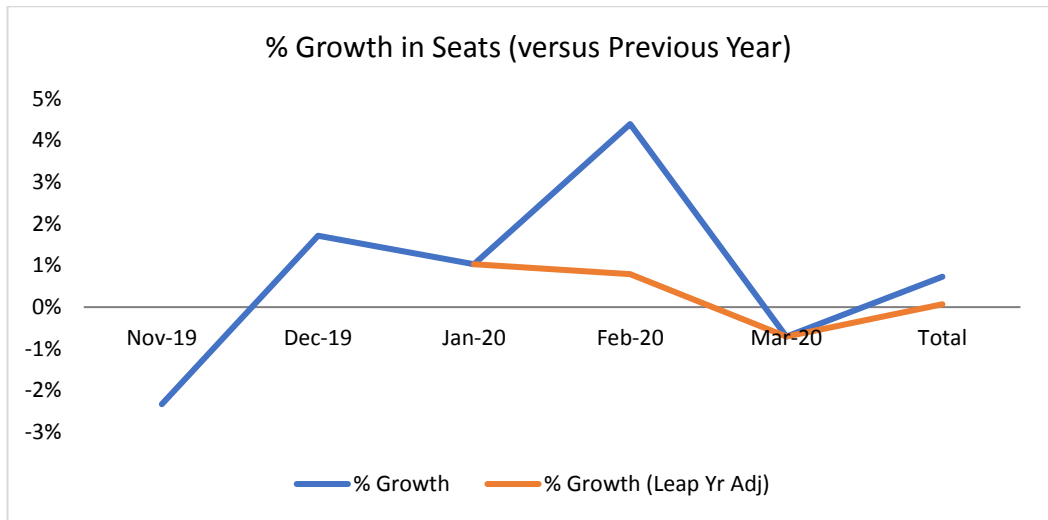
**Growth Decline in Dublin Airport**

3.20 Based on the above section, there is a clear slowdown evident in the aviation market and Dublin Airport is affected. Existing airline schedules for W19/20 indicate marginal growth of less than 1% versus the previous year. Moreover, 2020 is a leap year and adjusting for this results in flat capacity versus W18/19. This is a clear indication that the strong growth rates that have existed in Dublin Airport are waning.

<sup>23</sup> <https://www.research.hsbc.com/R/20/Fw9VZqvrRHGs>

<sup>24</sup> <https://www.research.hsbc.com/R/20/TxbINbzHMksj>

**FIGURE 3.6 DUBLIN AIRPORT SINTER 19/20 GROWTH (SOURCE: IATA AIRPORT- IS)**



3.21 Airlines are tactically reducing frequencies on high frequency routes during off-peak periods. Figure 3.7 illustrates this for Ryanair’s Dublin – Amsterdam route, where they reduce frequency from 4 times daily to 3 times daily for Tuesdays and Wednesdays for the last 3 weeks in November. This also occurs in the tough periods of January/February.

**FIGURE 3.7 FREQUENCY ON DUBLIN -AMSTERDAM**

2019 Jun		2019 Jul		2019 Aug		2019 Sep		2019 Oct		2019 Nov	
Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri
28	29	30	31	1 Nov	2	3					
				06:50 → 09:35 11:00 → 13:45 15:10 → 17:55 18:35 → 21:20	06:50 → 09:35 11:00 → 13:45 15:10 → 17:55 18:35 → 21:20	06:50 → 09:35 11:00 → 13:45 15:10 → 17:55 18:35 → 21:20					
4	5	6	7	8	9	10					
06:50 → 09:35 11:00 → 13:45 15:10 → 17:55 18:35 → 21:20	06:50 → 09:35 11:00 → 13:45 15:10 → 17:55 18:35 → 21:20	06:50 → 09:35 11:00 → 13:45 15:10 → 17:55 18:35 → 21:20	06:50 → 09:35 11:00 → 13:45 15:10 → 17:55 18:35 → 21:20	06:50 → 09:35 11:00 → 13:45 15:10 → 17:55 18:35 → 21:20	06:50 → 09:35 11:00 → 13:45 15:10 → 17:55 18:35 → 21:20	06:50 → 09:35 11:00 → 13:45 15:10 → 17:55 18:35 → 21:20					
11	12	13	14	15	16	17					
06:50 → 09:35 11:00 → 13:45 15:10 → 17:55 18:35 → 21:20	06:50 → 09:35 11:00 → 13:45 15:10 → 17:55 18:35 → 21:20	06:50 → 09:35 11:00 → 13:45 15:10 → 17:55 18:35 → 21:20	06:50 → 09:35 11:00 → 13:45 15:10 → 17:55 18:35 → 21:20	06:50 → 09:35 11:00 → 13:45 15:10 → 17:55 18:35 → 21:20	06:50 → 09:35 11:00 → 13:45 15:10 → 17:55 18:35 → 21:20	06:50 → 09:35 11:00 → 13:45 15:10 → 17:55 18:35 → 21:20					
18	19	20	21	22	23	24					
06:50 → 09:35 11:00 → 13:45 15:10 → 17:55 18:35 → 21:20	06:50 → 09:35 11:00 → 13:45 15:10 → 17:55 18:35 → 21:20	06:50 → 09:35 11:00 → 13:45 15:10 → 17:55 18:35 → 21:20	06:50 → 09:35 11:00 → 13:45 15:10 → 17:55 18:35 → 21:20	06:50 → 09:35 11:00 → 13:45 15:10 → 17:55 18:35 → 21:20	06:50 → 09:35 11:00 → 13:45 15:10 → 17:55 18:35 → 21:20	06:50 → 09:35 11:00 → 13:45 15:10 → 17:55 18:35 → 21:20					
25	26	27	28	29	30	1 Dec					
06:50 → 09:35 11:00 → 13:45 15:10 → 17:55 18:35 → 21:20	06:50 → 09:35 11:00 → 13:45 15:10 → 17:55 18:35 → 21:20	06:50 → 09:35 11:00 → 13:45 15:10 → 17:55 18:35 → 21:20	06:50 → 09:35 11:00 → 13:45 15:10 → 17:55 18:35 → 21:20	06:50 → 09:35 11:00 → 13:45 15:10 → 17:55 18:35 → 21:20	06:50 → 09:35 11:00 → 13:45 15:10 → 17:55 18:35 → 21:20	06:50 → 09:35 11:00 → 13:45 15:10 → 17:55 18:35 → 21:20					

**Significant Infrastructure Constraints in Dublin**

- 3.22 Dublin Airport has several constraints hindering growth including a severely constrained runway along with terminal and stand constraints. The slot constraints on the runway will continue until the opening of the new runway in Summer 2022, while the stand and terminal constraints will not be alleviated until 2024, following the completion of the CIP 2020+.
- 3.23 Dublin Airport also has planning conditions associated with the new North Runway, which include operating restrictions that cap night flights at 65 per night, which is 43% less than the current flight demand.

### Runway Capacity Utilisation

3.24 As noted in Mott MacDonald's Traffic Forecast Review<sup>25</sup> and shown in Figure 3.8, Dublin airport is Europe's fourth most capacity-constrained airport, with 93% slot utilisation, falling just behind the two largest London airports and Lisbon.

**FIGURE 3.8 TOP 10 EUROPEAN AIRPORTS BY SLOT UTILISATION (SOURCE: MOTT MACDONALD)**

		Utilisation*
LHR	London-Heathrow, GB	98%
LIS	Lisbon, PT	97%
LGW	London-Gatwick, GB	95%
DUB	Dublin, IE	93%
SAW	Sabiha Gokoen, TR	92%
SVO	Moscow-Sheremetyevo, RU	89%
IST	Istanbul, TR	89%
LIN	Milan-Linate, IT	86%
DUS	Duesseldorf, DE	86%
FRA	Frankfurt, DE	85%

(\*) Summer season busy week slot utilisation – busy 16-hour average over busiest 5 days-of-week – based on declared runway capacity

Sources: ACL ([www.online-coordination.com](http://www.online-coordination.com)) for LHR, LGW and DUB; Mott MacDonald analysis of SRS schedules and declared capacities for other airports

3.25 Figures 3.9 and 3.10 show Dublin Airport's slot availability for the Summer 2019 season. These charts illustrate the fact that there is only slot availability on certain days of the week and parts of the season. In general, there are no slots available for a new daily Summer service between the hours of 06:00 to 19:59.

3.26 Also noted in Mott MacDonald's review, the peak departure hours of 06:00 and 07:00 are particularly constrained. This prevents growth in the number of Dublin-based aircraft by Aer Lingus and Ryanair (and other airlines) operating short-haul services to the UK and mainland Europe. Short-haul services operated by Dublin-based airlines represents over 70% of the airport's traffic, so constraints at this time of day represent a strong limitation on the airport's overall growth potential.

<sup>25</sup> Commission for Aviation Regulation Traffic Forecast Review, July 2019. Mott MacDonald

**FIGURE 3.9 DUBLIN AIRPORT SUMMER 2019 SLOT AVAILABILITY – PEAK WEEK**

Hour (LT)	ARRIVALS							DEPARTURES							Hour (LT)
	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	
0600	2	4	3	2	4	1	3	0	0	0	0	0	0	0	0600
0700	0	1	0	0	0	1	3	0	1	0	0	0	1	3	0700
0800	1	4	2	2	2	6	7	1	6	2	2	4	7	8	0800
0900	0	0	1	0	0	1	3	0	0	1	0	0	1	4	0900
1000	5	3	3	2	2	4	4	5	3	3	2	2	7	5	1000
1100	2	4	6	1	3	1	1	2	4	6	1	3	1	1	1100
1200	0	2	3	0	1	2	2	0	2	3	0	1	2	2	1200
1300	1	3	0	2	2	4	0	0	0	0	1	0	3	0	1300
1400	2	6	3	2	3	0	4	2	5	2	2	3	0	2	1400
1500	0	3	3	4	1	6	3	0	3	2	4	1	2	3	1500
1600	2	6	3	2	2	10	1	2	4	4	2	2	6	1	1600
1700	1	1	0	0	0	5	0	1	1	0	0	0	5	0	1700
1800	0	2	2	1	1	4	0	0	2	2	1	2	4	0	1800
1900	1	2	0	1	0	12	3	1	2	0	1	0	9	3	1900
2000	6	9	8	10	7	14	11	6	9	7	9	8	15	10	2000
2100	12	9	12	12	10	14	8	15	15	14	14	15	19	14	2100
2200	5	5	6	6	4	13	8	6	5	8	8	4	15	11	2200
2300	4	10	5	10	7	8	1	7	14	8	14	10	11	5	2300

Source: ACL ([www.online-coordination.com](http://www.online-coordination.com)) for the week 8-14 July 2019 (accessed 11 June 2019)

**FIGURE 3.10 DUBLIN AIRPORT SUMMER 2019 SLOT AVAILABILITY – FULL SEASON (FRIDAY)**

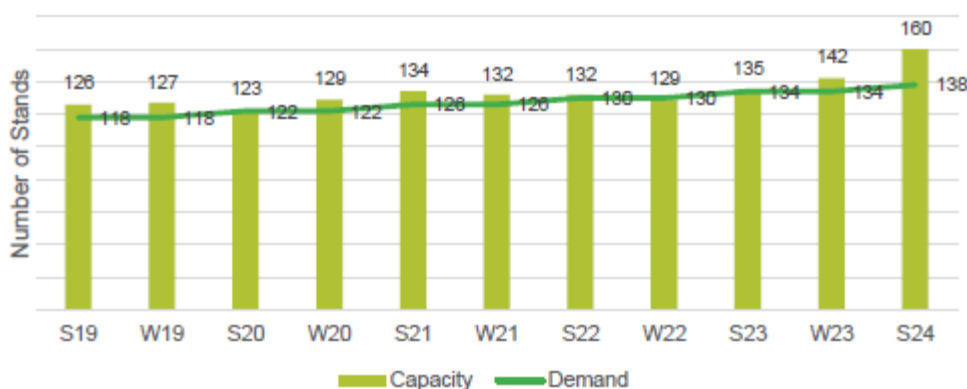
Source: ACL ([www.online-coordination.com](http://www.online-coordination.com)) (accessed 11 June 2019)

3.27 Heathrow<sup>26</sup>, Gatwick<sup>27</sup> and Paris Orly<sup>28</sup> airports (among others, including Dusseldorf, Munich and Prague) consider constraints when generating their forecasts as part of their regulatory review. As Dublin Airport is becoming more constrained, both on the runway and with aircraft parking stands, it is clear that the Commission must factor in this increasing level of constraints in their forecast.

**Stand Capacity Utilisation**

3.28 Following the opening of the Northern Runway in Summer 2022, stand capacity and terminal limitations will become the primary constraining factors for Dublin Airport until the completion of certain CIP 2020+ projects by the Summer 2024 season. Figure 3.11 plots the expected Dublin Airport stand capacity against stand demand and shows that there are significant constraints up until Summer 2024 – this assumes that all CIP 2020+ stands are completed on time.

**FIGURE 3.11 DUBLIN AIRPORT STAND SUPPLY AND DEMAND BY SEASON (2019-2024)**



Source: daa; narrow body equivalent stand capacity and demand

**Dublin Airport High Load Factors**

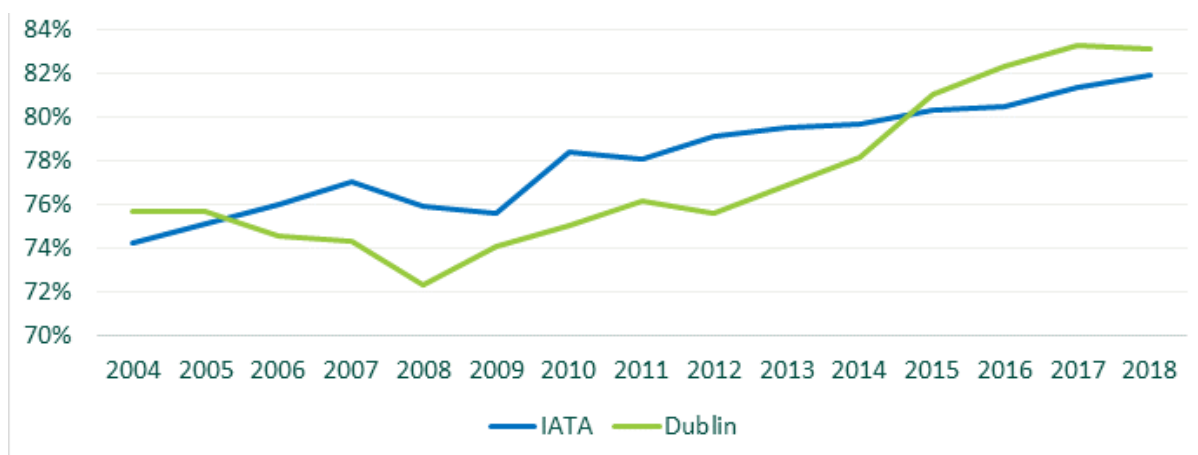
3.29 Dublin Airport is also constrained on growing load factors as they already have strong year-round load factors, with 90% on average in a peak Summer months and c. 83% for the full year. IATA’s most recent view of Dublin Airport average load factors versus the world (Figure 3.12) shows that Dublin Airport have surpassed the average in 2015 and we are continuing to outperform the global load factors since then, limiting the ability to grow traffic with load factor increases.

<sup>26</sup> CAP1103, Chapter 3, <http://publicapps.caa.co.uk/docs/33/CAP%201103.pdf>

<sup>27</sup> CAP1102, Chapter 3, <http://publicapps.caa.co.uk/docs/33/CAP1102.pdf>

<sup>28</sup> Section 1.1, [https://www.pariaeroporto.fr/docs/default-source/groupe-fichiers/finance/rerelations-investisseurs/r%C3%A9gulation/2021-2025/public-consultation-document.pdf?sfvrsn=d78efbbd\\_4](https://www.pariaeroporto.fr/docs/default-source/groupe-fichiers/finance/rerelations-investisseurs/r%C3%A9gulation/2021-2025/public-consultation-document.pdf?sfvrsn=d78efbbd_4)

**FIGURE 3.12 ANNUAL LOAD FACTOR FOR DUBLIN VERSUS WORD (SOURCE: IATA)**



**Commission for Aviation Regulation Not Supporting Growth**

3.30 Since Summer 2017, the Commission has been the authority in declaring capacity for Dublin Airport. The declaration of capacity happens following the Dublin Airport Coordination Committee Meeting where the airlines, airport and IAA discuss and vote on any potential capacity increases. The Commission has voted against some or all of the growth proposed by Dublin Airport in two out of the three Summer season’s to-date (Summer 17 & Summer 19). It is unclear how the airport can grow in line with the Commission’s forecast when they do not support the growth proposed.

**Summary**

3.31 In summary, the Commission’s revised forecast CAGR of 3.01% ending with a total passenger number of 37.7m in 2024 is unattainable due to all the factors outlined above. Each of the specific factors will have an impact separately on the forecast and with all of them combined, we believe that the Dublin Airport passenger forecast submitted in the Regulatory Proposition is valid.

**3.2 Dublin Airport Forecast**

3.32 In the Regulatory Proposition, Dublin Airport forecast 36.1m passengers by 2024, a CAGR of 2.1%. The methodology used for forecasting was described in Dublin Airport’s “Passenger Forecast Methodology and Market Outlook” document. As stated above, Dublin Airport believes that this forecast is still a fair and valid view of growth over the period considering all the factors hindering growth outlined in the above section.

3.33 In section 7.1 of the methodology document (Appendix 2), it was noted that aviation was one of the most exposed industries to the consequences of Brexit. This has also been



outlined above in “Brexit Uncertainty” and have reaffirmed with “Global Economic Slowdown” and “Weakening Aviation Industry”. To cater for this, traffic between UK and Ireland was projected to be flat over the lifetime of the 2019 determination in Dublin Airport’s forecast. Growth in 2017 and 2018 was relatively stagnant (Table 3.1), so there is no reason to believe this trend will change. A hard Brexit would result in a drop in UK traffic. Therefore, a flat curve is a balancing of the risk.

- 3.34 In section 5.2.3 of the methodology document it was noted that it was highly probable that at some point in the short-medium term, transit stops will be superseded by direct services. Thus, it was assumed that over the course of the next regulatory traffic, transit traffic would cease.
- 3.35 Furthermore, in sections 6.6 and 7.2 of this methodology document, it was noted that the assumption of unconstrained growth being used as the traffic target for the first half of the next regulatory determination is impractical and a constraining adjustment should be developed to refine the growth targets. After this document was written, it became clear that there would continue to be significant constraints after the runway opens in 2022, although if the CIP 2020+ projects are completed on time, these constraints would be mostly eradicated by 2024. The Dublin Airport forecast was validated against these constraints and subsequently confirmed by Mott MacDonald’s constrained forecast.
- 3.36 None of the specific factors outlined have changed significantly since the initial Dublin Airport forecast was completed. In fact, the dangers of a hard Brexit have only increased. Other markets have compensated in 2019 and Dublin Airport is forecasting a slight improvement in its outlook for the year, increasing its forecast from 32.4m to 32.5m.
- 3.37 Our initial forecast of 2.1% CAGR is still valid as this balances the risks between continued economic growth, a downturn and the constraining factors at Dublin Airport.

### 3.3 Mott MacDonald Independent Forecast

- 3.38 Given the significant discrepancy between the Commission’s forecast and Dublin Airport’s forecast, Dublin Airport commissioned Mott MacDonald to undertake a review of the Commission’s traffic forecast and to develop its own independent forecast to evaluate the appropriateness of the forecast models used<sup>29</sup>. While Mott MacDonald confirmed that the Commission’s approach was statistically valid, it identified concerns with the methodology as outlined in the following section (and in the supporting full document):
- The Commission’s econometric analysis considers only a single explanatory variable, Irish GDP, although other factors are also likely to influence air traffic

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<sup>29</sup> Commission for Aviation Regulation Traffic Forecast Review, July 2019. Mott MacDonald (Appendix 1)

at DUB such as GNI, oil price and the GDP of source markets (i.e. economies at the other end of a route).

- The Commission's forecast represents unconstrained demand and does not take account of Dublin Airport's capacity constraints.
- The Commission's forecast does not consider downside traffic risks due to softening economic conditions and the potential impacts of Brexit.

3.39 Furthermore, Mott MacDonald noted that because of the effect of Dublin Airport's capacity constraints and the downside traffic risks due to economic conditions, the traffic risks are asymmetrically distributed – Dublin Airport is unlikely to fully benefit from upside traffic opportunities due to capacity limitations but are fully exposed to the downside traffic risks.

3.40 Mott MacDonald has developed a more detailed market demand forecast, which takes account of differential growth rates by market and GDP contributions from both the Irish economy and economies at the other end of the route. This unconstrained market demand forecast results in a lower growth rate than the Commission, with a CAGR of 2.76% per annum over the 2019 to 2024 period, instead of (the revised) 3.01% suggested by the Commission. This equates to a total of 37.25m passengers in 2024 – which is 1.15m higher than Dublin Airport and 0.44m lower than the Commission.

3.41 Mott MacDonald note that, while the 2024 final traffic number of the unconstrained demand is realistic due to the easing on runway and stand/terminal constraints, the forecast for the intervening years should be reduced. When considering these constraints in the total, Mott MacDonald forecast that there will be 2.3 million fewer passengers over the period (2020-2024) versus their unconstrained forecast. This equates to 3.8 million passengers lower than the Commission's revised forecast.

3.42 Mott MacDonald's approach is similar to Dublin Airport's. Dublin Airport created an unconstrained forecast and then applied adjustments to reflect a Brexit scenario and downturn in the global economy, which was then validated against the capacity constraints in Dublin Airport. The difference in the Mott MacDonald and Dublin Airport forecast relates mainly to the handling of Brexit. In 2024, the difference in traffic to/from the United Kingdom was c. 0.9m, while the total difference was 1.1m.

### 3.4 Conclusion

3.43 While the Commission has lowered the elasticity assumption, their revised forecast of total passengers for the five years remains similar at 178.4 million passengers, due to the small increase in starting point for 2019 from 32.4m to 32.5m. This equates to a CAGR of

3%. Several factors have been highlighted to clarify why Dublin Airport believes this is unachievable including Brexit, global economic slowdown, capacity constraints in Dublin Airport and the Commission previously not supporting proposed capacity growth in Dublin.

- 3.44 Dublin Airport's forecast at 2.1% CAGR reaching a total of 36.1m passengers in 2024 (a total of 172.6m passengers for the period) remains valid as capacity constraints have been factored in along with an assumption of flat traffic to/from the UK as a consequence of Brexit.
- 3.45 Mott MacDonald's forecast, at 2.76%, falls in between Dublin Airport (2.1%) and the Commission's revised (3%) forecasts. Mott MacDonald's forecast is calculated based on disaggregating traffic by region to pick up on specific regional trends, a more complex unconstrained forecasting model (GDP at both ends of the routes) along with a view on capacity constraints at Dublin Airport.
- 3.46 The difference between the Dublin Airport and Mott MacDonald forecast is mainly due to the treatment of Brexit, while Dublin Airport kept the UK traffic forecast flat, Mott MacDonald applied a traffic multiplier based on GDP.
- 3.47 Therefore, Dublin Airport believes that it is prudent to use our original forecast submitted in the regulatory proposition, which has a CAGR of 2.1% as it considers the market downturns and capacity constraints.

## 4. Focus on the passenger

### 4.1 Introduction

- 4.1 Passenger numbers at Dublin Airport have increased by 45% since 2014, to a record 31.5 million in 2018. Throughout that period, we have had a relentless focus on providing the best possible experience to our growing number of customers. We continue to put the passenger at the heart of everything we do at Dublin Airport.
- 4.2 Dublin Airport was named one of the best airports in the world in a global ranking of passenger experience. Joint winner in its category of European Airports that have 25-40 million passengers per year in the Airports Council International (ACI) World Airport Service Quality (ASQ) Awards.
- 4.3 The ASQ survey measures passengers' satisfaction across more than 30 key performance indicators including access to the airport, check-in, security, wayfinding, the courtesy and friendliness of staff, cleanliness, quality of internet/Wi-Fi service. The global benchmarking programme is based on surveys of passengers at the airport on their day of travel.
- 4.4 We are dedicated to providing every passenger with a safe and enjoyable journey through the airport. Dublin Airport has continued to expand our significant passenger research programme to ensure that our quality of service proposition meets future passenger expectations and needs.
- 4.5 Despite this commitment and successful achievement of high service quality in a capacity constrained airport, the Commission have proposed to further increase the service quality measures, the targets to these measures and the financial penalties of breaching these measures.
- 4.6 It appears that whether Dublin Airport achieves a high quality of service or not, is irrelevant to the Commission's proposals. Incentive based regulation should encourage the regulated entity to succeed both in the short and long term. However, this ever increasing pressure on service quality measures indicates that short term success leads to long term punishment from the Commission in the form of higher targets and harsher penalties.
- 4.7 For example, a fine of €330,000 (33m pax.) for not reaching an extremely high, arbitrary target of 9 out of 10, on one single question in a customer survey is not a fair or justified approach to encourage a high quality of service.

- 4.8 In the 2014 Draft Determination, the Commission stated that as Dublin Airport had improved/sought to improve the level of service provided, a major overhaul of the system was unnecessary.
- 4.9 However, in 2019 Dublin Airport has improved the level of service provided, yet the Commission has now moved the goal posts with an overhaul of the system with 9 new measures and amending almost every existing measure.
- 4.10 We quantify in the below table the financial impact of the proposed measures of the first category proposed by the Commission, 'Airport processes are reliable, efficient and punctual' where the total penalty of €0.21 per passenger would have been breached in 2018 under the proposed new SQMs.
- 4.11 The Commission has given no consideration to additional opex or capital investments that will be required to achieve the new SQM and targets proposed. The size of the penalties from year 1 of the new regulatory period will significantly penalise Dublin Airport and demonstrates the proposals are unrealistic.
- 4.12 This would bring the proposed price cap of €7.50 down to €7.29, which creates extreme financeability issues for Dublin Airport and violates the Commission's statutory objective '*To enable daa to operate and develop Dublin Airport in a sustainable and financially viable manner*'.
- 4.13 Of the 6 measures in this grouping, one would not incur a breach in 2018. The Commission has proposed FEGP and AVDGS will not impact the price cap in 2020, this proposal is welcomed by Dublin Airport as the table highlights how vital this exemption is.
- 4.14 Dublin Airport also argues that an exemption for the construction period for the baggage SQMs is vital if we are to achieve these measures. This is discussed in more detail later in this chapter.

**TABLE 4.1 GROUP 1 – SQM BREACHES 2018**

SQM			Breaches	Cost per Breach	Total Cost per pax.	Total fine €'m
Security T1*		15 min	6	0.005	0.03	0.95
	Daily	25 min	8	0.01	0.08	2.52
Security T2		15 min	1	0.005	0.005	0.16
		25 min	4	0.01	0.04	1.26
Max wait time	Annual		1	0.01	0.01	0.32
Outbound baggage	Per event		1	0.01	0.01	0.32
Inbound baggage	Monthly	T1	3	0.03	0.09	2.84
		T2	12	0.03	0.36	11.34
FEGP**	Monthly		6	0.03	0.18	5.67
AVDGS	Monthly		0	0.03	-	-
<b>Total Breaches</b>				<b>0.17</b>	<b>0.81</b>	<b>25.36</b>
<b>Max Penalty</b>					<b>0.21</b>	<b>6.62</b>

\*Security based on data from 1/5/18-30/4/19

\*\* based on current equipment

4.15 It is important that amendments are made to the SQMs proposed in the 2019 Draft Determination that represent fair targets, supported by stakeholders and provide the necessary allowances to support achieving the targets.

## 4.2 Security Queue Times

4.16 Dublin Airport requested that the Commission amend the existing security queue metric to ensure majority of passenger queued for less than 30 minutes while allowing for circumstances where the queue may be longer which can be due to deviations in forecasted passenger presentations or any unforeseen operational events.

- 4.17 The purpose of the Security function at Dublin Airport is to protect civil aviation against acts of unlawful interference, through ensuring compliance with specific EU Regulations.
- 4.18 Given the above, our priority is security screening but we acknowledge responsibility to provide a positive passenger experience and fundamental to this is security queue time.
- 4.19 In this regard our ACI Airport Service Quality scores for wait time at Security inspection has averaged 4.07 (out of 5) over the current control period, which reflects the views and satisfaction of our passengers. This has been achieved while also maintaining our standards and performance against the other key satisfaction for Security as outlined in the table below. This highlights that the proposed changes are unnecessary and disproportionate considering Dublin Airport's performance and passenger satisfaction relating to this measure.

**TABLE 4.2 ACI AIRPORT SERVICE QUALITY METRICS – SECURITY PERFORMANCE**

Customer Scores					
Airport Service Quality Metrics	2015 Avg.	2016 Avg.	2017 Avg.	2018 Avg.	Q1 2019
Feeling of being safe and secure	4.34	4.34	4.34	4.34	4.38
Courtesy and helpfulness of Security staff	4.21	4.23	4.23	4.22	4.18
Waiting time at Security inspection	4.04	4.13	4.12	3.99	4.06

- 4.20 It is important to note that Dublin Airport only received one response to our SQM consultation in late 2018, implying that users have no issues with the current measures. The only request received by the Commission on the security target was to decrease the percentage of queue times within the time limit.
- 4.21 The metric proposed in the 2019 Draft Determination is unachievable for Dublin Airport. To highlight the impact of this change, between the months of January to June 2019, there would have already been 8 breaches on this measure.
- 4.22 This would equate to a penalty of €1.9m<sup>30</sup> for the first 6 months of 2019 before we enter the busiest half of the year. The bonus is unachievable due to current infrastructure constraints at the Security checkpoints and would also require significant additional

<sup>30</sup>  $((4*0.005) + (4*0.01)) * 32,400,000$

resources above the allowance outlined by the Commission and so all financial penalties would stand.

- 4.23 If the proposed target of 97% in less than 25 minutes goes ahead, an additional lane is vital at peak times for Terminal 1 and Terminal 2. This would drive an incremental +€1.7M to baseline Security Staff costs and require capital investment of €1.2M.

**TABLE 4.2 FINANCIAL IMPACT OF ADDITIONAL LANE**

	FTE Requirement	Pay Cost
Terminal 1	19	€0.9M
Terminal 2	13	€0.6M
<b>Total</b>	<b>37</b>	<b>€1.5M</b>

**TABLE 4.3 CUMULATIVE IMPACT OF ADDITIONAL LANE (000's)**

2020	2021	2022	2023	2024	Total
€1,481	€1,508	€1,533	€1,550	€1,568	€7,641
	+1.9%	+1.7%	+1.1%	+1.1%	

- 4.24 In order to mitigate against the requirement for additional resources, the queue metric should be revised to 97% in 30 minutes and if the second target is to remain it needs to be amended to 70% in 20 minutes.
- 4.25 In addition, the following factors should also be taken into consideration which demonstrate why the new measure is not a sustainable target for Dublin Airport.

### **Regulatory Requirements**

- 4.26 The primary duty of security staff is to ensure regulatory standards are maintained and they prioritise rigour when processing passengers. Safety of passengers takes precedence over every other process in the airport and there are multiple EU regulations to ensure this.
- 4.27 The current regulatory determination period saw an increase in the regulatory requirements of the security process, such as the introduction of Explosive Trace Detection for both passenger and cabin bags in 2015. This resulted in a material change to operational processes at the Security Checkpoint and added additional checks and controls above previous requirements. Which has had an unavoidable increase on the time needed to complete the security process.



- 4.28 In addition, new policies introduced by airlines (e.g. Ryanair) have resulted in luggage coming through security that might have otherwise been checked-in.
- 4.29 These added complexities provide significant challenge in balancing the delivery of security and queue time performance, and it is Dublin Airport's view that the revised measure proposed by the Commission unduly weights the focus to queue time performance.

### **Capacity constraints**

- 4.30 Dublin Airport is suffering with restricted capacity across the airport, Central Search included. Although the Commission approved the capital investment projects that will allow for an increase in capacity, these projects are not due for completion until Q1 2022. It should also be noted that the lane requirements put forward as part of the security projects to alleviate capacity constraints were modelled on the current queue metric.
- The current checkpoint footprint in Terminal 1 is constrained, with sub optimal queueing space available to certain lanes due to infrastructure layouts which results in reduced throughput performance on these lanes.
  - Terminal 2 currently operates 'manual lane' technology which requires upgrading to an Automatic Tray Return System (ATRS) to increase processing capacity and efficiency. To facilitate this infrastructure the footprint of the current checkpoint needs to be expanded.
- 4.31 In the interim, we face the already existing capacity constraints and the added difficulty of relocation.
- 4.32 The extended peaks across both Summer and Winter seasons, where Central Search is required to significantly increase processing capacity and in instances where there are unexpected deviations from passenger presentation profile can cause increased volatility in queue times. In order to mitigate against this an additional lane would need to be staffed in both T1 and T2 Central Search to ensure there is capability to facilitate these challenging forecast deviations.
- 4.33 An analysis of the correlation of peak lane requirement and the effect on queue length indicates that when the peak lane demand period is sustained beyond 2hrs, the prolonged flow of passengers leads to an increase in queue times.
- 4.34 During these sustained periods of processing, congestion builds up at the back of the lane due to the time it takes passengers to repack their belongings within a constrained floor area, wait for their baggage to be searched and reunite with other members of their travelling group.

- 4.35 This congestion causes a time lag in the items being removed from the lanes in a timely manner which results in longer queue-times to the X-ray divest area.
- 4.36 This highlights the need for an additional lane in both Terminal 1 and Terminal 2 if we are expected to deliver on the revised target and maintain required levels of Security Compliance, whilst also taking account of the impact to passenger queue times during the busiest periods.
- 4.37 To eradicate the need for an additional lane during peak operations, the queue metric should be revised to 97% in 30 minutes and 70% in 20 minutes. This will make it possible for Dublin Airport to ensure delivery without the extra lane and the additional staff costs that come with this.

#### **Opex Constraints**

- 4.38 The proposed queue target needs to be considered in tandem with the opex forecast in Chapter 5 which are based on the current security queue measure.
- 4.39 In the regulatory proposition, Dublin Airport proposed security operating costs under the assumption that the target would be remaining as is, at 100% of queue times within 30 minutes.
- 4.40 The Commission has not only not allowed the operating costs needed to meet the current target, they have also cut Security's baseline costs in an environment with increasing regulatory requirements.
- 4.41 In addition to the above, there would be an increase in the maintenance costs of this proposed measure. The excessive increase in severity on the security queue measure creates a need for dedicated support to the Security system 24/7 to ensure the availability of infrastructure until the completion of CIP2020+ projects relating to Central Search and the footprint is delivered.
- 4.42 This results in a requirement of 6 additional Maintenance FTE's at a pay cost of €■■■■ p.a.

#### **Blip track system**

- 4.43 Altering the system to report different measures requires an initial analysis which incurs a cost to Dublin Airport, which again has not been allowed for. The new target increases

the complexity of the reporting of the queue times to security staff on a real time basis. This is a vital aspect of the system to ensure staff are aware if a breach is imminent.

- 4.44 In addition, the central search facility requirement has been tailored for the 95<sup>th</sup> percentile busy day. Thus, up to 30 days in the year could be busier in the day during which airport level of service may not be attainable during peak times.
- 4.45 Using the 95<sup>th</sup> percentile busy day is standard industry practice and was referenced throughout the CIP consultations to both internal and external stakeholders including the Commission.
- 4.46 It is also important to note that the Blip Track system is still relatively new technology and the accuracy of the processing rates cannot be 100% guaranteed at this time. Cutting queue times means Dublin Airport is even more vulnerable to possible inaccuracies.

#### **Conflicting measures**

- 4.47 The Commission proposed a new measure which conflicts with the new security queue target. While the maximum queue time is shorter, there is now a measure for PRMs for satisfaction of security staff.
- 4.48 The Commission's priority is on minimising queue times, however, PRM passengers measure of their Security experience is not solely focused on their wait time.
- 4.49 A PRM values an attentive and patient interaction with Security staff to allow for a seamless and stress free experience. In order to deliver this, Security staff cannot focus solely on processing time. As a result, this measure is in conflict with the queue target and without a separate, discounted lane for PRM's, it can have an impact on the overall performance of the queue times.
- 4.50 Security staff go through rigorous training with focus on compliance on the regulatory requirements that are in place to ensure safety of all passengers. However, by adding a separate measure for passenger satisfaction for PRMs we propose an allowance needs to be made for more customer service training.
- 4.51 The first PAG meeting discussed the need to train any staff who care for PRMs and assess staff awareness of the aged, visually impaired and passengers with sensory needs. This can only be improved through further training. These issues were reiterated in the third passenger advisory group meeting, further highlighting its importance.

4.52 Increased training hours need to be included in the Commission's opex allowance for security staff to allow for the added pressures being placed on them.

4.53 The table below demonstrates the additional capital and operating costs involved in implementing the new targets proposed by the Commission.

**TABLE 4.3 COSTS OF NEW SECURITY QUEUE TARGETS**

	<i>Capital Outlay €'m</i>	<i>Operating Cost €'m</i>	<i>Cumulative Cost 2020- 2024 €'m</i>
Capital cost of two additional lanes	1.2		1.2
Security Pay Costs		1.5	7.5
Asset Care Maintenance costs		0.36	1.8
Bliptrack costs		0.2	0.2
Training Costs		0.2	1.0
<b>Total</b>	<b>1.2</b>	<b>2.26</b>	<b>11.7</b>

### 4.3 Availability of Baggage Systems

4.54 The revised SQMs propose that all parts of the baggage system, and not just the belts, shall not be unavailable. Given that large portions of the BHS must be replaced and reconfigured to facilitate the construction and implementation of a new Standard 3 system, this will not be possible until such a time as the project has been completed.

4.55 To achieve the revised SQM, the only solution would be to construct a separate BHS while the existing BHS remains fully operational. This is not possible within the constraints of the existing terminal infrastructure.

4.56 Dublin Airport proposes that the current SQM is maintained, while infrastructure and equipment beyond the check-in is redeveloped. On successful completion of the BHS upgrade to Standard 3, the proposed SQM, could then be implemented taking the below comments into consideration.

4.57 Even when construction is complete, the proposal to change this measure to include the entire baggage system is arduous and burdensome. If there are belts out of service, there are often other belts available with no impact to either the passenger or the handler. However, this downtime would still be captured in the monthly operational time and bring the percentage down. At present, reporting quarterly allows for this time to be spread over a longer period and has little impact on the monthly operational time.

- 4.58 We propose that if this punitive target remains, an exemption should be made to allow Dublin Airport to resolve the issue without a penalty. i.e. “if an alternative arrivals delivery system is available with no impact to the processing of bags, this would not constitute a breach”.
- 4.59 In addition, the targets for these measures are extremely high and many factors need to be considered when looking at the possibility of actually attaining the target.
- 4.60 The Commission must consider the fact that it takes 1 hour just to open up the belt safely in order to find out what the issue is. There is an allowed downtime of just 3 hours in a month which would quickly get eaten up with just one outage that likely didn’t even prevent any stop to services due to alternatives available.
- 4.61 If we put pressure on the persons working on these situations to get the issue resolved within a very restricted time, we run the risk of increasing the risk profile, which in turn could increase staff numbers. With the already cut opex allowance from the Commission, this is not a feasible option.
- 4.62 The Commission has proposed that this measure now includes any infrastructure, equipment and software necessary to deliver arriving bags brought from the aircraft by the baggage handlers. This raises numerous problems when combined with the arduous target.
- 4.63 The number of assets that this now applies to makes the target unachievable, this could consider up to 10 assets in T1 alone, with carrousel and delivery lines. Not alone the number of assets but also the age of these assets, which increases the need for more contingency on possibility of failure.
- 4.64 As this SQM is now to be reported monthly, as opposed to quarterly, contingency time has been eradicated further.
- 4.65 There are various third party influences beyond the control of Dublin Airport. For example, IT infrastructure: SSK / BDK, CBP BIL’s, AOS, Airline DCS systems etc. The baggage hold system team are not able to measure or report on the performance of these third parties. We strongly support the existing exemption of “any fault or misuse or abuse or malicious actions caused by third parties results in downtime;”.

- 4.66 It can be difficult to determine the root cause of the problem as systems from both the airline and the airport are involved. There have been cases where it cannot be determined as to who/what caused the issue. In this instance, it would be unwarranted for Dublin Airport to receive a €1m fine (33m pax.). We request an exemption for this instance. i.e. "if a fault occurs, and the root cause cannot be confirmed as attributable to Dublin Airport, this will not constitute as a breach".
- 4.67 The Commission has halved the downtime available, reduced flexibility through increasing reporting to monthly, thus increasing potential number of fines and drastically increased the number of assets now included in the target.
- 4.68 The baggage SQM put forward in the 2019 Draft Determination is wholly unfeasible for Dublin Airport and it is vital the above points are carefully considered by the Commission.
- 4.69 Due to the added complexity of this measure and the number of assets now included in its monitoring there is a requirement for an additional FTE for the Asset Care SQMs. The Commission needs to include an opex implication of €55,000 p.a. in its opex forecasts.

#### 4.4 Availability of FEGP and AVDGS

- 4.70 FEGP and AVDGS are not customer facing, majority of passengers would not even know what these assets are and so to say it is in 'benefit of passengers' is an embellishment of the truth.
- 4.71 Many difficulties lie within the monitoring of FEGP and AVDGS, primarily with the targets the Commission have set. €0.03 per passenger is severe, in particular for a new measure and system that is bound to experience teething problems in the beginning, even after construction is complete.
- 4.72 The Commission states that Aeroport de Paris is one of the 3 other airports that monitor FEGP. ADP measure electromechanical equipment and took a progressive approach to their targets starting at 93.5% and increasing by 0.25% annually. As this will be a new monitoring system within Dublin Airport we propose the Commission uses the same progressive approach. This enables Dublin Airport to meet the targets while still ironing out the inevitable issues in the early stages of monitoring with this new system.
- 4.73 The Commission states that AVDGS is only monitored in one other airport, Heathrow. No stakeholders requested this additional measure.

- 4.74 The Commission has little evidence to support the need for this new measure with harsh penalties. Therefore, a target of 99% is unfairly high and based on a sample of 1. We propose the same approach as FEGP, starting in 2021 with a target of 93.5% and progressing over the years allowing for the inevitable glitches of a new system.
- 4.75 The Commission has included multiple exceptions to the target for availability of these systems. Our primary concern relates to damage to equipment that is outside the airport's control. For example, on June 10<sup>th</sup>, a catering vehicle made contact with the docking guidance mast on a stand, causing substantial damage to the unit and gantry. The stand required closure and a crane was required to remove the damaged guidance unit from the stand. Unfortunately, as activity levels continue to increase each year at the airport, the frequency of these incidents will increase. It would be grossly unfair to financially penalise the airport for damage caused by another party.
- 4.76 We strongly support the exemptions provided by the Commission and deem them essential to make passing this SQM a possibility for Dublin Airport.

#### 4.5 Availability of Lifts, Escalators and Travellators in T2

- 4.77 The Commission proposed to monitor this in Terminal 2 only as there is an automatic monitoring system already in place. This measure only being monitored in Terminal 2 highlights how unnecessary it is.
- 4.78 The Commission has provided no evidence as to why this measure is being introduced other than the fact it is customer facing. It is unwarranted to continuously add SQM's that have no basis or reasoning.
- 4.79 Dublin Airport does not have an operational system in place to accurately record the downtime for this equipment as a group and so this measure adds yet more administrative burden.
- 4.80 The Commission has based their target on Dublin Airport's annual scores on these measures. They have set the monthly target at 0.4% below our overall performance across the entire year.
- 4.81 Last year overall annual performance on this measure was above the monthly target by 0.4%. Monitoring this monthly eradicates any contingency that was allowed for in our internal KPIs. 99% is a difficult but achievable target on an annual basis but is unattainable as a monthly measure.

- 4.82 Like other measures, often when a piece of equipment is out of service we have an alternative available. With these numerous and aging assets, a certain number of failures are inevitable. Dublin Airport aims to minimise this number; however, the possibility of failure can never be eradicated completely.
- 4.83 Therefore, an integral part of providing a high quality of service is to quickly identify and rectify problems. When a piece of equipment fails, if an alternative is provided within a specified time, this should not constitute a breach.

#### 4.6 Wait Times for Assistance for PRMs

- 4.84 There are multiple factors that affect wait times for PRMs i.e. notification, equipment, resources, external factors, etc. In addition, Dublin Airport does not provide this service internally but outsources to OCS.
- 4.85 As a result, Dublin Airport does not have complete control over this service and so has limited impact on improving it if wait times exceed the target.

#### 4.7 Customer Satisfaction Monitor

##### **PRMs**

- 4.86 While we understand and agree that PRM feedback should be monitored, we do not see the need to isolate PRMs with a separate measure. It may be more useful to ensure that a valid and realistic sample of PRM passengers are represented in the surveys.
- 4.87 Dublin Airport supports the addition of the PRM specific measures; 8. Satisfaction with PRM Assistance & 17. Satisfaction with facilities for PRMs.

##### **Satisfaction with helpfulness of security staff**

- 4.88 At present, passenger satisfaction with Dublin Airport security is one of the highest in Europe. Based on ASQ results in 2018, there were only 4 airports who achieved a higher score than Dublin for "Courtesy & helpfulness of security staff". While our scores have exceeded the proposed target of 9.0 in recent quarters, this is a best in class score. Penalising this staff group for falling short of this on occasion is extremely onerous, particularly when falling short applies to a score as high as 8.9, still an excellent performance.
- 4.89 We believe setting the bar this high may exert additional and unfair pressure on this staff group who perform a vital and stressful role for the airport. In particular because this



groups number one priority is safety and compliance with regulatory requirements, to add this second highly punitive measure is unmerited.

- 4.90 Given the impact of unforeseen or unexpected external factors and the need to ensure adherence to rules/compliance as well as efficiency, we are concerned at the impact on staff morale if failures occur.
- 4.91 We are also conscious of the impact of any move of the security facility from its current location in Terminal 1 which will occur during the next regulatory period. While the end result will be an improved experience for passengers and a better environment for staff, there will undoubtedly be a period of disruption during which scores may come under pressure.
- 4.92 Reviewing previous results, we would have failed to meet the target in Q2 2016 and Q2 2018 and just achieved the target in Q3 2018 and Q4 2018 by a margin of 0.04 and 0.01 respectively.
- 4.93 Statistically, there is no difference between a score of 9.04 and 9.01 – it is possible on margin of error that we could have failed to meet the target in those quarters also, despite receiving an award on this measure in 2018. Breaching the Commission’s measure yet receiving an award on a global scale, showcases the fact that the Commission’s targets are unreasonably high.

#### **Satisfaction with Walking Distances**

- 4.94 Satisfaction with walking distance is currently monitored in the CSM to adapt future investment plans. However, this does not provide justification for an SQM with a harsh penalty. In the short term, Dublin Airport has a very limited range of options to mitigate the impact of a growing airport footprint.
- 4.95 Ensuring the journey is well signed, well lit, contains views to the outside or positive visual aspects can improve the experience but does not physically reduce the distance to be walked.
- 4.96 The availability of travellers and wheelchair or buggy access are also important but do not change the physical distance. Passengers may feel that the distance to be covered is simply longer than they would like and provide a low score but if pressed would acknowledge that this fact is an inconvenience and does not actually have a significant impact on their overall experience. We have seen evidence of this in our analysis which shows walking distance is not a key driver of satisfaction.

**Satisfaction with the ease of automated check In**

- 4.97 Passengers use automated check in within the footprint of their airline area and with the support of airline staff. How airlines choose to resource this facility and the protocols applied which dictate that a passenger may be unable to use the kiosk and must go to a desk are under the control and management of the airline. The airport does not control the substantive aspects of the check in experience and therefore should not have a target associated with it.
- 4.98 For reference - Ease of Automated Check In is only asked of passengers who have used SSK/Automatic check in machine or Internet/Web Check In. Based on Q118 and Q218 we would have failed to meet the proposed target for this measure.
- 4.99 There are two IATA IT standards for self-service check-in kiosks; CUSS and CUWS.
- 4.100 The Common Use Self Service standard (CUSS) means that an airline develops and certifies its own software application for self-service check in which can then be loaded onto either shared or airline specific kiosks. In that instance the UX (user experience) and UI (user interface) is entirely outside the control of the airport.
- 4.101 The Common Use Web Services (CUWS) standard means that an agent/software house develops a single software application which can communicate with several airline DCSs to provide self-service check-in on common kiosks at an airport. This operating model requires a web service integration between the common software application and each airline DCS. In this instance the airport and participating airlines will have influence over the common UX and UI. However, the airport does not have control over the integrity of the web service integration at the airline end.
- 4.102 Currently Dublin Airport provides self-service check-in kiosks in Terminal 1 and Terminal 2 west side which operate under the CUWS standard only. Our partners, Phase 5 and Collins Aerospace, develop and maintain the software and hardware. Our participating airlines provide web service access to their DCS and maintain those web services links.
- 4.103 After consultation with airlines currently located in the east end of the Terminal 2 check in hall, Dublin Airport lately purchased several check-in kiosks that can operate either the CUSS standard or the CUWS standard. The airlines in question have indicated their preference to use their own check in software on kiosks. Note, American Airlines currently also provide their own kiosk hardware and Aer Lingus also have a number of their own green kiosks throughout the airport campus.

4.104 Areas where Dublin Airport has no control over the passenger satisfaction with self-service check-in:

- Where an airline is using their own hardware (currently AA and some EI kiosks)
- Where an airline is using their own software application (presently CUSS in T2 east)
- Where an airline makes changes to their web service setup or changes to their DCS which will affect the web service integration to CUWS without giving prior notice and properly testing the integrations.

4.105 Therefore, it would be unfair to financially penalise Dublin Airport on this measure as it is not completely in our control.

#### 4.8 Proposed Measures without a price cap adjustment

4.106 The Commission has proposed to add 9 service quality measures without a price cap adjustment as these measures are partially or totally outside of the control of Dublin Airport.

4.107 Passengers will now be asked about their satisfaction with the e-gates in the immigration area, these gates are totally outside of the control of Dublin Airport as INIS controls this area. These gates are not always open and there are no specific times as to when they are closed. When staffing is low and there are large non-EU queues the e-gates often close. Although this does not impact on the price cap, the result of asking this question to passengers may have a negative effect on their view of their overall arrival journey, resulting in a negative answer for the remainder of the questions.

#### 4.9 Targets

4.108 As discussed, the targets set by the Commission are high and enormously penal. The financial penalties for the service quality measures proposed by the Commission are punitive with a possible €0.36 at risk per passenger per year and a highly likely penalty from year 1 of 0.21 per pax. per annum.

4.109 The total level of penalties represents 4.8% of the annual price cap, compared to 4.5% in the previous determination. Our service quality has improved, as demonstrated by the award Dublin Airport won in 2018. With this success, the Commission has taken the opportunity to increase possible punishment on service quality measures, without any justification as to why this has increased.

4.110 The below table demonstrates the total level of penalty Dublin Airport could face with the Commission's new measures and targets. The financial risk of these service quality measures is €64.2m cumulatively.

**TABLE 4.4 ANNUAL REVENUE AT RISK**

2020	2021	2022	2023	2024	Total
€12.1m	€12.5m	€12.9m	€13.2m	€13.7m	€64.2m

\* €0.36\*CARs pax numbers

4.111 If efficient targets and incentives were put in place the airport would not be financially penalised to such an extreme and could use this money to expand and improve its services further.

4.112 In order for Dublin Airport to be safeguarded from SQM failures and thus avoid the harsh penalties, we will need to perform better than our already award winning service quality performance, which surpasses our peers. There is no basis in regulatory principle for requiring Dublin Airport to consistently maintain such a high standard, well above the general performance of peer airports.

4.113 The targets set by the Commission for the customer service monitor are arbitrary. The difference between Dublin Airport's actual 2018 results and the proposed target varies for each measure, again highlighting the baseless deductions the Commission have made.

4.114 There is a lack of evidence as to how and why these targets were selected. An individual opinion on each measure is not sufficient explanation for setting a target as high as 9, especially when there is a financial penalty of €330,000 (33m pax) for attaining a score of 8.9.

#### 4.10 Bonus Scheme

4.115 The Commission has proposed a positive price cap adjustment, there are no rewards, but they offer to remove some punishments.

4.116 Any possibility to minimise the harsh fines at stake is welcomed by Dublin Airport. However, with the positive targets set at the proposed level, it appears to be an empty offering from the Commission.

4.117 The bonus scheme is a futile offering as the unachievable nature of these bonus targets eradicates their purpose. Aiming to achieve them is next to impossible and so not a worthwhile cause.

4.118 In particular with regards to the security queue metric. The Commission has proposed that the highest fine of the year is waived if 80% of queue times are less than 10 minutes every month of the year.

4.119 To achieve this for even one month would require a substantial opex increase and additional capacity which will not be completed until 2022. Thus, making it a fruitless task to even attempt to reach these targets.

4.120 In reference to the CSM bonus targets, the lowest is 8.7 and the highest is 9.8. These targets are unrealistically high, in particular that of 9.8

#### 4.11 Conclusion

4.121 Dublin Airport has shown a high quality of service over the last number of years which was proven when Dublin Airport was named one of the best airports in the world in a global ranking of passenger experience. Joint winner in its category of European Airports that have 25-40 million passengers per year in the Airports Council International (ACI) World Airport Service Quality (ASQ) Awards.

4.122 Dublin Airport has over the last determination period fully supported the Commission's requests for improving passenger engagement and in response we have strived to participate fully with the work and meetings of the newly created Passenger Advisory Group.

4.123 Therefore, we believe that the Commission has had no reason to increase the number of SQM measures, create harsher targets, and add complexities to the service quality regime.

4.124 Dublin Airport continuously strives to be best in class on all service quality measures, yet despite this the Commission is proposing to raise targets for the next regulatory determination period because of the achievements over 2015-2019.

4.125 This unjustified revamp of the service quality regime is intended to incentivise Dublin Airport to perform at the highest level possible. Alternatively, it acts as a reminder that regardless of the work put in, the Commission will implement more measures, higher penalties and harsher targets.

4.126 Dublin Airport specifically requests that the Commission re-consider the mechanics of the measure for monitoring the airport's queuing times for Central Search (security) in its Final 2019 Determination. We appreciate that the Commission is proposing to amend the current measure, however upon detailed review, we believe that the proposed amendments in the 2019 Draft Determination are unnecessarily complex, will require an increased level of administrative burden to support, will require a substantial increase in security staff costs and will drive an additional requirement for immediate infrastructure enhancements. We proposed an alternative adjustment, which would change the 100% target to 97% of security queue times within 30 minutes on the basis that this measure would provide a fair reflection of the service provided to the majority of passengers.

## 5. Operating Costs

### 5.1 Introduction

- 5.1 The 2019 Draft Determination sets out its proposed operating cost (opex) allowance for the next five-year period based on projections prepared by CEPA<sup>31</sup> and Taylor Airey on behalf of the Commission.
- 5.2 €215m of opex (average impact €43m p.a.) has been disallowed despite an ambitious €36m efficiency target set by Frontier Economics in our forecasts.
- 5.3 Financeability of €2bn capital programme and associated long-term debt requirements have been severely impacted (-4% FFO: Net Debt) due to scale of unremunerated opex over the forthcoming period amounting to approx. █████ per pax.
- 5.4 Total baseline reduction of █████ from 2020 gives no “glidepath” for Dublin Airport to achieve the Commission’s proposed opex targets and accounts for over 70% of the cumulative opex disallowed. This compares to just █████ baseline opex disallowed in 2015 under the 2014 Determination.
- 5.5 Flawed benchmarking gives rise to an average of █████ / █████ of which are mostly frontline roles disallowed (average impact █████ ) from the forecast jeopardising future jobs with no consideration by the Commission of the associated implications on staff, business operations, financial viability and █████ .
- 5.6 A 5% - 10% reduction to front-line unit costs (average impact €6m p.a) imposed on the basis that contractual legal pay agreements and recommendations imposed by the Labour Court should not have been paid to all staff over the current regulatory.
- 5.7 A lack of information and clarification requests from the Commission’s consultants CEPA, has resulted in clear forecasting errors in relation to staff on different contract terms resulting in lower unit prices (average impact €3.5m p.a). Additionally, CEPA has deemed a number of opex increases over the period as “unjustified” without sufficient analysis to support this conclusion.

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<sup>31</sup> In the remainder of this section, we refer to the two forecasts for simplicity as being prepared by CAR and Dublin Airport rather than CEPA (on behalf of the Commission) and Frontier Economics (on behalf of Dublin Airport).

- 5.8 Non-discretionary cost items such as Rates, Insurance, Utilities have all been under forecasted (average impact €5m p.a.) by CEPA resulting in significant differences in opex forecasts.
- 5.9 New SQM metrics / targets have been set by the Commission without consideration to opex implications and will result in immediate price cap penalties (approx. €0.21 per passenger p.a.) in the absence of investment and additional opex costs.
- 5.10 The below table summarises the Commission’s opex forecast for Dublin Airport for the period 2020 and 2024 in comparison to Dublin Airport’s own projections. Financial analysis and projections in this section have been prepared in February 2019 prices<sup>32</sup> and are based on our regulatory proposition passenger numbers (36m pax by 2024).

**TABLE 5.1 COMPARISON OF DRAFT DETERMINATION OPEX TARGET VERSUS DUBLIN AIRPORTS:**

	CAR		Dublin Airport		Difference		
	2020	2024	2020	2024	2020	2024	Cumulative

- 5.11 The remainder of this section summarises our view of the CEPA report and provides data and external information to support our opex forecast put forward in our regulatory proposition document which was shared with the Commission and CEPA earlier this year. In addition, an independent peer review of the CEPA/Taylor Airey operating cost assessment has been provided by Frontier Economics and can be found in Appendix 3.
- 5.12 Following this, we request that in making its final 2019 Determination, the Commission takes account of the evidence provided to support a revision to its operating cost allowance for the period 2020-2024 in order to remunerate Dublin Airport appropriately for opex levels expected over the next regulatory period 2020-2024.

<sup>32</sup> 100.5% February 2019 vs 2017 average.



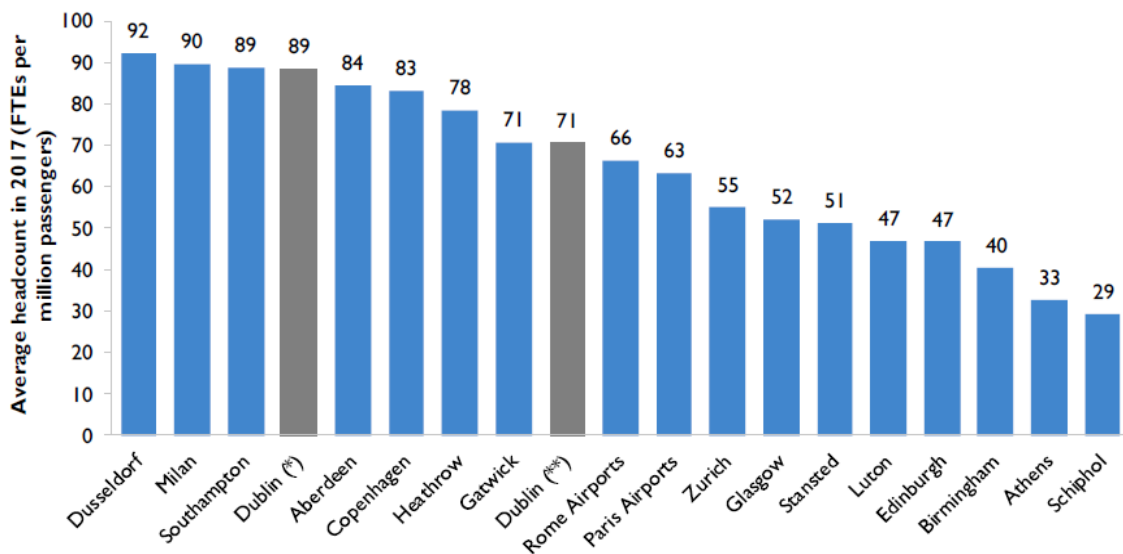
**5.2 Benchmarking**

5.13 The CEPA report provided the following benchmark of FTE per million passengers as an overall indicator of the relative efficiency of Dublin Airport relative to a number of selected airport comparators. CEPA relied on this benchmark as evidence in determining appropriate staffing levels at Dublin Airport.

5.14 It is apparent that there are differing levels of outsourcing at the various airports compared. This impacts the airports’ relative efficiency ranking in terms of average headcount per passengers, a fact which was acknowledged by CEPA. This is therefore an inappropriate benchmark for assessing relative airport efficiency and it should not have been used by CEPA as an indicator of efficiency levels at Dublin Airport.

**FIGURE 5.1 COMPARISON OF DRAFT DETERMINATION OPEX TARGET VERSUS DUBLIN AIRPORTS**

Figure 3.4: Average headcount per million passengers in 2017 (FTE per million passengers)



Source: Airport annual reports;

\* Dublin Airport including capitalised; \*\* Dublin Airport including capitalised but excluding retail operations and cleaning

Note: The data for some airports includes group-level headcount estimates, and as such includes employees not working directly on airport related activities. Additionally, airports having varying levels of outsourcing arrangements, which inevitably affects the estimates of average headcount.

5.15 Dublin Airport reviewed the comparator airports used and we set out below the areas that are we believe outsourced by those airports.

**TABLE 5.2 AIRPORTS AND OUTSOURCES ACTIVITIES**

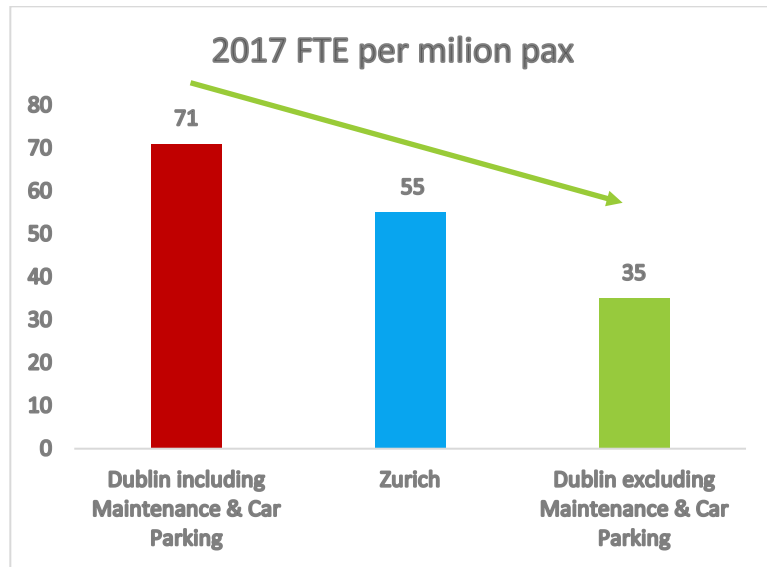
Benchmarking Airport	Outsourced
<b>Zurich Airport</b>	Security Retail Maintenance (partially outsourced)
<b>Gatwick Airport</b>	Maintenance Carparking
<b>Heathrow Airport</b>	Retail Carparking Maintenance (partially outsourced)
<b>Schiphol Airport</b>	Security Cleaning Maintenance
<b>Copenhagen Airport</b>	Retail
<b>Rome Airport</b>	Retail
<b>Paris Airport</b>	Security
<b>Milan Airport</b>	Retail Carparking Maintenance (partially outsourced)
<b>Athens Airport</b>	Security Cleaning Retail Maintenance

Source: Dublin Airport

5.16 Therefore, as an example we have adjusted our headcount for a like for like comparison for two of these airports. The tables below clearly show that the Dublin Airport FTE per million passenger reduces considerably and is substantially more competitive when the appropriate adjustments are made.

5.17 We understand that Zurich Airport outsources Security and Maintenance Operations. Therefore, adjusting Dublin Airport’s staffing level on a hypothetical basis to show a true like for like comparison demonstrates a more favourable comparison. Figure 5.2 below shows that Dublin Airport’s FTE per million passengers is actually 36% lower than that of Zurich Airport.

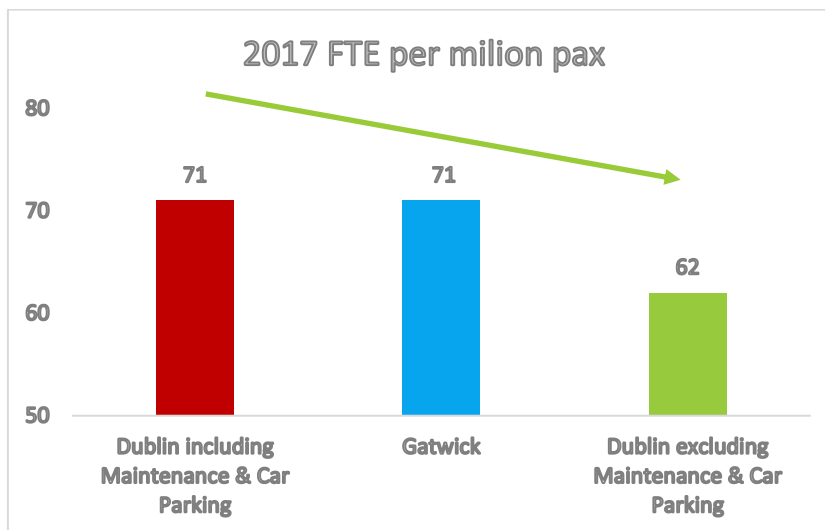
**FIGURE 5.2 DUBLIN AIRPORT REVISED VS ZURICH**



Source: Dublin Airport

5.18 Similarly, on a like for like basis, as shown in Figure 5.3, Dublin Airport’s FTEs/pax when adjusted for outsourcing compares more favourable where costs are 13% lower than that of Gatwick Airport.

**FIGURE 5.3 DUBLIN AIRPORT REVISED VS GATWICK**



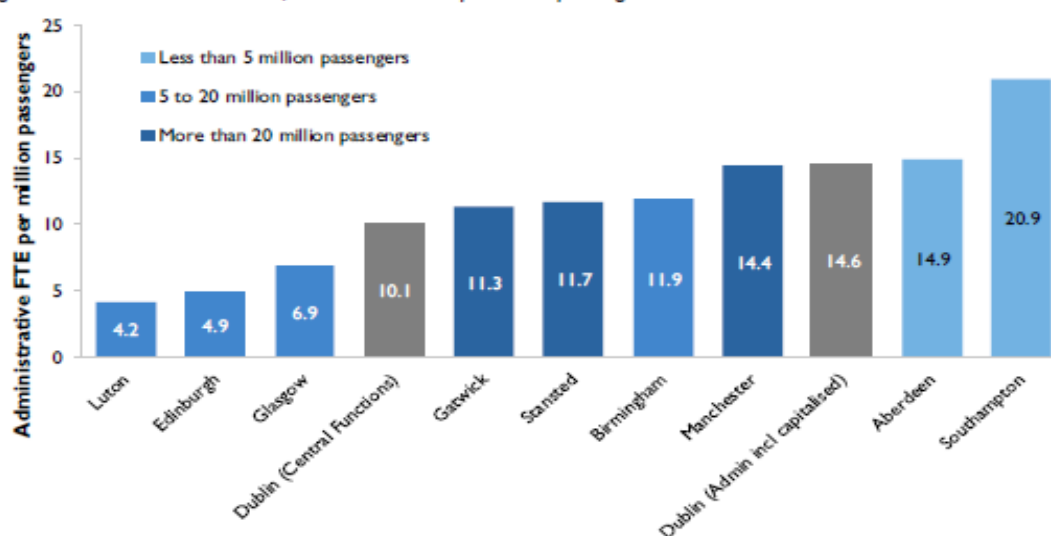
Source: Dublin Airport

5.19 While Dublin Airport only made these adjustments for the sample airports above, a further adjustment for the other comparator airports would likely to yield similar results.

5.20 In its assessment of Central Functions costs, CEPA used a similar benchmark looking at the number of administrative FTEs per million passengers across the comparator airports. There is no apparent adjustment for the level of outsourcing at each of these airports in this benchmark. Once again, the relative level of outsourcing can skew the findings of this partial productivity benchmark and therefore it should not be relied upon for assessing the relative efficiency of a cost category such as Central Functions.

#### FIGURE 5.4 BENCHMARK OF ADMINISTRATIVE FTEs PER MILLION PASSENGERS

Figure 4.23: Benchmark number of administrative FTE per million passengers, 2017



Source: Dublin Airport; CEPA analysis; airport annual accounts

5.21 The above examples demonstrate that partial productivity benchmarking should be used with caution given that most data sets need to be normalised in order to ensure that the data used is comparable and that it is capable of generating reliable results.

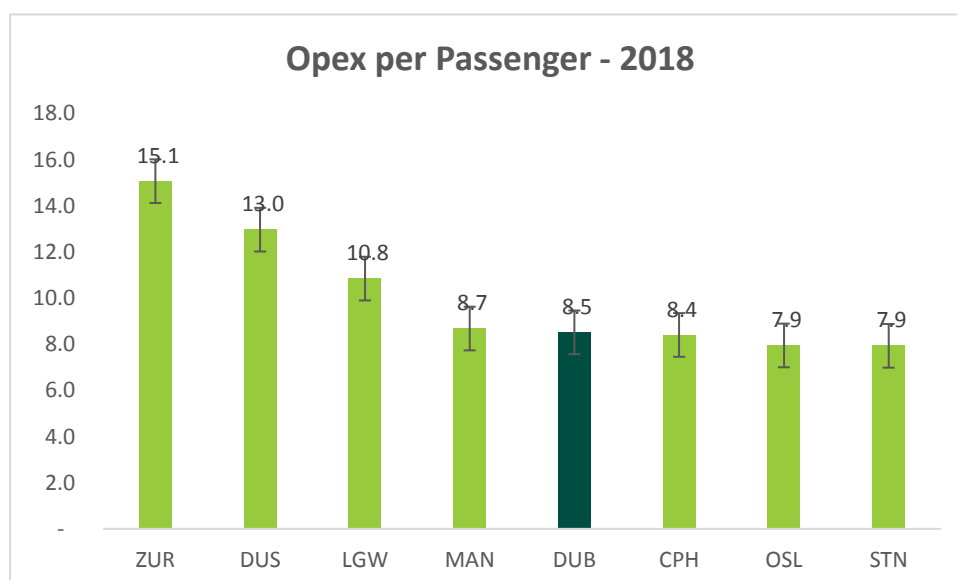
5.22 Given the level of uncertainty around levels of insourcing an outsourcing at the different airports, we believe that these benchmarks of FTEs per million passengers should never have been used by CEPA/Taylor Airey without proper adjustment.

5.23 It also should be noted that in its assessment of Retail opex, CEPA looked at basic benchmarking with Dufry operations stating our FTE per 100 sqm was behind that of comparator airports. We assessed this and found that this was another example of flawed benchmarking given that the metric used was also not reliable when viewed in isolation given the different dynamics at the comparator airports. For example, T1 has relatively smaller floor space than other airports, yet has high volume of transactions/customers driving the current staff levels. Full details of our assessment can be found in section 5.5.

5.24 Dublin Airport would suggest that a potentially more appropriate metric for comparing cost bases amongst airports would be the operating cost per passenger measure as this will not be skewed by the level of outsourcing /insourcing in the comparator airports. That said, judgement is still required to determine what the appropriate level of opex is, for example, some airport include 'Cost of Goods Sold' which relate to costs associated with Turnover and is not comparable with the Dublin Airport opex. Additionally, some airports may have one off 'Exceptional Items' which require adjustment as they can skew results in any given year.

5.25 Based on publicly available information, the opex per pax metrics of comparator airports selected by the Commission for 2018 shows that Dublin Airport is efficient in terms of operating costs per passenger with an opex per passenger of €8.51.

**FIGURE 5.5 2018 OPEX PER PASSENGER RESULTS**



Source: Dublin Airport/2018 Annual Reports

### 5.3 Payroll Costs

5.26 The disallowance of opex costs is heavily weighted towards payroll costs which accounts for €179m of the cumulative net variance and is the equivalent of the total payroll opex of running the airport for a year.

5.27 Staff levels across all areas but mainly front-line roles, have been deemed higher than required by the Commission/CEPA resulting in [REDACTED] staff being disallowed from baseline and this increases to [REDACTED]. The value of this is worth [REDACTED] over the regulatory period.

**TABLE 5.3 STAFF LEVELS DISALLOWED AND ASSOCIATED COST**

	2019	2020	2021	2022	2023	2024

5.28 Various volume differences arise due to the Commission/CEPA believing there has been an unjustified increase in staff levels from 2014 or 2017 (depending on the cost category) without any substantiated detail to defend their conclusion.

5.29 CEPA's report lacks robust analysis to support such a substantial reduction in staff levels. Additionally, for the Commission to believe that Dublin Airport could rectify such large-scale reductions in little or no time, without incurring significant costs is implausible.

5.30 A price variance of €75m accounts for the remainder of the payroll variance. This is attributed to lower unit costs for frontline areas with higher proportions of longer service staff, errors in the number of pre-2010 staff, different forecast assumption used by CEPA for different contract types, and no allowance for pension cost increases from 2020.

5.31 The table below sets out the annual price difference commencing at €12m and rising to €18m by 2024.

**TABLE 5.4 BREAKDOWN OF PRICE DIFFERENCE**

€'m	2020	2021	2022	2023	2024	Average Impact p.a.
Average unit cost difference	(4)	(4)	(4)	(4)	(4)	(4)
Pension rebase difference	(3)	(3)	(4)	(4)	(4)	(4)
Pre-2010 contract % difference	(4)	(5)	(5)	(5)	(5)	(5)
Forecasting variance	(2)	(3)	(3)	(4)	(5)	(3)
Other	(1)	(0)	(1)	(1)	(1)	(1)
<b>Total</b>	<b>(12)</b>	<b>(14)</b>	<b>(15)</b>	<b>(16)</b>	<b>(18)</b>	<b>(15)</b>

5.32 Additionally, we set out CEPA's pay forecast for pre and post 2010 contracts versus ours which suggests that Dublin Airport can enforce a two tier pay agreement with unions that has no precedent.

**TABLE 5.5 FORECASTED ANNUAL (REAL) PERCENTAGES**

	2020	2021	2022	2023	2024
<b>Pre-2010 Contracts</b>					
Dublin Airport	2.20%	1.50%	1.50%	1.50%	1.50%
CAR / CEPA	1.05%	0.75%	0.75%	0.75%	0.75%
<b>Post 2010 Contracts</b>					
Dublin Airport	2.30%	1.60%	1.60%	1.60%	1.60%
CEPA	2.10%	1.50%	1.50%	1.50%	1.50%

#### 5.4 Unit Costs

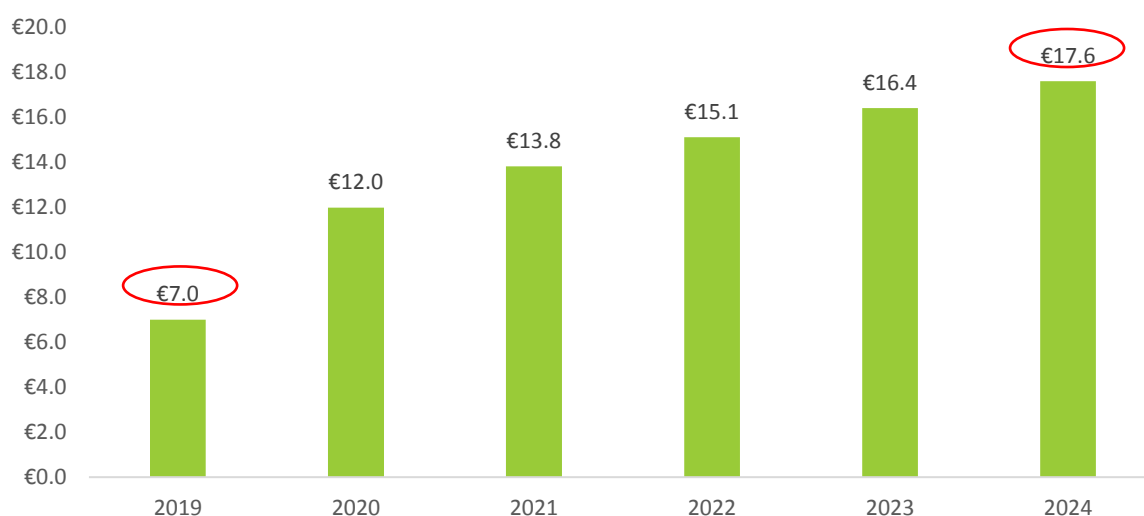
5.33 The CEPA report states *“we conclude that wage rises since 2015 have been inefficient. For certain roles, wage growth has exceeded growth seen elsewhere in the economy. We therefore reset 2019 salary levels to reflect our view on efficient wage growth between 2015 and 2019.”*

5.34 This methodology results in a cumulative unit price difference of €75m of which 80%, relates to the 2020-unit price reduction. This is split into three components:

- a) Lower unit pay rates for frontline areas dismissing recent pay claim awards from the Labour Court, resulting in an understatement of €6m p.a. of lower costs
- b) A blatant error in the number of staff on pre-2010 for four cost categories and represents 68% of staff employed on pre-2010 contracts. This results in an understatement of €4m p.a. of lower payroll costs and
- c) Higher pension costs which are linked to average unit costs which have been given no consideration by CEPA despite being highlighted in our report, resulting in a further understatement of €3m p.a. of lower costs

5.35 The baseline difference in 2019 grows from €12m in 2020 and to €18m by 2024 mainly due to:

- d) The assumption by CEPA that pre-2010 contracts will increase at only half the rate of post-2010 contracts; and
- e) Overstatement of the annual resignation/retirement assumptions i.e. rate of expected attrition for pre-2010 staff.

**FIGURE 5.6 ANNUAL PRICE VARIANCES****a) Frontline Unit Pay Rates**

5.36 The Commission has failed to take into account a number of critical factors. These include Labour Court pay awards, contractual commitments to restore Cost Recovery Programme pay reductions once profitability thresholds were reached and contractual pay increments. The origins of these pay increases relate back to the financial crisis experienced by the Irish economy<sup>33</sup>.

5.37 We have included the details of the Labour Court pay awards which have been implemented and the terms of the agreement which was reached between Dublin Airport and trade unions representing employees working at the airport in Appendix 4.

5.38 The table below shows that the Dublin Airport pay agreement was completely in line with similar other multi-year agreements made between similar companies and trade unions in Ireland at the time.

<sup>33</sup> In 2010, daa employees under the Cost Recovery Programme voted to accept pay cuts (averaging at 5.5%) until the company returned to profitability and an agreed set of return on equity metrics were achieved at Dublin Airport. These targets were met by Dublin Airport in 2015 and pay restoration was made to 1,300 employees in 2016 resulting in an average pay increase of 5% bringing wage levels for these employees back to the pre-2010 levels.



**FIGURE 5.7 DUBLIN AIRPORT UNION AGREEMENT 2017-2020**

Firm	Total Settlement	2017	2018	2019	2020
Daa	8.5% over 49 months	3% from 01/04/2017	2.75% from 01/04/2018	2.75% from 01/06/2019	Deal expires 31/07/2020
Aer Lingus	8.5% over 39 months	3% from 01/04/2017	2.75% from 01/05/2018	2.75% from 01/06/2019	Deal expires 30/06/2020
Bord Gais Energy	2.5% over 12 months		2.5% from 01/01/2018	Deal expires 31/12/2018	
Dublin Port	8% over 36 months	3% from 01/01/2017	2.5% from 01/01/2018	2.5% from 01/01/2019	Deal expires 31/12/2019
An Post	6% multi-year deal		1.5% from 01/05/2018		
Edenderry Power	7% over 39 months		2.25% from 01/01/2018	2.5% from 01/04/2019	2.25% from 01/04/2020
Eviva	5.67% over 27 months		2.5% from 01/01/2018	2.5% from 01/01/2019	0.67% from 01/01/2020
Lufthansa Technik	6% over 24 months		3% from 01/01/2018	3% from 01/01/2019	Deal expires 31/12/2019
Musgrave Retail	6% over 32 months	2.5% from 01/07/2017	2% from 01/07/2018	1.5% from 01/07/2019	Deal expires 29/02/2020
Tesco Ireland	2% over 12 months		2% from 01/04/2018	Deal expires 31/03/2019	

5.39 In addition, our pay agreements have been in line with comparable organisations in the transport sector – Aer Lingus, Ryanair, Dublin Bus, Irish Rail, Luas (Transdev). This supports the view that Dublin Airport has secured an appropriate and competitive pay agreements in the current challenging labour market environment.

5.40 In addition to general pay agreements, we are contractually bounded to pay increments and pay progression to staff in accordance with the terms of the employment contracts and union agreements. Any attempt by Dublin Airport not to pay these increments or to prevent pay progression would be seen as a unilateral change to terms of employment. Such a change would give rise to significant legal issues and inevitable industrial unrest. An independent expert view of the employment law constraints faced by Dublin Airport is attached and can be found in Appendix 5.

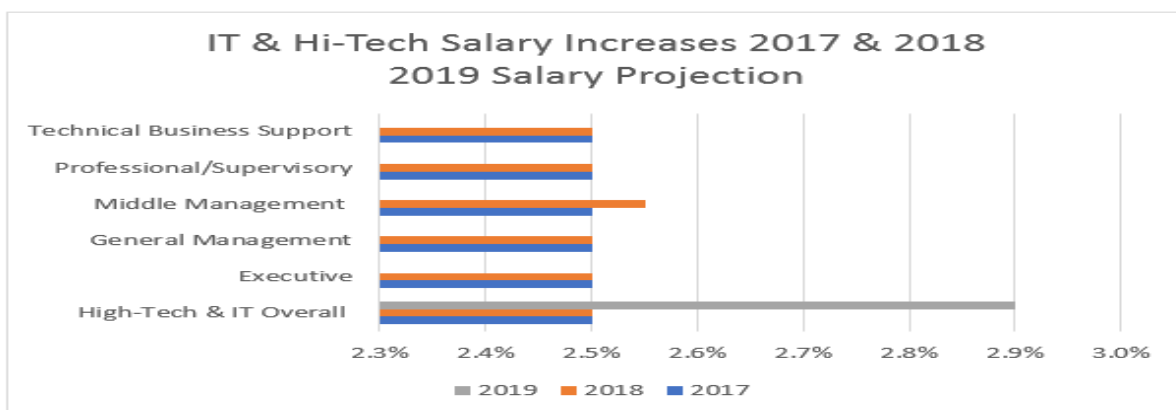
5.41 To meet the operational requirements for our customers, over 70% of Dublin Airport staff are required to work shift with start times before public transport availability. Commencing shift work at 3am, 24/7 is reflected in our pay rates, unlike certain other employers, this is estimated at an additional ████ premium.

5.42 When looking at market rates it is not appropriate to settle solely on the rates applied in the lowest cost segment of a business such as T2 as any market comparison would recognise a salary band typically running from 80% to 120% of the market rate. It would be expected that longer serving employees, such as those working in T1 with longer service, would be paid at the higher end of the band.

**IT Market Rates**

- 5.43 Increases in IT wages since 2017 have been dismissed by CEPA as their report states *“they find that from 2018, wage growth at Dublin Airport is forecast to exceed wage growth for IT workers across the Irish Economy”*.
- 5.44 This results in the baseline unit cost being 8% lower than our forecasts and results in a cumulative price difference over the determination period of approx. €3m.
- 5.45 It is well known that the IT industry is experiencing wage inflation greater than other sectors. Changes in the market rates were reported by WillisTowersWatson who identified a steady incline in salaries across the IT/High Tech sector during 2017 and 2018 and are projected to increase further in 2019. As outlined in the table below, salaries within the IT sector have increased on a cumulative basis by over 7% since 2017.

**FIGURE 5.8 IT SALARY INCREASES 2017-2019**



Source: WillisTowersWatson

- 5.46 Due to the shortage of available skills in the market, new hires were provided with additional payments which resulted in the base pay positioning above the median. Many companies did not have a formal process to manage this practice however on average, new hire salaries were paid in excess of 10% - 20% of the median salary.

**b) Assumptions for Pre-2010 Contracts**

- 5.47 The Commission has incorrectly calculated approx. 170 less staff on pre-2010 contracts when determining the 2019 average unit price for forecasting purposes.

- 5.48 CEPA states there has been ‘a natural attrition rate of 25% over the period 2013–2017’ which is factually incorrect and has nowhere been justified by CEPA in their report. The correct attrition rate is 10% over the period 2013 - 2019.
- 5.49 While the attrition rates in some categories are higher than others for pre-2010 contracts, staff move between categories as they take up new positions. Therefore, the overall attrition rate percentage is the correct reflection of total attrition for pre-2010 contracts.
- 5.50 The table below notes that Dublin Airport employed 1,137 staff on pre-2010 contracts in 2013. This declined to 1,023 staff by April 2019, a reduction in staff of 115 (10%) or an annual reduction of 2% per annum.
- 5.51 There are material errors in the percentage of staff on older contracts presented by CEPA when compared to the actual number of staff and the difference ranges between 5% and 15% for staff categories representing approx. 60% of the total pre-2010 staff population.

**TABLE 5.6 PRE-2010 CONTRACT ATTRITION BETWEEN 2013-2019**

Category	2019 Pre-2010			2019 Frontier		CEPA	
	2013	FTEs	% Change	FTEs	% of Total	2019	Difference
Airside	56	63	13%	100	63%		
Campus	211	198	-6%	295	67%		
Capital Projects	27	25	-5%	22	n/a		
Car Parks	16	15	-9%	35	41%		
Central Functions	148	126	-15%	349	36%		
<b>Facilities &amp; Cleaning</b>	<b>173</b>	<b>150</b>	<b>-13%</b>	<b>476</b>	<b>32%</b>	<b>27%</b>	<b>-5%</b>
IT	29	23	-21%	72	32%		
<b>Maintenance</b>	<b>122</b>	<b>107</b>	<b>-12%</b>	<b>244</b>	<b>44%</b>	<b>29%</b>	<b>-15%</b>
<b>Retail</b>	<b>104</b>	<b>76</b>	<b>-27%</b>	<b>359</b>	<b>21%</b>	<b>9%</b>	<b>-12%</b>
<b>Security</b>	<b>252</b>	<b>239</b>	<b>-5%</b>	<b>810</b>	<b>30%</b>	<b>23%</b>	<b>-6%</b>
<b>Total</b>	<b>1,137</b>	<b>1,023</b>	<b>-10%</b>	<b>2,762</b>	<b>37%</b>		

\*Reflects staff not capitalised to capital projects

- 5.52 The actual rates of attrition for resignations and retirements over the period 2017–2019 was between 0.7% and 1.5%. The three-year average attrition rate amounted to 0.9%.

**TABLE 5.7 PRE-2010 EMPLOYEE ATTRITION RATES 2017-2019**

	2017	Total FTE	% of Total	2018	Total FTE	% of Total	YTD 2019	Total FTE	% of Total	Avg
Resignations	6	1,037	0.6%	4	1,030	0.4%	2	1,023	0.2%	<b>0.4%</b>
Retirements	1	1,037	0.1%	3	1,030	0.3%	13	1,023	1.3%	<b>0.6%</b>
<b>Total Attrition</b>	<b>7</b>	<b>1,037</b>	<b>0.7%</b>	<b>7</b>	<b>1,030</b>	<b>0.7%</b>	<b>15</b>	<b>1,023</b>	<b>1.5%</b>	<b>0.9%</b>

5.53 The level of pre-2010 contracts presented by CEPA for 2019 was understated by 17% resulting in a lower payroll allowance of €3.4m p.a. in 2020 or €17.1m over the period 2020-2024. This mis-representation should be corrected by the Commission.

**TABLE 5.8 UNIT COSTS ADJUSTED FOR ATTRITION RATES**

	CEPA Weighted Average	Revised Weighted Average	Difference	CEPA 2020 FTEs	2020 Payroll Difference €'000	CEPA Pre-2010 assumption	daa Pre-2010 assumption

5.54 The historical attrition rates used by CEPA formed the basis for the attrition rates ranging between 2.5% and 6% by category for the period 2020-2024. The table below reflects the actual number of retirements projected to take place up to the end of 2024 for all pre-2010 contracts. This amounts to 145 staff and results in a residual of 866 staff on pre-2010 contracts being in employment at the end of 2024 with some of the pre-2010 contracts not expected to end naturally (by retirement) until 2053.

**TABLE 5.9 PRE-2010 CONTRACT RETIREMENT EXPECTATIONS**

	2020	2021	2022	2023	2024
Retirements (all categories)	8	20	31	43	43
Staff (all pre-2010 contracts)	1,003	983	952	909	866
<b>% of Retirements</b>	<b>0.8%</b>	<b>2.0%</b>	<b>3.3%</b>	<b>4.7%</b>	<b>5.0%</b>
<b>2020 - 2024 Average</b>					<b>3.2%</b>

5.55 Looking specifically at the cost categories identified by CEPA, the table below quantifies the difference between the number of pre-2010 contracts forecast by CEPA compared with our forecast. This amounts to an overstatement by CEPA of █████ staff ( █████). The actual retirement dates by staff member is the only credible way to complete this analysis accurately.

**TABLE 5.10 2024 ESTIMATED PRE-2010 CONTRACTS VS CAR**

Category	2019 Pre-2010 FTEs	Forecast Retirement by 2024	Forecast Natural Attrition 0.4%	Dublin Airport 2024 Pre-2010 FTEs	CAR 2024 Total FTEs	Pre-2010 Contracts FTEs	Delta FTEs
Facilities & Cleaning	150	(33)	(4)	114	454	51	(63)
Maintenance	107	(11)	(3)	94	230	10	(84)
Retail	76	(10)	(2)	64	279	0	(64)
Security	239	(33)	(6)	201	802	74	(127)
<b>Total</b>	<b>573</b>	<b>(87)</b>	<b>(14)</b>	<b>473</b>		<b>135</b>	<b>(338)</b>

5.56 As highlighted, the average annual attrition percentage for pre-2010 contracts retirements will be on average 3.2% based on actual age profiles and 0.4% for resignations based on the three-year average (2017-2019). This results in an annual expected attrition rate of 3.6% p.a.

5.57 CEPA has presented the below attrition rates set out below and these clearly overstate level year on year. This underestimation amounts to a payroll disallowance of €0.5m in 2020 rising to €2m p.a. by 2024 and should be corrected by the Commission.

**TABLE 5.11 FORECAST ATTRITION ASSUMPTIONS**

CAR Attrition Assumptions	2020	2021	2022	2023	2024
Maintenance	-5.2%	-5.0%	-4.9%	-4.9%	-4.9%
Facilities and Cleaning	-3.2%	-3.2%	-3.2%	-3.1%	-3.1%
Retail	-6.0%	-2.9%	0.0%	0.0%	0.0%
Security	-3.2%	-2.5%	-2.8%	-2.7%	-3.1%
Campus facilities staff	-3.2%	-3.2%	-3.2%	-3.1%	-3.1%
Car park operations staff	-3.2%	-3.2%	-3.2%	-3.1%	-3.1%

### c) Pension Costs

5.58 In 2015 Dublin Airport implemented a new pension contribution scheme and introduced a freeze to pensionable salary levels. At that time, the company set employee and

employer contributions to the scheme based on 2015 salary levels and froze any salary changes until 2020.

- 5.59 Due to the various labour court agreements and contractual pay changes implemented over the period and the change in the labour market in general, the reset of the pensionable salaries will increase pension costs from 2020. We include the cost of this into our 2020 – 2024 forecast and this was highlighted in the Frontier Economics report.
- 5.60 From 2020, the forecasted cost of pensions should reach actual salary levels and the period of ‘freeze’ ends.
- 5.61 CEPA has incorrectly disregarded this contractual change in our cost base and have failed to include in their forecast. The resulting understatement amounts to €18m over the regulatory period and is summarised in the table below. This underestimation should be corrected by the Commission.

**TABLE 5.12 PENSION REBASE IMPACT**

€'m	2020	2021	2022	2023	2024	Average
<b>Pension</b>	3.2	3.4	3.6	3.9	4.1	3.2

**d) 2020 – 2024 Forecasting Assumptions**

- 5.62 CEPA forecasted a two-tier wage inflation profile for pre and post 2010 contracts and have not put forward any evidence which would demonstrate how such a pay award model has worked in other organisations. Indeed, we are not aware of any precedent whereby any Labour Court recommendation segregated employees into two groupings for the purpose of pay agreements. It would inevitably lead to serious likelihood of strike action and trade union unrest.
- 5.63 The Commission /CEPA have not specifically considered increments and pay progression which are contractually applicable to front-line employees that meet required performance targets year on year and have additional years’ service. Frontier Economics had forecast increments/pay progression separate to general pay.
- 5.64 As set out below, the forecast by the Commission/CEPA is underestimated by €2m in 2020 rising to €5m by 2024 and we request that the Commission adjusts for this oversight by CEPA.

**TABLE 5.13 FORECASTING ASSUMPTIONS**

	2020	2021	2022	2023	2024
<b>Dublin Airport / Frontier</b>					
Pre-2010 Contracts					
Increments	0.90%	0.90%	0.90%	0.90%	0.90%
General Uplift	1.30%	0.60%	0.60%	0.60%	0.60%
<b>Total</b>	<b>2.20%</b>	<b>1.50%</b>	<b>1.50%</b>	<b>1.50%</b>	<b>1.50%</b>
<b>CAR / CEPA</b>	<b>1.05%</b>	<b>0.75%</b>	<b>0.75%</b>	<b>0.75%</b>	<b>0.75%</b>
Post 2010 Contracts					
Pay Progression	1.00%	1.00%	1.00%	1.00%	1.00%
General Uplift	1.30%	0.60%	0.60%	0.60%	0.60%
<b>Total</b>	<b>2.30%</b>	<b>1.60%</b>	<b>1.60%</b>	<b>1.60%</b>	<b>1.60%</b>
<b>CAR/CEPA</b>	<b>2.10%</b>	<b>1.50%</b>	<b>1.50%</b>	<b>1.50%</b>	<b>1.50%</b>
<b>Value of Difference</b>	<b>€2.0m</b>	<b>€2.6m</b>	<b>€3.3m</b>	<b>€4.0m</b>	<b>€4.7m</b>

**5.5 Staff Levels**

5.65 The staff levels prescribed by the Commission/CEPA result in lower staff in 2020 rising to staff reductions by 2024. This results in a volume disallowance/difference of in 2020 rising to by 2024, the cumulative impact, .

**TABLE 5.14 FTES BY AREA CAR V DUBLIN AIRPORT**

Category	CEPA		Dublin Airport		Difference		
	2020	2024	2020	2024	2020	2024	Average
[Redacted Content]							

5.66 The Commission/CEPA’s staffing reduction targets are front-loaded over the period 2020-2024 as noted below

- [REDACTED] from 2020;
- A [REDACTED], [REDACTED] by the beginning of 2021;
- A further [REDACTED] by the beginning of 2022;
- A further [REDACTED] by the beginning of 2023; and
- A further [REDACTED] by the beginning of 2024.

5.67 The staffing reductions proposed are focused primarily in the areas of staff engaged in front line activity - 68%.

#### 1. Central Functions (Average reduction 79 staff p.a.)

5.68 Commercial (14 FTEs) – we dispute CEPA’s revenue per FTE metric as being important for determining staff levels. Increases in Commercial revenues driven by passengers do not always drive additional staff, however increases outside of traffic revenue growth clearly require staff investment to generate revenues. While we acknowledge the revenue per FTE metric has declined, this is due to the FTE base being so small (24 in 2014) that a doubling of FTEs of course would exceed revenue growth. The increase in commercial staff accounted for less than [REDACTED] in payroll costs as compared to over [REDACTED] in revenue. Thus, financial performance justifies the staff investment. Indeed, the Commission have included commercial revenue of [REDACTED] in its projections which would not have been achievable were it not for the additional investment in staff. The Commission has made no allowance for the additional front-line roles [REDACTED] to operate Platinum Services

[REDACTED]

5.69 Transfer Hosts (14 FTEs) – We disagree with CEPA’s assumption to disallow the Transfer hosts. The number of transfer passengers has increased by 145% since 2014. The transfer market is increasingly competitive around Europe and requires strong marketing and customer support to both airlines and passengers. This function has helped to support a significant increase in passenger charges and non-aeronautical revenues. Bussing of passenger requires additional staffing and has been supported by our transatlantic customers to ensure a smooth transfer journey and is critical to the passenger. The Transfer hosts also carry out board card checks in the Transfer facility to ensure that only those with legitimate reasons to travel re-enter the departures area. In the absence of this service, transfer passengers will experience a longer transfer process putting flight connections and this business at risk as transfer passengers support the operation of a number of transatlantic routes.



5.70 HR (16 FTEs) – 9 FTEs disallowed relate to Graduates who are usually dispersed around the organisation however a decision was made to hold centrally for 2019. We recruit an annual intake of graduates who are paid a lower rate than average salary for this category and contribute significantly to the business building talent and taking on more senior roles after a two-year period. Additionally, CEPA has disallowed additional Business Partner requirements to deal with our growing workforce and associated HR activity that comes with having additional staff.

## **2. Retail (Average reduction 73 staff p.a.)**

5.71 CEPA carried out basic benchmarking with Dufry operations stating our FTE per 100 sqm was behind and therefore imposed a 37% reduction in T1 staff levels by 2024. Dufry operations spread around the world are not necessary a good proxy for a single airport in Europe.

5.72 We have assessed this and found the metric used is not reliable when viewed in isolation given the different dynamics at airports. For example, T1 has relatively smaller floor space than other airports, yet has high volume of transactions/customers driving the current staff levels.

5.73 It is unrealistic to assume that such a reduction in staff (52 / 37% of T1 staff) would not have a hugely detrimental impact on the sales and customer service in T1.

5.74 Direct retail revenue has increased by █████ (2018 vs 2014) +80% with gross margin increasing by +6% since 2014 and EBITDA margin increasing by 10% over the same period demonstrating strong financial returns and improvements in financial metrics over the period notwithstanding staff/pay cost increases.

5.75 Dufry had on average 6.7 FTE staff per 100 square metres of retail space, compared with Terminal 1 and 2 at Dublin Airport, which in 2017, stood at 10.7 and 6.9 FTE respectively. There are 4 common metrics which should be used to measure staff productivity, these are FTE per 100 sqm, transactions per FTE, average sales per FTE and Passengers per FTE.

5.76 The assertion that T1 (and to a lesser extent T2) is inefficient based on a comparison with T2 and Dufry is flawed as it is primarily based on a single measure of FTEs per 100 sqm (rather than taking into account, transactions per FTE, average sales per FTE and Passengers per FTE). The below stats demonstrate that T1 and T2 are highly efficient against Dufry when taking into account different airport dynamics and viewing sales per SQM and Sales/Transactions per FTE.

**TABLE 5.15 RETAIL BENCHMARKING**

	T1	T2	Dufry
<b>FTE per 100 SQM</b>	10.9	6.6	6.7
<b>Sales per SQM</b>	€47,534	€31,894	€23,841
<b>Sales per FTE</b>	€445,436	€462,476	€356,764
<b>Transactions per FTE</b>	13,672	11,907	Not available
<b>Pax per FTE</b>	66,179	53,344	Not available

### 3. Security (Average reduction 60 staff p.a.)

5.77 CEPA incorrectly assessed Security rosters based on incorrect assumptions around passenger presentation profiles and staff demand requirements.

5.78 When the actual presentation profile<sup>34</sup> is applied, and the correct demand requirements are used, the level of 'over-coverage' reduces by 10% and 19% for T1 and T2 respectively. The actual over-coverage provided by Security rosters across Terminal 1 and Terminal 2 for both the Summer and Winter seasons has been optimised to minimise over-coverage with the maximum levels no higher than 16% which for an operation with high volatility in demand would be deemed to be very efficient. This is set out in detail in the payroll supporting evidence section and it requires an additional 29 FTEs.

5.79 The requirement to increase the number of supervisors within Security Operations to ensure security regulation compliance and mitigate against deficiencies, along with the need to manage additional operational requirements was outlined to CEPA. These resources are key in ensuring positive outcomes are obtained from both National and EU Security Audits and therefore safeguard the reputation of our airport business. This resulted in the requirement to increase Supervisors across T1 and T2 Central Search by 12 FTE.

5.80 Additionally, CEPA disallowed 7 Training staff despite Dublin Airport flagging numerous times in documents and meetings that security training requirement have changed.

5.81 With effect from the 1 December 2017, only an Approved Aviation Security Training Organisation (ASTO) can deliver aviation security training. Training can only be delivered by certified instructors. This regulatory change meant that the Dublin Airport ASTO is responsible for all security training within Dublin Airport, including any security training for third party operators at Dublin Airport.

<sup>34</sup> This is a profile of when passengers are expected to present themselves for Security screening relative to the departure time of their flight.

5.82 The introduction of Screener Certification which requires all screeners to attend training and be examined in seven different modules and obtain a pass to be certified to conduct their duties has significantly increased demand on the Security Training Department. Screeners must also resit certification modules in a 3- and 5-year timeframe and obtain a pass to maintain certification compliance. This requires over 5,000 modules to be trained, examined and corrected by the Security Training Department on a recurring basis, which has significantly increased the demand on the unit since 2017.

5.83 In order to meet these increased regulatory training demands and to deliver a flexible training solution that meets the needs of the business an additional 7FTE is required.

#### **4. Facilities & Cleaning (Average reduction 40 staff p.a.)**

5.84 CEPA suggested investments in airport signage should reduce the requirement for facilities staff. This is going on the assumption that human interaction can be readily replaced by signage. A recent survey found that *“59% of European travellers and 62% of US travellers agree that companies should prioritise employing humans over robots/automated services even if it means they have to charge higher prices”<sup>35</sup>.*

5.85 In addition, CEPA also incorporated a reduction in the number of Control Centre staff in the cost baseline as they suggested that a rationalisation of the airport control centres would reduce the staffing requirement.

5.86 Customer Services staff have increased strongly due to decision to focus on quality of service and the need to handle very high passenger peaks in a constraint Infrastructure environment. Were we to attempt to manage our facilities and cleaning operations with 40 less staff, the impact will be a deterioration in SQMs and facilities for passengers, capacity issues, longer immigration and check-in queues and overall customer dissatisfaction.

5.87 Dublin Airport are required to employ terminal facility staff to manage the safe flow of passengers through the terminals. In 2017, there were 45 days (12% of the year) where passenger numbers exceeded 100,000 in the day representing 96% of a typical busy day. It is estimated that in 2019 there will be 132 days (36% of the year) where passenger numbers will exceed 100,000 in the day representing 87% of a typical busy day and 84% of the absolute peak busy day.

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<sup>35</sup> Foresight Factory- Base 605-3232 online respondents per country aged 16-64 - Indonesia 16-54, July 2018

- 5.88 New infrastructure over the period 2015 - 2019 has required additional investment in staff. In 2017, the South Gates were introduced driving a requirement of up to 10 staff when fully operational. Additionally, the increasing complexity of passenger processes has driven an increase in facility staff. Examples include the T2 check-in process, US CBP facility and swing gate operations.
- 5.89 Dublin Airport have received an increasing number of requests from 3<sup>rd</sup> party airport operators (e.g. INIS/Customs) and airlines to resource key areas/posts in the terminals. New technology was introduced by INIS and at request of the state body we agreed to facilitate the new E-gates to improve customer flow and experience at peak times. These services will cease should the Commission not allow the appropriate staff levels for this area (i.e. direct bussing from South Gates, use of E-gates) and airlines will then have to take on and fund such tasks.

## **5. Maintenance (Average reduction 24 staff p.a.)**

- 5.90 CEPA's staff forecast was determined by defining staff as passenger and non-passenger driven. We disagree with how CEPA has categorised various areas.
- 5.91 CEPA assigned the Engineering Services Team (EST) to the non-passenger driven category which results in 7 fewer staff in the baseline numbers. EST supports terminal 1, airfield, campus security, utilities and associated passenger sensitive equipment including lifts and escalators.
- 5.92 Additionally, CEPA did not consider the introduction of a 24/7 roster to facilitate the increasing number of movements on the airfield during daytime which led to a significant portion of our planned maintenance being completed outside normal working hours, limiting daily resource availability to meet business needs and increasing operational risks. This requires an additional 10 staff.
- 5.93 During the period the maintenance staff have been supporting an increasing number of assets, infrastructure, night time maintenance and escorting. ATRS has significantly increased passengers per maintenance FTE at T1. The increase in FTEs has also been driven by the extra infrastructure at the airport. The new CPRSA road and new South Gates, Pier 1 Extension and Pier 2 Segregation
- 5.94 CEPA did not allow any elasticity for the maintenance management and admin business units. There are 5 new system/asset manager positions allocated to Maintenance Management which should be classified as front line as they directly manage the operational performance and availability of passenger facing assets such as Fleet, Security

Equipment, Civil Structural and Building Architecture. These roles support the Asset Management practices at Dublin Airport for which an ISO 55001 accreditation was received in 2015.

5.95 Detailed information is provided in the payroll and non-payroll evidence section to further substantiate staff levels and requirements in the various areas. We request that the Commission corrects for this mis-categorisation and consequential staff understatement.

## **6. Airside (Average reduction 17 staff p.a.)**

5.96 A total of 14 FTEs have been disallowed from the baseline forecasting as CEPA stated there was evidence of inefficiency given that the number of staff employed in airside operations had grown at a greater rate than the increase in airline flight movements at the airport.

5.97 This does not address the key issue at Dublin airport that airside operations have seen a large increase in movements within a constrained and ageing airside environment. It also fails to acknowledge that there is now an increasingly congested airfield and taxiway at Dublin Airport.

5.98 We reject this suggestion on the following basis and should appropriate staffing levels not be provided; these areas will be adversely impacted:

- NEASA Safety Regulations (EU)139/2014- EASA ADR demands a mandatory level of safety inspections and apron management.
- Stand demand pressure has increased due to the increase number of aircraft movements. The share of ATMs at remote stands has increased from 12% in 2013 to 17% in 2018. Each ATM at a remote stand requires extra staff for bussing and gate activity
- 14,000 airport staff have airside access with an average of 3,500 staff operating airside each day. Over 3,100 individual pieces of Ground Handling GSE (Ground Service Equipment) operate daily, averaging 9,600 unique GSE movements per day.
- The increase in aircraft size operating at the airport creates challenges for daily operations, given that larger aircraft can have twice as much ground handling requirements and tight apron management of equipment by ground handlers is a prerequisite requirement for safe operations.
- Increase in airfield construction and maintenance has also led to a requirement for more detailed and co-ordinated planning with stakeholders. Increased

patrols are required to safeguard day - to - day operations. Total escorts have increased from 309 in 2016 to over 2,500 in 2018.

- The complexity, and costs implications of this are becoming apparent. For instance, as a consequence, total safety reports have increased from 203 in 2014 to around 400 in 2018 with 100 cautions issued and 400 impoundments issued in that period.

5.99 If the Commission/CEPA fails to correct staff levels resulting in a reduction of ■■■ staff p.a. / ■■■ of 2024 total staff levels, there will be severe consequences for Dublin Airport and its customers (airlines and passengers) as a result. This is contrary to the Commission's new SQM measures proposed for introduction and stringent targets which will inevitably put pressure on operating costs in order to achieve high SQM targets.

5.100 The Commission and CEPA state they provide a "glidepath" and give Dublin Airport "sufficient time to meet an efficient level of opex". We do not agree that a ■■■ staff reduction by 2020, six months from now, provides any such glidepath or time to achieve the target set by the Commission .

5.101 Fundamentally we do not believe the Commission/CEPA have carried out robust analysis to defend the staff reductions proposed thus, we have provided evidence to support staff increases over the regulatory period in order for the Commission to ensure appropriate levels of opex are remunerated.

## 5.7 Nonpay Opex

5.102 Nonpay opex accounts for 35% of the operating cost base. The Commission/CEPA have disallowed €77m of which 35% relates to non-discretionary expenditure e.g. Rates, Insurance, Utilities.

5.103 Nonpay costs are expected to grow (in real terms) from €104m in 2018 to ■■■ in 2020 and ■■■ by 2024 ■■■ The majority of the increase in costs are due to new incremental cost items such as Rates, Noise, CBP officers, Bussing and Hold Baggage Screening and are not directly correlated to passengers in a given year.

5.104 The below table summarises the differences in forecasted opex by category.

**TABLE 5.16 NONPAY COST FORECAST DUBLIN AIRPORT**

€'m	CAR		Dublin Airport		Difference		Cumulative 2020-2024
	2020	2024	2020	2024	2020	2024	

*Note – Frontier incorrectly left PRM costs flat over the period 2020 – 2024 which gives rise to a positive difference in table above.*

5.105 The Non-pay supporting evidence section provides the detailed rationale and supporting evidence in respect of the cost increases experienced over the regulatory period for the Commission to consider.

**1. Maintenance (€18m Understatement):**

5.106 The Commission/CEPA concluded that Dublin Airport Maintenance costs per pax fared well against other European Airports ranking 4th lowest maintenance expenditure out of 12 airports. We also compared well on maintenance cost per sqm coming in lower than Heathrow and Gatwick. CEPA concluded that no inefficiency existed therefore it did not apply an efficiency adjustment; however, a €18m disallowance against our forecast arises. This should be corrected by the Commission.

5.107 The Commission/CEPA have allowed no increase for outsourced costs. This is not consistent with current market trends where under the Sectorial Employment Orders, Electrical and Mechanical Trades have agreed to annual increases of 2.7% per annum from 2019 to 2021. Similarly, the Construction Price Index published by the Society of Chartered Surveyors Ireland indicates a 7.6% increase in construction tender prices for 2018. These will impact both costs associated with external contractor engagement i.e. framework and specialist contractors and place increased pressure on internal staff rates of pay, impacting on our operational costs going forward.

5.108 Secondly, we note that the Commission have allowed for no growth in costs as passengers increase and have disallowed a number of incremental costs expected in the future which are not already captured in our CIP opex impacts. This will result in lower levels of asset maintenance impacting asset lives should sufficient expenditure not be remunerated.

5.109 CEPA has applied a 5% non-pay efficiency saving to Maintenance costs however, as our equipment is specialised, a number of our assets can only be serviced by one or two providers resulting in little of no competition or economies of scale to be achieved.

## **2. Rent & Rates ( [REDACTED] Understatement):**

5.110 We included a general [REDACTED] rates uplift in our forecast for the ongoing rates revaluation. CEPA disallowed this amount stating that they expect the overall rates review to result in no change to our annual rates bill from 1 January 2020.

5.111 The Commission has met with the Valuation Office and it is familiar with the revaluation process which only occurs once every ten years.

5.112 We now have confirmation from the Valuation Office that the global valuation for the airport is increasing significantly and by more than was originally anticipated. In addition, the multiplier is increasing resulting in a prospective rates bill of [REDACTED] more than the current rates bill ([REDACTED] on our proposition document).

5.113 We have included evidence to support our request in the Incremental Costs section and we request that the Commission considers an appropriate mechanism to ensure the final confirmed rates bill by Fingal County Council is fully allowed from 2020 given the likely significant increase in costs indicated.

5.114 Supporting documentation from the Valuation Office can be found in Appendix 4.

## **3. IT (€14m Understatement):**

5.115 In setting the 2019 cost baseline for IT non-pay related expenditure, CEPA made an efficiency adjustment by resetting expenditure estimates to 2017 levels. CEPA stated that it had failed to find justification for the large rises in non-pay related IT expenditure in 2018 & 2019 disallowing €14m cumulatively over the period 2020-2024.

5.116 CEPA stated that its analysis showed that Dublin Airport IT spend was higher than benchmarks in the early years of the current regulatory period but in 2017 was converging to a similar level to that seen at other airports. When this is extrapolated out to 2018, using the same SITA benchmark referenced by CEPA, we continue to compare very



favourably to this metric despite increasing IT support costs, see the nonpayroll supporting evidence section for further analysis. In fact, our IT operating costs as a % of revenue were 2.8% in 2018 which were below the SITA benchmark of 3.0%.

5.117 Reviewing the increase in costs since 2017, analysis shows that 55% of cost increases in IT have been driven by 'Reliability & Safety' activities (such as IT Security Regulation and Risk Mitigation) and 'IT Infrastructure Expansion' activities that require ongoing maintenance and support. 70% of the top 25 most material contracts have renewal dates beyond 2019 meaning that we have signed contractual obligations which cover periods post 2019 and have set prices. It is unacceptable to disallow operating costs incurred today while running an efficient IT operation, based on these SITA metrics.

5.118 New costs associated with the operating running of Common User Self-Service have been disallowed despite this technology reducing investment costs and increasing check-in capacity supported by airlines.

5.119 It is important to note the shift of software solutions towards cloud is resulting in a higher number of upfront investment costs being treated as operating expenditure from an accounting perspective increasing IT opex levels.

#### **4. Marketing (€9m Understatement):**

5.120 Marketing expenditure is critical to achieving revenue and passenger growth and increasing competition in the market for passengers.

5.121 CEPA has understated the marketing spend forecast by €9m over the period.

5.122 CEPA stated that the increases in expenditure occurred at a higher rate than expected and reprioritisation of costs should have been imposed.

5.123 We believe the current levels of market and aviation customer support are required to maintain and drive commercial revenues and also to continue to attract new airline entrants and routes at the airport.

5.124 We also disagree that the elasticity for marketing expenditure has reduced from 1.0 in the 2014 Determination to only 0.4. Frontier Economics econometrics results also support an elasticity of 1.0 for this cost category.

## 5. Utilities & Insurance (€9m Understatement):

5.125 Utilities costs are understated due to CEPA using lower water rates than those included in our regulatory proposition document and allowing no provision for carbon cost increases.

5.126 The Commission for Regulation of Utilities published a provisional increase in the price for water from 2020, +26% on current prices. While there is an annual cap of +10%, CEPA's forecasts are understated by >€1m cumulatively. This applies to water rates and surface water. Additionally, we disagree with the elasticity used of 0.5 and have included evidence to support an elasticity of 0.82 in our non-payroll supporting evidence section.

5.127 The price we pay for additional electricity from the grid increases as our consumption increases. Dublin Airport's energy requirements are expected to double by 2024 due to increases in infrastructure (price and volume are included in CIP impacts). This will result in increases in Use of System (UoS) charges such as Network Capacity Charges, Electricity Tax and PSO levy.

5.128 Carbon is an embedded cost in the provision of electricity and natural gas. Market trends and the recent publication of the government's climate action plan indicative forecasts expect carbon to increase to €80 t/CO<sub>2</sub> by 2030. This aligns with the shadow forecast used by the Department of Public Expenditure and Reform (DPER)<sup>36</sup>.

5.129 Insurance costs are non-discretionary costs that we must absorb to reduce our business exposure from significant business risks. The increase in costs over the current period is due to:

- The high level of passenger traffic growth accompanied by the growth in staff numbers at Dublin Airport that has given rise to an increasing number of insurance claims in recent years.
- Dublin Airport has [REDACTED] and is projected to also exceed this for 2018 and 2019 given the growth in passenger numbers and increasing number of insurance claims. This results in a higher premium.
- There are limitations in the aviation insurance market at present. There has been contraction over the last year as capital moves away to other less risky

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<sup>36</sup> Consultation paper 'Valuing Greenhouse Gas Emissions in the Public Spending Code' -Department of Public Expenditure and Reform -November 2018.

markets. Lloyds have shown a reducing appetite for aviation insurance. This aviation market has experienced recent incidents e.g. Boeing 737 Max and component claims on the international front are negatively impacting the attractiveness of this sector. This in turn has increased premium cost, regardless of perception of risk or whether or not passengers remain static.

## **6. Other Overheads (€3m Understatement):**

5.130 CEPA has retained CBP Officer opex in line with 2019 levels notwithstanding the fact the Commission have targeted US preclearance passengers and related non-aeronautical revenues to increase. This is a clear omission from the forecast and we would request the Commission to correct this.

5.131 Both can only be achieved in tandem therefore consistency across building blocks is required to ensure targets set by the Commission are achievable. We set out our CBP cost expectation based on our passenger proposition showing the number of officers and costs are expected to grow from Should the Commission have different passenger targets to us in their 2019 Final Determination, costs need to be adjusted consistent with other regulatory building block changes.

5.132 Additionally, we fundamentally disagree with the Commission's proposed elasticity for this category. No growth in costs have been allowed for third party lounge costs, bussing, hold baggage screening and banking and cash handling costs which are all subject to change depending on passenger levels and account for 50% of costs within this cost category.

## **5.8 CIP Opex Impacts**

5.133 We note the majority of CIP related opex has been forecasted by the Commission/CEPA as supplied by Dublin Airport with the exception of two cost items:

### **Retail Staff**

5.134 As part of the T1 IDL project Retail will get additional space of approx. 700 sqm. We initially estimated a total of 50 additional staff would be required on opening of the new space and an additional 25 FTEs to deal with the additional passenger numbers.

5.135 We acknowledge the number of volume FTEs forecast (25) was overstated by assuming all were required from day one of the additional space opening.

5.136 On review, we believe an additional 5 staff per annum are required to maintain the pax per FTE metric at 66k.

5.137 While we note CEPA has allowed volume increases for Retail, the low elasticity of 0.2 only results in an additional 9 staff by 2024 and does not even cover what is required for the existing T1 and T2 stores.

5.138 We request that CEPA revises the elasticity for this cost category and ensure the new T1 IDL store has the required volume FTEs to meet passenger/transaction requirements and the Commission's revenue targets.

### **IT CIP Costs**

5.139 CEPA disallowed all opex associated with 2020 - 2024 IT CIP projects resulting in a cumulative opex disallowance of €3.4m over the period 2020-2024.

5.140 CEPA states that IT projects in this category constitute areas of on-going investment for Dublin Airport. As such, CEPA is not convinced that these projects will lead to additional non-pay IT expenditure beyond what is already included in their forecasts.

5.1 The IT CIP for 2020-2024 totals €78m compared to €41m in the last regulatory period and 40% of the proposed investment relates to "transform" investments which drive incremental expenditure/support costs, therefore it is not simply *"to maintain and develop the IT infrastructure at Dublin Airport"*.

5.2 As we invest in more applications and as existing applications become more resource hungry each year (due to added functionality by the vendors), the consumption of IT grows faster than the growth in passenger numbers. This drives additional Infrastructure & infrastructure licencing opex, applications licencing opex and FTE opex to provide support. There is significant growth in data resulting from the below which drives incremental IT opex;

- incremental applications;
- data volumes increasing; and
- appetite for analytics to drive decisions and optimise operations.

The diagram below illustrates the changes over the current period.

FIGURE 5.8 2015- 2019 IT INVESTMENTS

## 2015-2019 – IT Services Investments

- Formal Service Level Agreements put in place for critical services (27) with Gold & Silver classifications
- Average service availability of 99.94% now being achieved
- Service desks rationalised from 3 to 1.
- Data Centre architecture rationalised from 4 data centres to 2 leveraging our on site assets to provide resilience
- Cloud services implemented for Web Hosting and Office 365
- Systematic upgrades of Networks, Storage, Servers, Databases and applications to maintain currency and support
- Comprehensive monitoring implemented to improve Service Availability



5.141 The current forecast does not allow for Dublin Airport to support and maintain its existing asset base or serve a further an incremental asset base of €78m. We have set out our rationale for the incremental costs associated with the projects below. Should the annual opex allowances not be granted for these projects, it jeopardises the viability of proceeding with such investments.

**TABLE 5.17 IT CIP IMPACT JUSTIFICATIONS**

CIP Code	Project	Opex Impact €m (by 2024)	Opex Justification
<b>CIP.20.05.007</b>	Reliability, Safety, Security & Compliance	€0.3m	New support costs for IT systems security tools that do not exist within our IT infrastructure today.
<b>CIP.20.05.010</b>	Passenger Processing (excl. Security Screening)	€0.2m	Dublin Airport doesn't currently have any self-service boarding gates. To service these gates, it is estimated we will incur new software costs of €1,000 per gate.  This would not be accurately captured by applying an elasticity to current IT opex spend.
<b>CIP.20.05.012</b>	Servers Storage Lifecycle Growth  and - &	€0.2m	Support for 'on-premise' services are expected to remain static as the mix of on-premise versus cloud storage shifts from 85% on-premise and 15% cloud (websites are currently on cloud) to 70% on-premise and 30% cloud by 2024.  The increase in cloud data centre use is expected to double our current spend on cloud data centre hosting. This uplift is not captured in current proposed forecasts.
<b>Remaining CIP projects</b>		€0.3m	The opex estimate for the remainder projects relates to either new infrastructure that is not in place today (e.g. standalone data centre) and expanded service requirements (e.g. e-commerce platform support).
<b>Total</b>		<b>€1.0m</b>	

## 5.9 New Identified Costs

5.142 This section highlights new or existing costs changes expected over the period 2020 – 2024 that were not included in our regulatory proposition paper and which the Commission should give consideration to before finalising its opex forecast.

### Rates

5.143 Rates payable to Fingal County Council are non-discretionary.

5.144 In our proposition document we highlighted that Dublin Airport was currently undergoing a valuation review with the Valuation Office and that this review was due to conclude in June 2019. In the interim we estimated an annual rate increase of [REDACTED] from 2020 as part of that review.

5.145 CEPA reviewed this information and did not include any uplift in the forecast for our annual rates bill to Fingal County Council on the basis that any uplift in the multiplier would be offset by a reduction in the valuation, however, as outlined below the annual rates bill is expected to increase by [REDACTED] per annum.

5.146 The existing method of valuation, of airports in Ireland and the UK, is the Contractors basis. This calculates the capital value on assets on an estimated replacement cost basis, less allowances. This provides an adjusted replacement capital value, which is then rentalised by applying a 5% rate the capital value. This valuation is set by the Valuation Office and is known as the Net Annual Valuation (NAV). An Annual Rate on Valuation ("ARV") multiplier is then set by According to FCC and applied to the NAV to determine the annual rates bill.

5.147 Historically, a single valuation certificate was issued for the airport NAV to include terminals/piers, runways /aprons and some ancillary assets. In the previous valuation this certificate set the NAV at [REDACTED]. As part of current valuation process the Valuation Office have departed from this practice and have instead issued 3 separate valuations in June 2019 summing to [REDACTED] an increase of [REDACTED] on the current valuation.

5.148 In addition Fingal County Council have indicated that the ARV multiplier will increase by 27% to 0.191<sup>37</sup> in 2020 from 0.15 in 2019. The net impact of these two factors results in our annual rates bill increasing by [REDACTED] (= rateable value of [REDACTED]) for 2020 from [REDACTED] (= rateable value of [REDACTED]) in 2019.

5.149 It is clear based on the valuation cert that a flat rates bill from 2020 is highly unrealistic and well beyond Dublin Airport's control.

5.150 The Commission have met with the Valuation Office and it understands the process therefore the Commission (rather than CEPA) need to ensure an appropriate regulatory mechanism exists to ensure the final concluded rates bill from 2020 is fully remunerated given the significant cost uplift proposed [REDACTED].

5.151 We will lodge representations with the Valuation Office in respect of the Proposed Valuation Certificates. The Final Valuation Certificate(s) will be issued in September or October 2019. [REDACTED]

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<sup>37</sup><http://www.fingalcoco.ie/business-and-economy/business-charges/revaluationofcommercialpropertiesinfingal/>

5.152 The proposed rates change will add ██████ to our cost base from 2020 and ██████ cumulative over the period 2020 – 2024.

### Drone Detection

5.153 Unmanned Aerial Systems (UAS) are a significant disrupter to existing airspace activity and regulations. The versatility and availability of drones has outpaced existing legislation and airspace control methods. For airports, the development in UAS technology raises a serious challenge of keeping airports safe from unwanted drone activities especially by hobbyists and potentially from terrorist or criminal acts as:

- Misuse of UAS technology can potentially have catastrophic effects on airport operations from a security, safety and reputational perspective.
- UASs can pose a significant threat to airport safety if a collision occurred with an aircraft on approach or take-off.
- UASs can also pose a threat to airport security by delivering contraband or illegal surveillance of airport operations.

5.154 Numerous near misses and incidents involving the unsafe use of amateur UASs around airports have occurred at European airports. As can be seen from the recent drone incident at Gatwick Airport in December 2018, UAS technology can have a significant impact on the commercial operations of an airport and its ability to effectively and securely service its customers.

5.155 We believe it is therefore prudent to include an investment for technology in our CIP of €0.6m and we anticipate an annual operating cost associated with the equipment of €0.2m p.a

**TABLE 5.18 DRONE COST PROJECTION**

Period	Year	Capex €'000	Opex €'000	Nominal % Increase YoY
YR0	2020	627		
YR1	2021		179	
YR2	2022		182	1.9%
YR3	2023		186	1.9%
YR4	2024		189	1.9%
<b>2020 - 2024 Value</b>		<b>627</b>	<b>737</b>	



### Bussing

5.156 We anticipate the current level of bussing costs of €2m for South Gates to be insufficient in the future given recent agreements (early 2019) with airlines to directly bus arriving passengers off aircraft to improve stand utilisation and OTP. This will drive an incremental bussing cost of €0.5m p.a from 2019 and was not factored into our opex forecast.

5.157 Additionally, the North PBZ bussing costs were based on the current levels of bussing expenditure. Due to this increase, we anticipate those costs increasing also by €0.5m p.a. However, as the project is not expected to be delivered until Q4 2024 we estimate a minor increase of €0.1m in opex required in 2024.

5.158 We estimate the below bussing opex uplifts are required in the forecast:

**TABLE 5.19 INCREMENTAL BUSSING COSTS NOT INCLUDED IN FORECAST**

	2020	2021	2022	2023	2024	Cumulative
<b>South Gates</b>	€0.5m	€0.5m	€0.5m	€0.5m	€0.5m	€2.5m
<b>North PBZ</b>					€0.1m	€0.1m
<b>Total</b>	€0.5m	€0.5m	€0.5m	€0.5m	€0.6m	€2.6m

### Metro Fees

5.159 We included a project of €0.5m for Metro fees in the CIP as we require a dedicated resource to interface on the Metro project over 5 years. As the Commission will not consider as a capital project, we request that the Commission include an annual opex allowance of €0.1m p.a. to cover costs.

### 5.10 Treatment of Risk

5.160 The Commission has retained all risk with the regulated entity in the 2019 Draft Determination. This means not only does the airport take on the volume (traffic) risk, we also take on the risk relating to any other changes that may occur within the regulatory period unexpectedly.

5.161 Dublin Airport has accepted this risk in the past on the basis that the risks outside of volume risk have been low, however we are concerned that there may be instances where unanticipated costs will be incurred by Dublin Airport going forward that are more substantial and are outside the airport's control.

5.162 Such costs should be recognised by the Commission as they are beyond the airport's control and incompatible with incentive regulation. For example, changes in Security

regulations may drive significant additional staff costs and investments which should be remunerated. An example of this in the current determination was Dublin Airport's security function became responsible for the provision of Hold Baggage Screening (HBS) at the airport. This saw the transfer of responsibility by the state for this service from airlines to airport operators, by way of an amendment to the National Civil Aviation Security Programme ("NCASP").

5.163 These incremental costs came on stream from 2018 and it is estimated that they will have cost Dublin Airport almost €5m by the end of this current regulatory period. These additional costs are not recoverable through airport charges, even though they are a result of efficiently incurred expenditure and they are mandatory costs outside the control of the airport. This was an example of where risk and costs were transferred from the airlines to the airport without any provision for the airport to be remunerated which runs contrary to accepted economic principles. Additionally, the introduction of Explosive Trace Detection in 2015 required the recruitment of additional Security staff to ensure compliance adding further costs of approximately €2.3m p.a.

5.164 Another area of concern would be energy costs. Energy costs are currently quite volatile and difficult to project plus it should be noted that any hedged position relating to energy costs beyond 2 years is not entirely indicative of future costs.

5.165 There are a number of specific risks that could potentially raise energy costs. The recent introduction of the integrated electricity market has and will see additional charges/rebates being passed through to the consumer, however this is not possible to estimate and no allowance for this has been made in the energy forecasts used by Frontier Economics. The likelihood however is an increase in costs. Furthermore, natural gas is largely imported from the UK at a Sterling cost base and no allowance has been made for Brexit and the potential cost implications of this going forward. In addition, there are risks around future carbon costs and the possible introduction of a Carbon Tax over the course of the next 5 years.

5.166 Lastly, as mentioned in previous sections, the annual rates bill from 2020 will potentially add █████ in costs per annum. The scale of this increase would see our current bill more than double adding █████ to the opex per pax metric.

5.167 As set out in our 2018 Issue paper response document, we believe that the Commission should introduce a cost adjustment mechanism for the 2020 -2024 determination period that would be compatible with incentive regulation. We would therefore recommend the introduction of an additional annualised cost allowance that would allow for the recovery of efficient costs that are incurred by Dublin Airport over the course of next regulatory period which are not anticipated in the Commission's current operating cost allowance.

5.168 Another acceptable option would be to provide a risk-sharing mechanism in the regulatory formula for regulatory, compliance or costs fully outside the control of the airport and which are material in nature on an annual basis e.g. costs greater than €0.5m p.a.

5.169 Alternatively, any delay in remuneration until after 2024 should take into account the time value of money adjustments as the impact of receiving delayed remuneration represents a cost for Dublin Airport.

### 5.11 Service Quality Measure Opex Impact

5.170 The Commission has proposed a mix of (1) introducing 9 new service quality measures, (2) increasing targets significantly for existing measures and (3) amendment to current measures for Security and baggage measures.

5.171 The Commission has not undertaken a robust assessment of the impact of these sqm changes on our cost base nor have they factored the costs into the opex forecast.

5.172 For example, the change to the Security SQM results in an annual payroll cost amount of €1.5m and drives a requirement for one additional lane per terminal which is not feasible given the infrastructure constraints.

5.173 Our opex chapter should be read in conjunction with our response to the quality of service chapter. Depending on the Commission's final decision on SQMs for the forthcoming period, the Commission needs to consider the likely opex impact required to meet the targets. We have not included opex implications in this section on the basis that we refute a number of the Commission's proposed SQM changes.

### 5.12 Commission Fees

5.174 We note that the Commission's fees have been significantly higher than the 2013 levels when setting allowances for opex under the 2014 Determination. An adjustment is required to allow for unremunerated costs not captured in the 2014 Determination. It should be noted that the level of cost growth increasing from €1.4m in 2015 to an [REDACTED] 2019 represents an over 150% increase in the level of costs since 2015.

**TABLE 5.20 CAR FEES 2013-2018**

€'m	2013	2014	2015	2016	2017	2018	[REDACTED]
<b>CAR Costs</b>	€1.9	€1.7	€1.4	€1.6	€2.0	€2.5	[REDACTED]

**5.13 2019 Opex**

5.175 In 2019, our operating costs will increase by ██████ versus 2018 levels. This represents a ██████ increase compared to a ██████ increase in expected passenger levels.

5.176 Payroll costs are expected to increase by ██████ for annual contractual increments/pay progression and labour court obligations for 2019 and ██████ for additional staff of which ██████ relates to the full year impact of staff recruited in 2018.

5.177 Nonpay costs will increase by ██████ due to new business costs such as CBP officers, higher insurance and PRM costs and volume driven costs for lounges and bussing.

5.178 The latest 2019 expected outturn is aligned with Frontier’s estimate however there are differences by cost category. The below table shows the uplift in cost by category expected in 2019 versus 2018.

**TABLE 5.24 2019 OPEX**

€'m	Opex (Real)				Ref
	2018	2019 Expected	Difference	% Difference	
[Redacted Table Content]					

5.179 Our detailed submission includes details supporting our cost increases historically and looking forward. In summary, the main cost changes are explained below:

- a) Security – addition ASU staff (some roll over from 2018) and new supervisors as set out on page 54 of Frontier report.
- b) Central Functions – Centralisation of Graduates in 2019 and New Transformation functions – see Central Functions payroll supporting evidence section.
- c) Airside Operations – additional AMU FTEs please refer to Airside payroll supporting evidence in document and page 113 of Frontier report.
- d) IT – mainly due to additional IT nonpay costs for incremental IT services (e.g. EAMS, ESP monitoring, AVDGS, IT Security) 84%, volume on existing contracts 29% and net contract price reductions -13%. See IT nonpay supporting evidence section of document. Additional FTEs also which mainly relates to the full year impact of 2018 backfills and new hires.
- e) Facilities & Cleaning – Increase relates to pay increases for front-line staff and the full year impact of 2018 new customer service staff hired in winter 2018 (€1.4m) – see Facilities & Cleaning payroll supporting evidence section.
- f) Retail – additional FTEs relate to new T2 redevelopment and expansion of space – see page 110 of Frontier report.
- g) PRM – new tendered pricing for service which was consulted on with airport users – see page 143 of Frontier report.
- h) Marketing – reduction in discretionary expenditure.
- i) Insurance – 2018 release of accounting provision reducing 2018 insurance cost by €0.8m. Higher insurance premium of €0.5m from 2019 shows total increase on 2018 of €1.3m (see page 54 of Frontier report).
- j) Other Overheads – Additional costs for CBP officers €2m (page 51 of Frontier report), additional CAR Fees €1m (as per CAR), more bussing costs €0.5m (see ‘New Identified Costs’ section of this document) and higher lounge costs €0.4m (additional revenue in 2019 of €0.8m).

- k) Employee-relates overheads – new agreement with Alcock & Brown to provide subsidised staff meals following engagement with staff and improvements required for staff offering.

#### 5.14 Conclusion

5.180 In its 2019 Draft Determination, the Commission is proposing to disallow €215 million of operating over the regulatory period. The scale of the initial baseline disallowance of €215 million in 2020 is exceptional; over ten times the baseline disallowance from the 2014 Determination. We fundamentally disagree with the assertion that approximately 50% of the increase in operating expenditure over the current regulatory period (2015 – 2019) has been inefficient and warrants this level of disallowance.

5.181 Due to a series of incorrect assumptions and/or cost mis-categorisations the Commission/CEPA have understated the level of future cost across a number of cost categories. Dublin Airport requests that the Commission addresses these cost understatements in the 2019 Final Determination.

5.182 The Commission's future efficiency targets are completely unachievable, under any set of circumstances. We are extremely concerned that the Commission is proposing that Dublin Airport should reduce payroll costs by over €179 million, without providing any voluntary severance allowance to achieve the required reduction in staff numbers (■■■■). The Commission's consultants have raised questions around outsourcing of roles, pay rates and pay increases (notwithstanding that such have been subject to labour court agreement, reflect contractual obligations and/or are comparable to agreements within our customer companies).

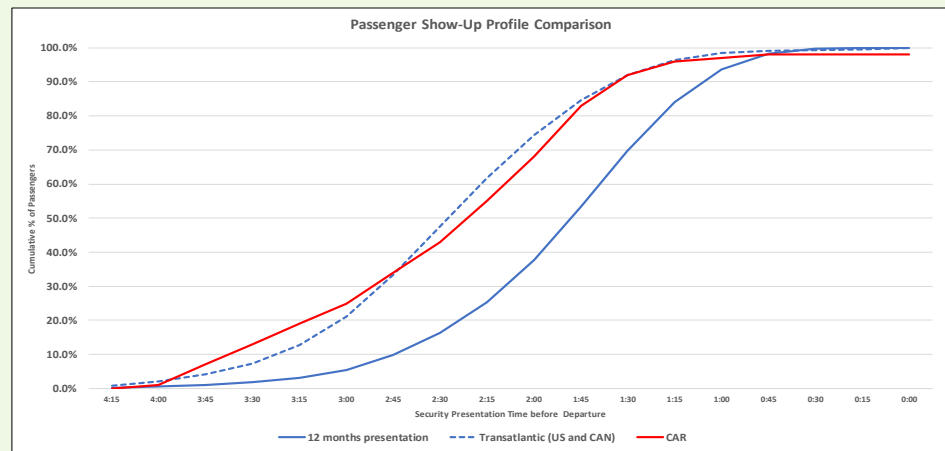
5.183 We are very concerned that the Commission's consultants seemingly have no regard for the nature of employment contracts or Irish labour law, the context in which state company employment operates or the industrial relations and consequential operational implications. Progressing these targeted reductions will undoubtedly set the airport on a major collision course with our staff and their representatives and this course of action could result in major passenger and operational disruption.

#### 5.15 Payroll Supporting Evidence

5.184 In the CEPA/Taylor Airey analysis a number of arbitrary reductions were made to the 2019 cost baseline for payroll costs in the various cost categories which in turn impacted on the 2020-2024 cost projections. Dublin Airport is providing detailed supporting evidence set out in the table below to illustrate that these reductions were not justified.

Cost Category	Discussion
Security	<p>1. Roster Assumptions</p> <p>CEPA has assumed a reduction of 29 FTEs in security staff for 2017 which has then been applied to the 2019 operating cost baseline. The cumulative financial impact of this is estimated at €7m over the period 2020-2024.</p> <p>CEPA has assumed that the Terminal 1 summer roster over provides on the staffing level required by approximately 32% on a busy week. Similarly, over a busy summer week, the T2 summer roster was said to over provide on the staffing level required by approximately 26%.</p> <p>In addition, CEPA assumed that by matching demand and supply better over each of the days of the week for the Terminal 2 winter roster and reducing the absence rate from the 9% to a target of 5.5%, it is possible to reduce the staffing level by approximately 10% to 15% over the winter period.</p> <p>The roster efficiencies proposed by CEPA have been based on inaccurate assumptions in relation to a) passenger show-up profile and b) staff demand requirements.</p> <p>When the actual passenger presentation is applied, and the correct demand requirements are considered, this significantly reduces the over-coverage delivered on rosters. It should be noted that all rosters have an inherent level of over-coverage due to considerations such as minimum shift lengths, workable roster patterns, adherence to relevant legislation (including employment and security regulations). The actual over-coverage provided by Security rosters across Terminal 1 and Terminal 2 for both the Summer and Winter seasons successfully delivers on demand requirements whilst keeping over-coverage to a minimum and thus delivering an efficient staff supply.</p> <p><u>Passenger Show-Up Profile</u></p> <p>A simple empirical show-up profile was derived and applied to the AODB records for departing passengers.</p>

**FIGURE 5.9 PASSENGER SHOW-UP PROFILE COMPARISON**



The graph above illustrates the derived show-up profile provided by the Commission’s consultants CEPA/ Taylor Airey, along with the actual average show-up profile and the Trans-Atlantic profile over a 12-month period. This analysis is based on Dublin Airport actual historic data. It is evident that the show-up profile applied by Taylor Airey is aligned to the Trans-Atlantic profile. Trans-Atlantic passengers whose journeys originate at Dublin Airport account for 1.6% of T1 departing passengers and 25.2% T2 departing passengers.

This profile has been applied across all passengers, implying that passengers would present earlier if the Security checkpoint in each Terminal was open. The distribution profile used by CEPA/ Taylor Airey is more gradual leading to a longer build up and thus reduced peaks. Whilst this is true for Trans-Atlantic passengers whom account for 10.1% of overall volumes, this is not an accurate reflection of the overall passenger show-up profile. Typically, 38% of total passengers present more than 2 hours before their flight compared with the Taylor Airey assumption of 68%.

As actual passengers present in a concentrated timeframe between 2hrs30mins and 1hr before flight departure, the lane requirement to service this passenger presentation is higher than that assumed by Taylor Airey. A more gradual presentation has been used which results in a lower lane demand at peak times than is required to maintain service quality targets.



Staff Demand Requirements

The Taylor Airey assessment of roster supply and staff demand failed to account for core additional demands above lane demand when analysing roster efficiency. The treatment in the Taylor Airey analysis of (i) break allocations and (ii) absence allocations have a material impact when assessing the efficiency of a roster.

**Break Allocation**

The Taylor Airey break calculation applied assumed an uplift of 10% on demand, spread evenly throughout the day. This is not feasible as breaks must be taken within certain time limits to comply with the Organisation of Working Time Act 1997 (See Operating Cost Appendix 4 Exhibit 1). The consequent impact of this is that break demand is clustered at intervals during the day, requiring additional staff supply to ensure that legislation outlined in the appendix is adhered to. Shift start times are staggered across the day, to minimise the effect on roster supply. Notwithstanding the mitigations outlined, the clustered break coverage increases the roster requirement by 2.8%.

**Absence Allocation**

Absence is defined as all instances where staff are unavailable to the business on day of operation. This includes annual leave entitlements; sick leave; maternity leave; parental leave; Jury Service, etc.

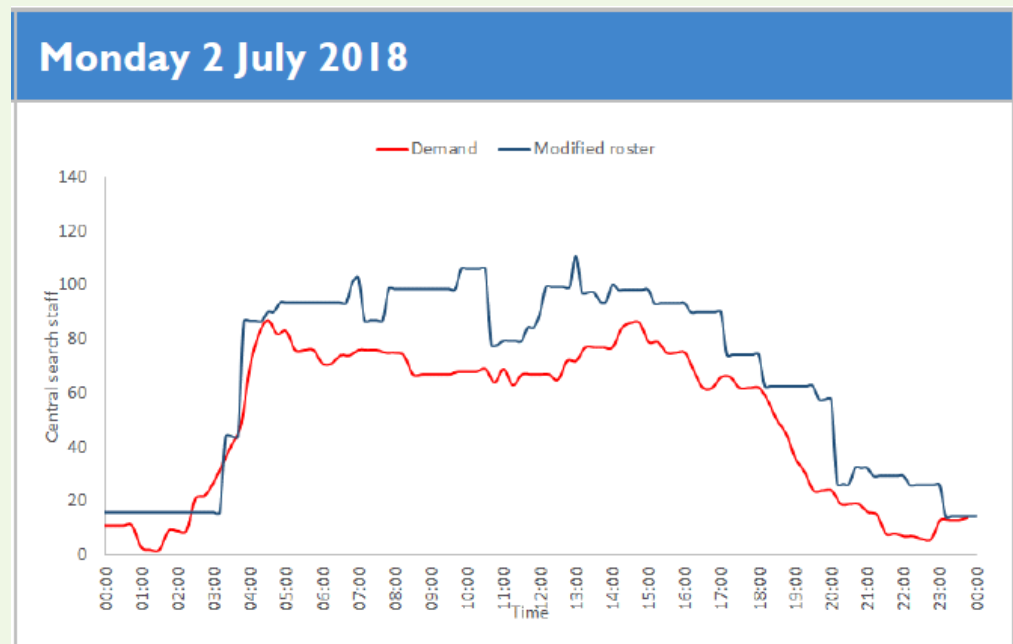
The following demand allocations are built into the Summer and Winter rosters for Terminal 1 and Terminal 2.

**TABLE 5.21 ROSTERED ADDITIONAL DEMAND REQUIREMENTS**

Percentage Resource Demand above Operational Demand
[Redacted Content]

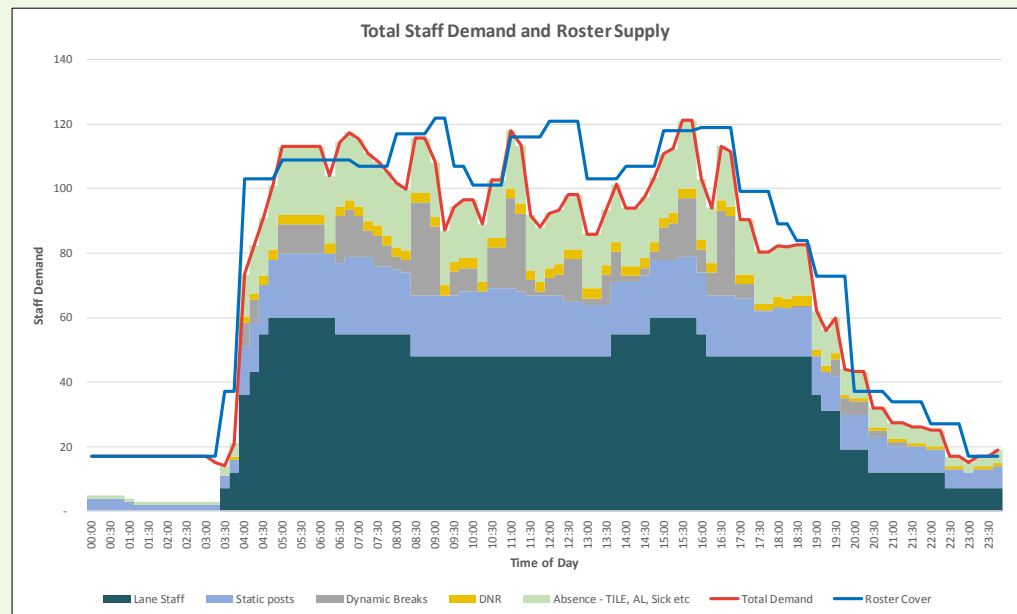
- The annual leave allocation differs between Terminal 1 and Terminal 2 due to the Full-Time roster in Terminal 2 being Net Hours (set annual leave is built in).
- The Taylor Airey analysis of roster supply only accounted for Sick Leave of [REDACTED] across Terminal 1 and Terminal 2 rosters as outlined in the table above.
- A review of the CEPA/ Taylor Airey interpretation of Central Search staffing requirements and rostered staff for Terminal 1 on Monday 02<sup>nd</sup> July, shows that it is assumed that there is an over-supply of staff of 32%, as shown in the graph below. Whereas, when all demand requirements are considered, the actual demand and supply show greater alignment as outlined below.

**FIGURE 5.10 CEPA/TA INTERPRETATION OF CENTRAL SEARCH STAFFING**



Dublin Airport Actual Demand Requirements and rostered staff for Terminal 1 on Monday 2<sup>nd</sup> July 2018

**FIGURE 5.11 ACTUAL STAFF DEMAND AND ROSTER SUPPLY**



A comparison of the perceived roster over-provision proposed by CEPA/Taylor Airey versus the actual demand requirements for each of the rosters is outlined in the Operating Cost Appendix 4.

When the above additional leave allocations, break allocations and the actual passenger show-up profile are accounted for there is a significant reduction in the over-provision suggested by CEPA/Taylor Airey.

The table below outlines the actual over provision for Summer Roster for Terminal 1 and Terminal 2 versus that outlined by CEPA/Taylor Airey. These rosters effectively delivered against the full suite of operational demands and in an efficient manner. Further efficiencies could not be realised without either significantly amending contractual terms and conditions or breaching the Organisation of Working Time Act.

**TABLE 5.22 SUMMER ROSTER ANALYSIS**

Summer Roster Over-Supply Analysis			
Terminal	CAR	Dublin Airport	Variance
Terminal 1	32%	13%	19%
Terminal 2	26%	16%	10%

Consequently, the proposed FTE reductions of -29FTE across T1 and T2 Central Search on the basis that there are significant levels of staff over-provision cannot be achieved against baseline Security Staff numbers.

**Throughput Efficiencies**

**CEPA Assumption**

CEPA accepts that the throughput of the X-Ray machines is the constraining factor at the central search locations where passenger and hand baggage security screening occur. The improvements, which are more marked for Terminal 1, have the potential to enable a reduction in staffing requirements of approximately 14% in Terminal 1 and 3% in Terminal 2, compared to the scenario in which the improvements had not been made. CEPA suggested that it was not clear whether this potential has been realised over the past three years.

**Dublin Airport Response**

The following outlines the FTE efficiencies achieved in both Terminal 1 and Terminal 2 Central Search because of improvement in X-Ray Image throughputs over the period 2015 to 2018.

The throughput efficiencies achieved, and corresponding roster adjustments have contributed to offsetting increased resource requirements needed to service additional security regulatory requirements and passenger volumes.

**TABLE 5.23 FTE EFFICIENCIES T1**

Terminal 1 FTEs	2015	2016	2017	2018

**TABLE 5.24 FTE EFFICIENCIES T2**

Terminal 2 FTEs	2015	2016	2017	2018

**2. Security Training**

In its 2019 operating cost baseline, the Commission has reduced the security training staff allowance proposed by Dublin Airport by █ FTEs. This will have a cumulative estimated financial impact of █ over the period 2020-2024.

CEPA made a large baseline adjustment to the number of security training staff in 2019 based on the assumptions that Dublin Airport’s security training programme is adequate therefore it does not need a major transformation and that it is volume-driven by the number of staff needing training. The Commission limited the increase by assuming that the growth of Security training staff will be proportionate to the increase in other security staff numbers over the next control period.

The below assessment outlines the impact of the above roster FTE efficiencies to the total Security Staff category.

**TABLE 5.25 IMPACT OF FTE EFFICIENCIES**

Opex Category	2019 Baseline	DAP	CAR Efficiency Adjustment	Revised Baseline	% Baseline Reduction
FTE’s	20		-7	13	-35%

Since 2017 there has been significant increases in the amount of regulatory training required to be completed by the Security Training Team. The Security Training Department provides Security Regulatory Training to all necessary departments and stakeholders operating at the airport to ensure full compliance of airport operations with Security Regulations. The table below

following outlines some of the key additional training requirements that are now delivered to adhere with the relevant regulations.

**TABLE 5.26 SECURITY TRAINING**

Course	Recipient Department
Screener Certification	Security ASU
Dangerous Goods	Security ASU
Screening of Airport Supplies	Dublin Airport Operations
Screen on Delivery	Third Party Contractors
Security Culture & Insider Threat	All AIC holders

With effect from the 1 December 2017, only an Approved Aviation Security Training Organisation (ASTO) can deliver aviation security training. Training can only be delivered by certified instructors. This regulatory change meant that the Dublin Airport ASTO is responsible for all security training within Dublin Airport, including any security training for third party operators at Dublin Airport.

The introduction of Screener Certification which requires all screeners to attend training and be examined in seven different modules and obtain a pass to be certified to conduct their duties has significantly increased demand on the Security Training Department. Screeners must also resit certification modules in a 3-year timeframe and obtain a pass to maintain certification compliance.

This requires over 5,000 modules to be trained out, examined and corrected by the Security Training Department, which has significantly increased the demand on the unit since 2017.

Since 1st May 2019 the appropriate authority no longer provide examiners for certification which means the Dublin Airport ASTO has to provide all examiners which comes from the same pool of instructors.

These additional training demands, and the consequent resources required to deliver on same have not been taken into account by CEPA when assessing the staff requirements for the Security Training business unit.

**Facilities & Cleaning**

CEPA suggested investments in airport signage should reduce the requirement for facilities staff. In addition, CEPA also incorporated a reduction in the

	<p>number of Control Centre staff in the cost baseline on the basis that a rationalisation of the airport control centres would reduce the staffing requirement.</p> <p>A total of 30 FTEs for have been disallowed from the baseline forecast accounting for €1.6m of the baseline difference and €9m of the cumulative payroll difference.</p> <p>Should the 2019 baseline FTE's not be allowed, we expect the following areas to be affected:</p> <p><b>1. <u>Customer Operation Team Members</u></b></p> <ul style="list-style-type: none"><li>• New infrastructure over the period 2015 - 2019 requires resources to manage passengers safely and efficiently. In 2017, the South Gates were introduced, the use of this facility requires that passengers present to a gate in Terminal 2, from which they are then bussed to the remote South Gate facility. The management of this process requires significant operational input and interaction with 3<sup>rd</sup> party stakeholders and results in a resourcing requirement of up to 10 FTE positions when fully operational.</li></ul> <p>Staffing resources are needed to carry out boarding card checks, manage the bussing of passengers and managing the South Gate facility as it transitions from a departure to arrivals facility. In addition to this, management is required to facilitate passenger movement to the transfer facility from Pier 3 via bussing.</p> <ul style="list-style-type: none"><li>• Customer service staff are critical in order for Dublin Airport to maintain Health &amp; Safety compliance as it is necessary to have sufficient customer service staff located in key areas in the case of a requirement for a fire / emergency / security evacuation.</li><li>• There are an increasing number of requests from 3<sup>rd</sup> party airport operators (e.g. INIS / Customs) and airlines to resource key areas / posts in the terminals, for example, customer service staff are now</li></ul>
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	<p>specifically required to assist in the operation and transfer of passengers through the E Gates in the Customs area.</p> <ul style="list-style-type: none"><li>• The increasing complexity of operations at Dublin Airport in recent years has driven an increasing demand for facility staff. Examples of which include the following:<ul style="list-style-type: none"><li>○ The T2 (east) check-in process requires daily management to swap out various queue systems as they transition from one airline configuration to another. This requires 2 x Customer Operations Team Members (COTM), 2 shift leads and communication with our T2 operations control centre. In addition, it is often necessary to impose a system of increasing and decreasing desks at different times across the day / week to maximise the efficient use of check-in space in the terminals which requires staff to manage and oversee this process.</li><li>○ The consistent increase in the use of the US CBP passenger facility (1.4m in 2017, 1.6m in 2018, 2019 projected 1.8m) has given rise to a requirement for additional resources to manage passenger flows through the facility.</li><li>○ The increases usage of swing gates – there are currently 6 swing gate configurations available for use in Terminal 2, prior to 2018 only one configuration was available. Each implementation or reversal requires multiple resources including the deployment of 3-4 security staff, 2 facilities staff and interaction and close monitoring from TOC.</li></ul></li></ul> <p>As explained above, if there was a significant reduction, this would clearly have negative repercussions for our services at Dublin Airport leading to a reduction in available airport capacity, safety, additional queues/waiting times and negative customer satisfaction from airlines and passengers.</p>
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	<p><b>2. Service Delivery Managers</b></p> <p>CEPA has rejected the requirement for 12 Service Delivery Managers (SDMs) without any adequate justification.</p> <p>The recruitment of 12 SDMs was part of the wider process of re-organisation and future proofing of the Operations department to enable the management of the business up to 40m passengers per annum.</p> <p>Service Delivery Managers have been recruited to support the Airport Duty Managers (ADMs) in actively driving and delivering efficient and effective day to day management of all resources, processes and facilities across the airport.</p> <p>Specifically, it is envisaged that these positions will:</p> <ul style="list-style-type: none"> <li>• improve control of our overall operation</li> <li>• Improve front-line presence and engagement with our airline partners including ground handlers and 3<sup>rd</sup> party state agencies e.g. INIS and Customs</li> <li>• act on key performance issues achieved by monitoring key operations metrics, using sound judgement to pro-actively make informed decisions about the operation including on-time performance (OTP), taxi times, baggage performance, staff resource levels etc</li> <li>• Resolve operational issues e.g. emergency or security events including serious weather events</li> </ul>
<p><b>Airside</b></p>	<p>A total of 15 FTEs for have been disallowed from the baseline forecast accounting for €1.1m of the baseline difference and €6m of the cumulative payroll difference.</p> <p>CEPA suggested that there was some evidence of inefficiency given that over the current regulatory determination period, the number of FTEs employed in airside operations had grown at a greater rate than the increase in airline flight movements at the airport.</p> <p>We reject this suggestion on the following basis and should appropriate staffing levels not be provided, these areas will be impacted:</p> <ul style="list-style-type: none"> <li>• New EASA Safety Regulations (EU)139/2014- EASA ADR demands a mandatory level of safety inspections and apron management. The Asset Management Unit (AMU) are required to carry out a minimum</li> </ul>

	<p>level of safety critical tasks as outlined in Acceptable Means of Compliance (AMC), Guidance Material (GM) provisions. Safety Occurrences peaked in 2015 with ■ occurrences, the increase in AMU staff has significantly reduced that number by almost 50% while traffic has increased by almost 20% in the same period.</p> <ul style="list-style-type: none"><li>• 14,000 airport staff have airside access with an average of 3,500 staff operating per day airside. Over 3,100 individual pieces of Ground Handling GSE (Ground Service Equipment) operate daily, averaging 9,600 unique GSE movements per day. Airside operations must ensure safe activity in this very busy environment. Equipment impounded totaled 631 units in 2018, this was down from 744 in 2017 a result of intense AMU management of the ramp.</li><li>• AMU must prepare safety incident reports for all occurrences taking place airside. Each incident report requires in depth investigation of the reported incident including interviewing witnesses &amp; parties involved, immediate corrective action including liaising with Airport Fire 7 Rescue Service, Airport Police, Guards, HSA, HSE, Dublin Fire Brigade and a compiling detailed report (for legal purposes).</li><li>• Due to the constraints in Apron Operations (larger aircraft with cargo operating into tight cul de sacs), Airside operations have divided the airport apron (east and west apron) into four zones during the day and two zones at night.</li><li>• While traffic at Dublin Airport is increasing, it is the increase in aircraft size operating at the airport which is creating a number of challenges for airport operations, given that larger aircraft can have twice as much ground handling requirements and tight apron management of equipment by ground handlers is a prerequisite requirement set by the AMU.</li><li>• Increased airfield construction and maintenance has led to a requirement for a more detailed and coordinated planning with stakeholders. Enhanced patrols are required to safeguard operations</li></ul>
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	<p>and to ensure all mitigations are in place and effective. Airside engineers (CPOs) are needed to deliver client requirements. The delivery of airfield infrastructure with a resulting increase in aircraft movements has resulted in larger zones which must be managed by the AMU, Stand Allocation and FOD teams.</p>
<p><b>Maintenance</b></p>	<p>A total of 26 FTEs has been disallowed from the baseline forecast accounting for €2m of the baseline difference and €10m of the cumulative payroll difference.</p> <p>CEPA took the 2014 FTE numbers for the Maintenance and classified into passenger and non-passenger driven positions. For passenger driven positions, CEPA applied a passenger elasticity of 0.4.</p> <p>We believe the approach used by CEPA has resulted in a significant underestimation of the baseline FTE requirement for 2019 for the following reasons:</p> <ul style="list-style-type: none"> <li>• While CEPA did apply a passenger elasticity to the Airside Operative business unit, there is still a staff differential of 10. The CEPA allowance failed to take account of the fact that in July 2018, after a period of consultation with trade union representatives and staff, Dublin Airport introduced a twenty-four-hour shift roster in the airfield operative section. This resulted in the airfield general operative team increasing by 12 (4 teams of 3) to address the increased number of aircraft movements which necessitates routine maintenance being performed at night, limited daily resource availability to meet business needs and increasing operational risks. Additionally, more resources are required to service the significant increase in airfield infrastructure such as Apron 5G, South Apron and increasing demands on the provision of winter maintenance services.</li> <li>• CEPA did not apply a passenger elasticity in respect of the Engineering Service team on the basis that they are deemed to be a central function for Asset Care. In practice, 80% of the Engineering Service team (40 Staff) support Terminal 1, Airfield, campus security, utilities and associated passenger sensitive equipment including lifts and escalators. On this basis, a passenger elasticity should have been</li> </ul>

	<p>applied and this would result in an additional 7 Staff in 2019 compared to 2014.</p> <ul style="list-style-type: none"><li>• CEPA has not given any allowance for additional maintenance management / admin staff. In 2015, Dublin was the first airport to be awarded the ISO55001 standard for best in class asset management. This standard is underpinned by an asset management framework that support the frontline service delivery teams. The standard underpinned by the asset management framework has had a significant impact on asset availability and reliability over the last 4 years facilitating Dublin Airport migrate from a reactive based maintenance model to a planned one (+7% in planned maintenance). To support the Asset Management practice, there were 5 new asset/system manager roles added in the Fleet, Security Equipment, Civil Structural and Building Architecture areas. It should be noted that these are in practice front line roles as they directly manage any technical issues with this equipment and therefore should be included in the baseline number.</li></ul> <p>Finally, it should be noted that CEPA's operating cost analysis did find that Dublin Airport's current level of expenditure compares well when benchmarked against other similar sized airports. This is further substantiated in the Frontier Economics report which benchmarked Dublin Airport's operating cost spend against comparator airports and it found that the Dublin Airport maintenance cost per passenger at €1.02 compared very favourably with the other benchmarked airports.</p> <p>It should also be noted that the operating cost per passenger at Dublin Airport has declined steadily since the introduction of Terminal 2 in November 2010 this is despite a moderate increase in c.50 staff that have joined the business between 2010 and 2018.</p>
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<b>Retail</b>	<ul style="list-style-type: none"><li>• T1 Roster Efficiency</li></ul> <p>A total of 52 FTEs p.a. by 2024 have been disallowed from forecast accounting €9m of the cumulative payroll difference.</p> <p>CEPA concluded there is scope for efficiency from improved staff allocation at both terminals in Dublin Airport, and in particular at Terminal 1. The Commission used data from Dufry's 2017 annual report as an external benchmark of the allocation of retail staff across available retail floorspace for Dublin Airport.</p> <p>Dufry had on average 6.7 FTE staff per 100 square metres of retail space, compared with Terminal 1 and 2 at Dublin Airport, which in 2017, stood at 10.7 and 6.9 FTE respectively. CEPA suggested that under the rearrangement of direct retail and concession floor space in Terminal 2 and estimated increases in staff numbers, by 2019, these figures are forecast to increase to 10.9 and 8.6 FTE (8.6 FTE is incorrect as it does not include the increased sqm in T2, the correct figure is 6.6). CEPA concluded that there was potential scope for efficiency from improved staff allocation at both terminals at Dublin and particularly at Terminal 1.</p> <p>There are 4 common metrics which ARI uses to measure staff productivity, these are FTE per 100 sqm, transactions per FTE, average sales per FTE and Passengers per FTE. The 2019 Draft Determination focuses on FTE per 100 sqm showing T1 and T2 at 10.7 and 6.9 respectively in 2017 and compared it with Dufry's UK, Central and Eastern European operations which had an average 6.7 FTE per 100 sqm. We believe that the assertion that T1 (and to a lesser extent T2) is inefficient based on a comparison with T2 and Dufry is flawed as it is primarily based on a single measure of FTEs per 100 sqm (rather than taking into account, transactions per FTE, average sales per FTE and Passengers per FTE).</p>
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**TABLE 5.27 STAFF PRODUCTIVITY MEASUREMENTS**

	T1	T2	Dufry
FTE per 100 SQM	10.9	6.6	6.7
Sales per SQM	47,534	31,894	23,841
Sales per FTE	445,436	462,476	356,764
Transactions per FTE	13,672	11,907	Not available
Pax per FTE	66,179	53,344	Not available

The benchmarking needs to consider the following:

- The dynamics of T1 and T2 are significantly different due to store layout/size, passenger demographics and flight waves. FTEs per 100 sqm is not the right benchmark to use (particularly in isolation) for T1 as T1 has a relatively small retail space of 1,340 sqm given the large passenger and transaction volumes. Ultimately the objective of FTEs is to ensure each customer receives excellent service from product knowledge and support to transaction completion. This can only be the case if there are sufficient FTEs to meet passenger demand. Given that there is a significant difference in the FTE requirement to operate 1,340 sqm’s of retail space in a high volume or low volume terminal, FTE’s per 100 sqm cannot be relied on.



- T1 is considered a more efficient operation in terms of transactions per FTE and passengers per FTE.
- Given that average sales per FTE are higher in T1 and T2 than Dufry, we dismiss CEPA’s claims that T1 staff should be reduced by 52 representing [redacted] of 2019 FTE baseline.

- If the Dufry comparator is to be used as the benchmark of staff efficiency, it should be noted that ARI are actually delivering a better sales return per FTE at Dublin Airport.
- The Sales per FTE target set by the Commission for 2024 would be 120% above the current Dufry amount of €356k which is both unrealistic and unachievable.

**TABLE 5.28 SALES PER FTE**

2019 T1 FTEs	146
CAR Reduction	-52
Volume adjustment	4
Total 2024 FTEs	98
CAR T1 Revenue Target	€77,008,000
Sales per FTE	€786,000
2017 Dufry	€356,000
Difference	+120%

As part of this process, a new roster for the T1 Sales Professionals was introduced in March 2019. The new T1 roster cover has a change in shift times (for Retail Sales employees) with shifts now starting at 6am, 8am, 11am and 12am to ensure the business has the right people in the right place at the right time based on demand data and sales analysis. It will also enable increased roster cover on busier days based on demand data and sales analysis.

- **Elasticity of 0.2**

CEPA applied an elasticity of 0.2 to reflect an increasing requirement for Retail floor staff driven by passenger volumes.

CEPA stated they did not believe there to be a strong link between passenger volume and rather the number of staff required was more closely related to floor space dedicated as well as passenger throughput. CEPA assumed that an increase in passenger numbers within the existing infrastructure is likely to

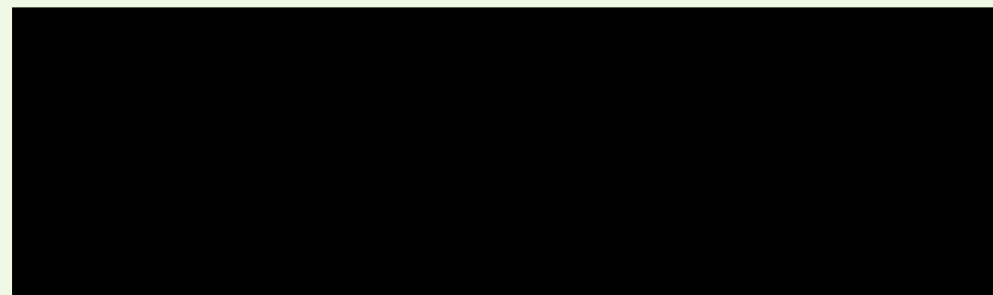
	<p>require a less elastic response given that passenger growth is more likely to take place in the less congested hours.</p> <p>CEPA’s assumption results in 1 additional FTE forecasted in T1 and 1 in T2 in each year. Given the current passenger per FTE ratio is already significantly high at 66,179 passengers, it is not realistic to assume that the proposed 1 FTE added each year to meet a passenger increase of circa 3% each year is sufficient. If this assumption is not corrected, the passenger per FTE could grow to circa 75,447 passengers per FTE by 2024. At this ratio of passenger per FTE, passengers would receive a very poor level of service with low levels of passenger interaction and slow processing of transactions. Additionally, Frontier Economics quantified the elastic at 0.46 while SDG in the 2014 Determination 0.52. We do not believe the elasticity has reduced to 0.20.</p>
<p><b>Central Functions</b></p>	<p>1. Transfer Hosts</p> <p>In setting its 2019 operating cost baseline CEPA assumed that FTE numbers for the Transfer facility staff would remain at the 2017 level of 8 FTEs despite the Dublin Airport projection of 22 FTEs for 2019. The cumulative financial impact of disallowing 14 FTEs is estimated at €3.3m over the period 2020-2024.</p> <p>CEPA stated that there were efficiencies to be gained from a more flexible deployment of all terminal facilities staff including those working to help facilitate passenger transfers.</p> <p>Transfer passengers at Dublin Airport has grown c72% since 2019 due to the consistent increase in long-haul and transfer passenger growth. This growth has been a strategic focus of ours is in accordance with the National Aviation Policy<sup>38</sup>.</p> <p>The expansion of our transfer passenger base has required investment in FTEs which are critical to this operation to ensure minimum connection times are</p>

<sup>38</sup> *“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. In this context, the support and promotion of Dublin as a hub airport is an important means of maximising air access for the Irish economy.”*



	<p>achieved as transfer passengers account for a significant portion of passengers on a number of transatlantic routes.</p> <p>The number of transfer hosts has increased from 8 in 2017 to 15 in 2018 due to the opening of the new Transfer facility. The addition of 7 additional staff was required due to perform the following duties:</p> <ul style="list-style-type: none"><li>• <b>Electronic E-Gates:</b> This includes queue management and passenger assistance at the gates in how to interact with the automatic barrier system - up to 3 staff at peak times to main the safe flow of customers and to avoid safety incidents caused by overcrowding. Ensure that UK bound pax do not use E-Gates due to CTA requirement.</li><li>• <b>Autopass:</b> This includes the safe management of the queue; boarding card checks and customer service assistance at the Autopass gates.</li></ul> <p>In 2019, additional flights from Pier 3 resulted in additional transfer passengers arriving onto Pier 3. In order for these passengers to make their connecting flight via the new streamlined Transfer facility, transfer passengers need to be bussed from Pier 3 to Pier 4. This requires additional staff for queue management, wayfinding from aircraft into the terminal building at Pier 3 and then onward via bus to Pier 4. Additionally, it is necessary for a customer service assistance to be positioned at the bus door and at the ramp/building door to direct passengers accordingly for Health &amp; Safety reasons.</p> <p>In order to continue growth in transfer passenger traffic at Dublin Airport, it is necessary to have a smooth transfer journey. If Dublin Airport did not have Transfer Hosts, passengers would be required to present their boarding pass at Security and go through the security process adding volumes at central search, increasing the transfer passengers time to get to their next flight and overall an inefficient airport experience. Should lower levels of staff be imposed for this area, the above duties and service levels for passengers and airlines will be impacted.</p> <p>2. Commercial FTEs</p> <p>CEPA applied a 12 FTE reduction to the number of commercial FTEs included for 2017 and a further 2 FTE reductions when adjusting from 2017 to the 2019 baseline. This is estimated to have a cumulative impact of €6.8m over the period 2020-2024.</p>
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	<p>The rationale for this reduction is our revenue per FTE metric has declined on 2014 levels.</p> <p>Overall commercial revenues excluding Car Parks &amp; Retail increased by +31% in 2017 vs 2014 and +53% in 2019 vs 2014. This equates to +€30m increase in the level of commercial revenues which will be subsidising airport charges by €0.90 per passenger in 2020.</p> <p>While the number of FTEs have increased, and the revenue per FTE metric has declined, the overall profitability of these businesses has increased substantially more than offsetting incremental payroll costs of &lt;€2m for additional FTEs versus +€30m in revenues per annum. Thus, the significant improvement in financial performance more than justifies the decline in FTE metric. Additionally, it should be noted that the businesses and revenue streams/customers for these businesses have changed since 2014 and therefore a negative metric is not always an indication of business and financial performance.</p> <p>We would strongly disagree with the two metrics used to assess Commercial FTE efficiencies:</p> <ul style="list-style-type: none"><li>• Revenue per passenger</li></ul> <p>CEPA refers to revenue per passenger metrics declining for this category which is correct as a number of businesses e.g. Property, Advertising and Commercial Concessions (which are subject to minimum annual guarantee payments) are not elastic with passenger growth therefore this results in a lower commercial revenue per FTE metric for these areas. Despite this, these businesses have seen a substantial increase in their revenue streams due to other factors such as renegotiated tenders and longer-term advertising partnerships.</p> <ul style="list-style-type: none"><li>• Revenue per FTE</li></ul> <p>The main increase in FTEs over the period 2014 to 2019 relates to Platinum Services [REDACTED] That said, the increased investment in staff has doubled the business revenue and made this business profitable.</p>
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Platinum Services

Platinum Services is a private terminal and it is now open 24/7 with a dedicated team on hand to ensure customers receive VIP treatment. This luxury service requires exceptional customer service and therefore drives a higher FTE requirement to other businesses.

CEPA's recommendation to disallow 14 FTEs (19 vs 14) essentially relates to this business and represents 50% of the workforce. Platinum Services is now a profit generating business with revenues offsetting incremental costs. To disallow an allowance for these staff puts the future financial viability of this business at risk as the incremental revenue associated the restructured operation cannot be maintained. If the Commission wishes to disallow opex allowances for FTEs, consistent treatment across regulatory building blocks is necessary, therefore the Commission should also disallow the incremental revenue versus 2014 of €2.9m p.a. from Commercial revenue forecasts/targets.

Staff increases in other Commercial areas:

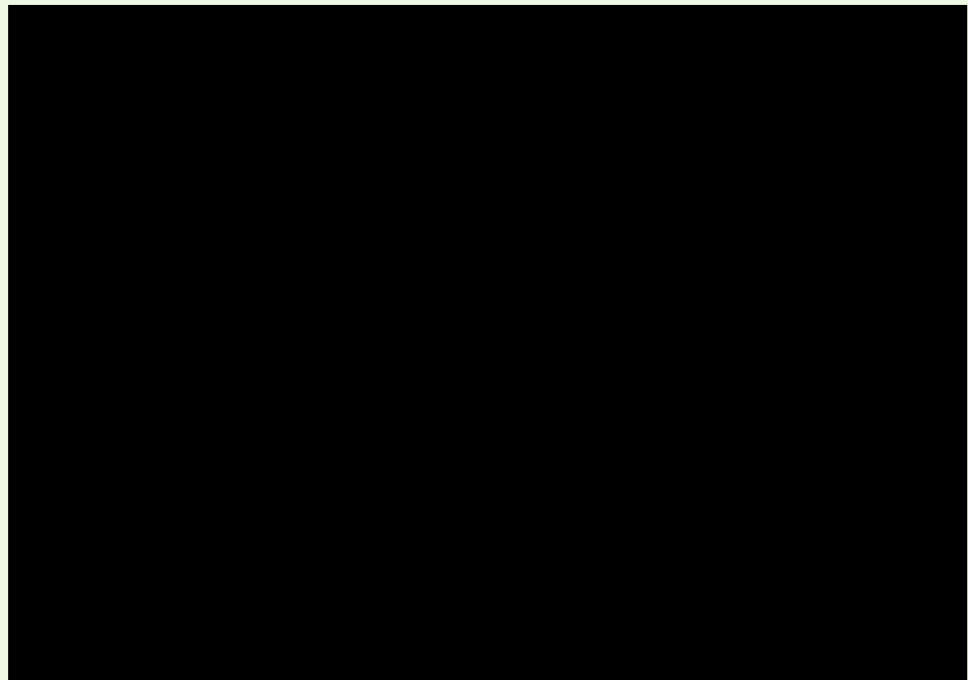
- Advertising staff levels have increased by 2 as we have taken a deliberate and strategic decision to put extra focus in the areas of sponsorships and brand partnerships as key channels to help drive incremental revenue for Dublin Airport over the next 5 years. We have done this mainly due to the greater revenue certainty these longer-term deals provide against a backdrop of transient base revenues, digital transformation in the market and to also off-set the increasing marketing investment going to online (Google & Facebook). Maintaining our base revenues and growing more longer terms deals, requires significant additional team effort to deliver to both the

	<p>standards demanded by the Irish marketing industry and Dublin Airport.</p> <p>A typical sponsorship deal for example can take anywhere between 8 – 12 months to plan, negotiate and deliver. A good example is the Grant Thornton Sponsorship project (Q2 2018) – worth █████ over three years. This timeframe involved meeting various stakeholders across Dublin Airport, working closely with the client, project management of all communications, meetings, negotiations and legal contracting was run by just one person on the Media Sales team, while at the same time, still managing all existing day – to – day client portfolios.</p> <ul style="list-style-type: none"><li>• Future Factory - 4 of the incremental staff can be attributed to <i>The Future Factory</i> - a new business development and innovation function for Dublin Airport. There are intense forces changing the landscape of our business e.g. our rapidly changing passenger base. Disruptive change is accelerating across all industries. This disruption is being driven by ever changing, and quite often, unreasonable customer expectations which are being enabled by a perfect storm of changing technology. Consumers “<i>want it all and want it now</i>”. This causes a tension for consumers and a problem for diverse businesses like our own. This is forcing us to rethink who we serve, what we do and how we do it. As a leading airport in Europe, we must cater for all consumers needs if we want to remain relevant and compete with airports that are ahead of us in this space e.g. Munich Airport have developed LabCampus with a team of 7 people focused on building a cross industry innovation eco-system for Munich Airport and its partners”.</li></ul> <p>A good example of a live project at <i>The Future Factory</i> is the examination of Plane Water- Dublin Airport’s acclaimed honesty-based water product which generates c. █████ in Retail Revenue per annum. With a key focus on reducing single use plastic, from a passenger, a business and a governmental policy perspective, we are forced to rethink this product and how we best distribute it to passengers to make the business category more sustainable while also looking at how we can protect revenue. <i>The Future Factory</i> is working with a range of stakeholders from across the business to look at how we can</p>
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encourage passengers to switch their behaviour to a more sustainable alternative without impacting the passenger experience.

- Commercial Concessions & Property – one additional FTE for revenue assurance since 2017 ( [REDACTED] ) which improves the control environment, identifies revenue leakage issues and provides comprehensive revenue risk analysis to drive internal improvements through prioritisation of tasks or resolution of activity to mitigate risk across commercial business activities. A second additional FTE in Concessions & Property is due to annual maternity cover required in the Commercial department which has a higher weighting of female staff.
- DATS - The Dublin Airport Travel Services business has grown revenue from €4m in 2014 to an expected €14.8m in 2018. The significant focus and increase in this business have required an additional 2 staff members – a graduate and manager. This incremental payroll cost of approx. €0.1m p.a. is significantly offset by incremental annual revenue of €8.3m (excluding Platinum Services) p.a. since 2014.

The expansion of the business over the past few years has been driven by:



There is continued focus on growing this business into the future with €11m of CIP projects provisionally allowed to improve and expand this business

	<p>further and grow the business to €20m by 2024 (as per the Commission), +€5m p.a. on 2018 revenue levels.</p> <p>3. HR</p> <p>CEPA took the 2017 staff level resulting in a disallowance of 16 FTEs in this area. This is estimated to have a cumulative impact of €9m over the period 2020-2024.</p> <p>CEPA stated that they had not found any significant inefficiency in the number of HR support staff and it therefore took the 2017 number of FTE staff as its baseline estimate. CEPA dismissed the increase in 2019 FTE levels stating that <i>“the largest increase is due to additional HR staff being hired as part of a HR Transformation programme, ...the size of such efficiencies has not been estimated”</i>.</p> <p>Our focus over the last period for HR has been to re-invigorate the HR model based on strategic Business Partners and Centres of Excellence, developing a people information platform and improving processes to deliver a better service for our growing and more demanding workforces.</p> <p>The number of HR staff has increased by 16 from 43 in 2017 to 58 in 2019.</p> <p>In 2019, the Groups graduate programme will be centralised and led by HR. Previously graduates were booked in local Business Units. The intention is to have a programme of 20 FTEs annually to build the Talent Pipeline. HR will also participate in the college internship programme from 2019. 2019 impact is an additional 9 FTEs as the programme starts in Sept and annually an additional 22 FTEs.</p> <p>The remaining additional 7 roles can be attributed to:</p> <ul style="list-style-type: none"><li>• Establishment of a HR Centre of Excellence Model (CoE Model) to build capability and support our business from the centre in the areas of Compensation &amp; Benefits, Employee Relations, Talent Acquisitions, Talent</li></ul>
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	<p>Management &amp; Organisational Capability. The full suite of HR services is currently delivered by our in-house HR teams.</p> <ul style="list-style-type: none"><li>• HR Business Partnering model was implemented to enable HR Business Partners to address issues at source and support both employees and managers to do their jobs on a day to day basis. This has led to an increase of 3 FTEs from 2017 to 2019.</li><li>• Implementation of iHR service desk to act as the first point of contact for employees to raise HR queries, with a focus on first call resolution. The increase in the Groups FTEs from 2014 has led to a higher volume of staff issues and people related queries.</li><li>• Leading a Data Project (E Filing project) to ensure compliant management of staff data including contracts and personnel data. Key focus for this team is to ensure Dublin Airport are fully compliant with all GDPR requirements introduced in 2018.</li><li>• Follow on activity ongoing to deliver the Pension &amp; Cost Recovery programme and implement the Pension Unfreeze in 2020. A head of pensions role was created in order to engage with IIA and also to focus on increasing the pension update from staff.</li><li>• Focused effort to partner with the Unions to build better working relationships and agree pay and productivity measures for staff to move our business forward.</li><li>• Centralise Recruitment to reduce reliance on external parties and reduce cost per hire.</li></ul> <p>It should be recognised that there are additional staff in the HR function as the Group is a bigger business now with a larger workforce than 2014. The number of FTEs in the Regulated Entity has increased by 34% from 2,046 FTEs in 2014 to 2,751 FTEs in 2018 while the number of HR FTEs excluding Transformation</p>
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has increased by 30% from 2014 to 2018. The increase in HR FTE's is required to provide people services to a growing workforce.

The HR Business Partnering model was established in 2014 and the ratio of HR Business Partners to FTE was 325: 1. Gartner's (CEB) industry benchmark outlines that industry standard for HR Business Partnering Model is 150:1 to provide for effective HR Services for staff. Suggesting that Dublin Airport is under resourced in terms of providing the right level of service to staff. However, where there is a mature Centre of Excellence (CoE) model the ratio of HR Business Partners to staff could move to a ratio of 300:1 which is the Dublin Airport target.

Over the next five years HR is focused on the delivery of its People Strategy through; Building Leadership Capability, developing Career & Reward frameworks for staff, investing in HR systems to automate processes and setting out clear people standards, creating a Leadership capability and providing addition services to a growing workforce such as staff health & wellbeing programmes. The focus of the people strategy is to build capability and future proof our HR services and capability. All of these items are considered important in the current environment to enable Dublin Airport to be an employer of choice & a great place to work which enable Dublin Airport to attract, retain and create an environment where employees are engaged and empowered and to develop great leaders. In 2018, it was the first year that Dublin Airport ranked 9<sup>th</sup> in the list of companies with the best corporate reputation in Ireland per the Reprtrak survey.

#### 4. HR Transformation

CEPA has stated that *"they expect the number of FTEs working in Transformation will reduce from 2021 to zero by the end of the period"*.

The Transformation team consisted of 10 staff in 2018. This team is responsible for the development, implementation and rollout of Mytime across the business and the transformation project management office. Previously there was a lack of investment and a slow pace of change in this area which negatively impacted the business. This project will bring roster technology and up to date practices and will allow the group to be less



	<p>dependence on external professional services firms who have this knowledge and experience.</p> <p>This project is expected to achieve annual saving target of €2.4m when Mytime is fully implemented, this was highlighted in our Frontier Economics report and the savings relate to absence management, roster efficiency, less resources as there will be standardisation of processes, rules and processes.</p> <p>The Transformation team will build the transformation core capability, build an inhouse change management core competence and bring inhouse Transformation Project Management.</p> <p>The CEPA report noted that the team will reduce to zero by the end of the period. This is the case for the core Mytime team which consists of 7 FTEs however, the Transformation PMO office will increase from 3 FTE to 5 FTEs as an additional 2 project managers are required to have the inhouse capability. There is also the establishment of the Workforce Support Office (WSO) which will consist of staff from the security BU Staff Planning &amp; Administration office which is a move from Campus Services to Central Functions.</p> <p>WSO will be the new CoE for time &amp; attendance, rostering governance and processes for the Group. At the end of the period the WSO staff will be 11. The cost of this this team over the period 2020 – 2024 including the saving efficiency's will be €1m.</p> <p>5. Finance</p> <p>In setting the 2019 cost baseline for the Finance Function, CEPA took the 2017 FTE number resulting in a disallowance of 6 FTEs in this area. This disallowance results in a cumulative reduction of €4m in the operating cost allowance.</p> <p>CEPA stated that Dublin Airport has not realised efficiencies from the expansion of the Shared Services Centre (SSC), this assessment is based on the assumption that the scale of the growth should have been matched by a proportionate reduction in other finance staff leading to an efficiency saving of 6 FTEs in 2019. Therefore, it imposed a reduction of 6 FTEs from Dublin Airport's operating cost forecast for 2019.</p>
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	<p>The SSC function has numerous departments which are outside the finance department, such as payables &amp; expenses, billing &amp; revenue assurance, customer support services, employee services and payroll, workforce support, continuous improvement department and a financial reporting department. The SSC team has resourced upwards over the last number of years due to both the transition of transactional work to SSC and also to support the business in numerous ongoing projects outside the finance function.</p> <p>The number of SSC FTEs has increased from 47 in 2017 to 55 in 2019. The requirement for increased FTEs within the SSC departments has been driven by the following factors:</p> <ul style="list-style-type: none"><li>• Procurement administration, Payables &amp; expenses: Transition of AP processing &amp; transactional work from the business to SSC</li><li>• Customer support services (car parking queries, taxi administration etc): Additional resources required due to the increase volume of calls as the passengers have increased by 45% from 2014 to 2018. There is a direct correlation between the number of passengers and the call volumes, with contact volumes increasing exponentially</li><li>• Employee services &amp; payroll: Regulated entity FTE's have increased by 34% from 2014 to 2018 which has a direct impact on the volume of employee services &amp; payroll activities. There have been a number of significant project initiatives in this space over the past number of years such as introducing Real Time Reporting with Revenue, moving all our staff to Pay in Arrears (still ongoing) and the introduction of Mytime project (Time and Attendance), partnering with trade unions and supporting &amp; actioning changes in the IR environment (cost recovery programme, trade union discussions etc, implementing payment in arrears, consolidating the number of payrolls).</li><li>• Workforce Support – Additional resources required to support the MyTime project and the maintenance of the current Clockwise system during the transitional period</li></ul> <p>The staff increases in SSC have not been proportionately offset by a reduction in the other central finance staff as the demands on central functions finance</p>
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	<p>has expanded over the period in various areas of financial reporting, business planning, treasury and tax.</p> <p>Historically the tax function consisted of 1 person and was heavily reliant on external consultants and professional services firm. A decision was taken to hire an additional tax accountant to build the inhouse capability and reduce reliance on external firms as a result of; entering Cooperative Compliance Framework, conducting in house tax self-reviews.</p> <p>The financial reporting team has increased by 1 FTE (Finance graduate) at a much lower unit cost than the average for this category in order to build our talent pipeline. There has been an increase in external reporting requirements which has been absorbed by the existing FTEs in terms of increased engagement and reporting requirements with DTTAS and NewEra on various finance items (financing, Code of Practice reporting requirements and other reporting requirements (strategic forecasts and dividend policy). Central functions financial processing, governance and compliance has also moved into Central.</p> <p>6. <u>Strategy</u></p> <p>In setting the 2019 cost baseline for the Strategy Function, CEPA took the 2014 FTE number resulting in a disallowance of 6 FTEs in this area. This disallowance results in a cumulative reduction of €2.5m in the operating cost allowance.</p> <p>CEPA reduced the number of strategy staff to 2014 levels, implying a reduction of 6 FTEs on the basis that Dublin Airport has adequately justified the increase in staff numbers given its activities were largely similar in scale to its activities on 2014.</p> <p>The staff increase in this area is required in order to support the increased activities and volume of traffic going through Dublin Airport which has affected the company's approach to strategy. The number of strategy FTEs has increased by 6 FTEs from 2014 which is primarily due to the creation of a Dublin Airport Strategy function set up post 2014.</p>
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The Dublin strategy function was established as a result of the Dublin Airport business expansion. The team is a project management office with its core focus being the development, implementation and engagement of the Dublin Airport strategy over the 4-year period. The team ensures that strategic ambitions and actual performance is achieved through profitable growth, which is achieved by reporting and alignment with the Leadership & Senior Management team, employee engagement, providing data driven insights to action priorities and the creation of business model and cultural restructures. The team supports the Dublin Operation in many ways provides an inhouse internal consulting role on various airport initiatives such as the roll out of a Systems Engineering approach to asset management which will provide better information management for decision making and stakeholder engagement, approvals and governance structure for infrastructure development, efficiency business model review and identifying areas of inefficiency and identifying business opportunities.

#### 7. Other Support Function

In setting the 2019 cost baseline for the Other Support Function, CEPA took the 2017 FTE number resulting in a disallowance of 8 FTEs in this area. This disallowance represents a cumulative reduction of €4.4m in the operating cost allowance.

CEPA stated that it had reduced the number of other support staff to 2014 levels, implying a reduction of 8 staff to 2017 levels on the basis that Dublin Airport had not adequately justified the increase in staff numbers.

The other support function includes a number of departments including compliance, governance, communication and internal audit departments. The departments which have grown since 2014 are Quality Improvement, Health, Safety, Security, Environment (HSSE), Legal and Internal audit.

While the Dublin Airport does accept that the number of other support staff has increased over the period 2014 to 2018, it should be noted that this increase is primarily due to the imposition of additional mandatory requirements under various new regulations and resulting from legalisation changes. This in turn has had a substantial impact of the volume of activity and projects which the Dublin Airport needs to complete and report on.

	<p>Reductions to staffing in these areas will have serious consequences in terms of the Dublin Airport's ability to maintain its legal and regulatory compliance. The impact of these changes on individual departments are outlined below.</p> <ul style="list-style-type: none"><li>• <b>Internal Audit function +2 FTEs</b><ul style="list-style-type: none"><li>○ The additional staff are graduates on a basic salary and the rationale is to build up the internal audit function and to retain staff for a number of years as there is a high volume of staff turnover. Over the period 2018 / 2017 internal audit has identified [REDACTED] and identified multiple control issues which could have led to potential financial losses.</li><li>○ The Chartered Institute of Internal Auditors "Models of Effective Internal Audit" May 2015 gives the various sizes of internal audit functions vs FTE. Transport for London has an internal audit function of 58 IA FTEs vs 28,000 FTEs (1IA: 482 FTE). Dublin Airport ratio is 1IA:621FTE) which is significantly better.</li></ul></li><li>• <b>Health, Safety, Security, Environment (HSSE) function + 2 FTEs</b><ul style="list-style-type: none"><li>○ This increase is due to significant changes in both safety regulatory changes which are imposed on the organisation and also increased reporting / monitoring requirements in relation to sustainability / environment.</li><li>○ The conversion from the IAA airport license to an EASA Certificate (introduced in 2018) has led to substantial changes as certification is required and there was a requirement for the safety management system to be re-developed. Following the certification of the airport under EASA rules, there is now an obligation to maintain and continuously improve the airport manual, airport procedures and SMS. Additionally, increasing internal oversight activities have been a key feature in relation to aviation safety, with substantial new obligations for compliance monitoring, management reporting, internal review and investigation of safety related issues. This has led to an enhanced management system at all levels and increased reporting requirements from a governance perspective.</li><li>○ As amendments or new EASA regulations are proposed and implemented, there is a need to assess their implications and inform/consult internal personnel about the implications, and</li></ul></li></ul>
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	<p>in some cases make submissions on key topics on behalf of Dublin Airport.</p> <ul style="list-style-type: none"><li>○ There has been a significant increase in the frequency and intensity of interaction with the safety regulator IAA-SRD following the move to an EASA certificate in terms of the level of interaction on current compliance activities as well as future projects, which has implications or activity in HSSE as well as some other areas.</li><li>○ EU Regulation 139/2014 places the onus on the Aerodrome Operator to demonstrate and monitor its own compliance with their Operations and Certifications Basis (i.e. terms of the certificate), where previous regulation placed this responsibility primarily on the regulator. HSSE fulfils this oversight function for the Airport.</li><li>○ The compliance programme necessitated by the above points is technical in its focus, requiring competent trained individuals as required by the aforementioned Regulation.</li><li>○ In addition, the formal oversight activity by IAA-SRD has increased in terms of focus and depth of analysis. HSSE actively engages with SRD throughout audit programme for both airports to ensure adequate clarity is provided, and to reduce the potential for findings.</li><li>○ Increased level of interaction with occupational health and safety regulator (HSA) over this period and going forward. HSSE act as the single point of contact with the HSA to coordinate robust replies to regulatory investigations that protect the business and organisation</li></ul> <ul style="list-style-type: none"><li>● <b>Sustainability/Environmental Monitoring</b><ul style="list-style-type: none"><li>○ In recent years there has been a notable increase in the level of interaction with various environmental regulators including EPA (Air Quality, noise mapping); FCC/ Irish Water/ (IFB) (surface water drainage). This is expected to increase going forward with the developments in national environmental and sustainability policy.</li></ul></li></ul>
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	<ul style="list-style-type: none"><li>○ Increased reporting requirements to local communities re environmental performance. There is increased environmental performance monitoring being required.</li><li>○ Given the “Green Agenda” which is firmly to the fore of Irish policy development, proactive informed environmental and sustainability management will be of paramount importance to enabling Dublin Airport’s growth in accordance with the corporate strategy.</li><li>○ An increased level of focus on sustainability at the airports has led to the review and re-formulation of Dublin Airport’s sustainability strategy in 2016, leading to HSSE coordinating the ongoing development of policy and management of sustainability implementation workstreams on a company wide basis, eg LEV, Energy, Carbon, Air Quality, Waste. This will be an ongoing and increasing requirement, in line with Climate change adaptation, increased environmental regulation and increased enforcement of environmental regulations</li><li>○ 2019 will see the start of a process of moving to ACA Level 3+ which will require a substantial amount of additional management of stakeholders in relation to carbon and sustainability initiatives across both airports, which HSSE will be coordinating. This means further increased workload over and above current levels.</li><li>○ The level of environmental support from HSSE for Planning processes is increasing as projects must undergo increasingly rigorous environmental assessment, which require significant input regarding current environmental monitoring standards and performance at the airport. AS CIP projects move forward this will increase even further, however this support is key to successful planning applications.</li></ul> <ul style="list-style-type: none"><li>● <b>Legal function +2 FTEs</b><ul style="list-style-type: none"><li>○ The increase is due to a change in the legal landscape in which the Group operates. This has led to significant increases in compliance and oversight by regulators and thus increasing requirements on the inhouse legal function. The main areas to call out are:</li></ul></li></ul>
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	<ul style="list-style-type: none"> <li>○ Legal planning, environmental and planning challenges relating to the capital expenditure programme of the current CIP programme and also the expanded CIP2020+ programme and the North Runway. The introduction of the noise regulation has required legal oversight and strategic legal inputs across the spectrum of the these intertwined legal regimes. Within this space, legal have been involved in a number of areas such as Runway, Runway overlay, 32m passenger cap, noise insulation &amp; house buyout scheme for the North Runway.</li> <li>○ EU Procurement Directive is highly prescriptive from a legislative point of view. There has been a dramatic increase in connection with procurement challenges. In this space legal has been involved in the T2 linked hotel tender.</li> <li>○ Heightened focus on security continues to demand significant legal input including the transfer of responsibility from grand handlers to Dublin Airport as mandated by IAA. This has led to significant work in terms in the change in hold baggage screening from EDS standard 2 to EDS standard 3. Reviewing the contractual arrangements with providers.</li> <li>○ Assessing the impact of changes in legislation which led to tighter governance and compliance with the introduction of the new Companies Act, Lobbying Act and Antibribery &amp; Corruption. The introduction of the General Scheme Aviation Regulation (Amendment) 2019 regulatory oversight and merger of two regulators IAA and the Commission.</li> </ul>
<p><b>IT</b></p>	<p>In setting the 2019 cost baseline for IT non-pay related expenditure, CEPA readjusted IT staff numbers back to the 2017 level and made a unit cost reduction. The cumulative financial impact of this for Dublin Airport over the period 2020-2024 is expected to be €4.1m,</p> <p>CEPA stated that its analysis failed to find justification for proposed increases to IT staff numbers after 2017 (+4 FTEs).</p> <p>The CEPA report neglects to take into account the fact that two new teams have developed within IT over the course of the current determination period, namely IT Security to manage all aspects of GDPR compliance and data</p>



	<p>security and also Data and Analytics to support the business with initiatives to enhance the value of airport data. Together, these two teams accounted for the increase in IT FTE from 2017 to 2019.</p> <p><b>IT Security +2 FTEs:</b></p> <p>Over the last number of years, cyber security risks have increased significantly, and cyber-threats on critical national infrastructure are now considered to be a national security risk. In addition, we are now subject to the following regulatory requirements:</p> <ul style="list-style-type: none"><li>• The General Data Protection Regulation (GDPR) – this requires that we appoint and adequately resource a Data Protection Officer (DPO) – this responsibility was assigned to the IT Security team in 2018.</li><li>• The Network and Information Systems Directive (NIS-D) – this classifies Dublin Airport as an Operator of Essential Services (OES) and requires that we secure our network and IT environments according to the requirements of the National Cyber Security Centre – this responsibility was assigned to the IT Security team in 2019.</li></ul> <p><b>Data &amp; Analytics +2 FTEs:</b></p> <p>The airport environment presents a unique and diverse set of business challenges. Data is generated across all stages of the passengers’ journey creating a rich environment for analytics. Unlocking the power of data is key to driving an intelligent airport; one that optimises its commercial &amp; operational activities, shares real-time information &amp; delivers an outstanding airport experience for airlines &amp; passengers.</p> <p>The role of the Data and Analytics team is to create trusted information and actionable insights about business operations, passengers, airline customers and partners that can be applied to drive business outcomes.</p> <p>This will require more sophisticated data capabilities to manage the increase in volume, the computer power to process this data and more sophisticated</p>
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	<p>tools to derive actionable insights utilising artificial intelligence and machine learning. It will also require investment in resources to ensure we have a competency to enable analytics at scale across Dublin Airport, taking advantage of the opportunity afforded by new technologies such as AI while doing so in a controlled and compliant manner.</p> <p>This investment is line with industry trends where organisations are investing more and more in analytics.</p>
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### 5.16 Non- Payroll Supporting Evidence

5.185 In the CEPA/Taylor Airey analysis a number of arbitrary reductions were made to nonpayroll costs which impacted the 2020-2024 cost projections. Dublin Airport is providing detailed supporting evidence set out in the table below to illustrate that these reductions were not justified.

Cost Category	Discussion
Utilities	<p><b>1. Water</b></p> <p>In its operating cost forecast, CEPA is estimating that water expenditure will rise from €0.9 million in 2019 to €1.1 million by 2024. This has created a €1.2m variance between the Dublin Airport and the Commission forecasts in real terms.</p> <p>CEPA states that it expects that water consumption will be partially driven by passenger volumes. It has assumed a passenger elasticity of 0.5, taking into consideration historic growth in consumption and on-going efficiency initiatives. In its forecast of unit water costs, the Commission considers that water prices are due to rise from €2.21 to €2.64 per cubic metre on a phased in 3-year basis from Q4 of 2019. CEPA then assumes that costs will stay constant thereafter.</p> <p>Dublin Airport currently pays Irish Water directly for 7 separate incoming water feeds. These accounts were previously under Fingal County Council and were the subject of a local agreement. Under the new scheme Irish Water will implement the new charges in Q2 2020.</p> <p>The Commission for Regulation of Utilities (CRU) launched a final consultation on its proposed decision on future tariffs for non-domestic</p>

water users. The consultation commenced on Monday 15th April and closed 13th of May 2019. The proposal sets out a national set of charges to be implemented. This is further to the submission in June 2018 made by Irish Water to CRU establishing the initial guiding principles. The original cost submission was made based on this draft proposal.

The CRU has issued a price for the following price period of €2.80<sup>39</sup> per m<sup>3</sup> from Q2 2020 resulting in a 26% increase in the current 2019 price of €2.22 per m<sup>3</sup>. Due to the significant price increase, there is maximum cap on the following years bill to +10% on the previous year until the annual bill comes in line with the actual price for the year.

**FIGURE 5.12 NEW TARIFF RATES**

**The new metered enduring tariff rates are as follows:**

Metered Tariffs	Water Service Charges		Wastewater Service Charges		Combined Service Charges	
	Standing Charge (€/year)	Volumetric Charge (€/m <sup>3</sup> )	Standing Charge (€/year)	Volumetric Charge (€/m <sup>3</sup> )	Standing Charge (€/year)	Volumetric Charge (€/m <sup>3</sup> )
Band 1 class (<1,000m <sup>3</sup> )	43.76	1.87	44.81	1.92	88.57	3.79
Band 2 class (1,000m <sup>3</sup> – 19,999m <sup>3</sup> )	113.31	1.30	135.79	1.82	249.10	3.12
Band 3 class (20,000m <sup>3</sup> – 249,999m <sup>3</sup> )	1,872.98	1.21	1,969.50	1.81	3,842.48	3.02
Band 4 class (≥250,000m <sup>3</sup> )	21,771.46	1.05	25,266.78	1.75	47,038.24	2.80

As part of our proposition document, we assumed the below price levels. Following CRU latest publication and taking into account the 10% cap, our forecast remains valid. When we compare the Commission’s allowance and divide by consumption levels, it appears the Commission’s average price<sup>40</sup> is on average 10% lower resulting in a cumulative €1.2m variance between the allowance versus our expected forecast.

<sup>39</sup> [https://www.cru.ie/document\\_group/establishing-irish-waters-non-domestic-tariff-framework/](https://www.cru.ie/document_group/establishing-irish-waters-non-domestic-tariff-framework/)

<sup>40</sup> Real allowance/estimated consumption based on pax and elasticity.

**TABLE 5.29 PRICE LEVEL COMPARISONS**

Per m3	2019	2020	2021	2022	2023
Per Propostion	€2.22	€2.35	€2.50	€2.64	€2.64
Irish Water (Final)	€2.22	€2.80	€2.80	€2.80	€2.80
<b>Capped Price (@10% of PY)</b>	<b>€2.22</b>	<b>€2.34</b>	<b>€2.49</b>	<b>€2.65</b>	<b>€2.63</b>
<b>CEPA</b>		<b>€2.15</b>	<b>€2.23</b>	<b>€2.31</b>	<b>€2.39</b>
<b>Variance</b>		<b>-8%</b>	<b>-11%</b>	<b>-13%</b>	<b>-9%</b>

Assuming a static volumetric consumption over the period 2019 to 2024 this will result in water costs increasing by +10% in 2020 to +25% in 2024 versus 2019.

**TABLE 5.30 CONSUMPTION 2019-2023**

Nominal	2019	2020	2021	2022	2023
Consumption	465,585	465,585	465,585	465,585	465,585
Price	€2.22	€2.80	€2.80	€2.80	€2.80
Water Cost	€1,033,599	€1,303,638	€1,303,638	€1,303,638	€1,303,638
Standard Charge	€47,038	€47,038	€47,038	€47,038	€47,038
Total	€1,080,637	€1,350,676	€1,350,676	€1,350,676	€1,350,676
% Change		25%	0%	0%	0%
Cap @10% (flat consumption)		€1,188,700	€1,307,570	€1,350,676	€1,350,676
% Change		10%	10%	3%	0%

Taking into account consumption increases as per the Commission (0.5 elasticity) and the Commission's passenger assumptions, consumption will grow from 466k m3 in 2019 to 490k m3 in 2024. The increase in consumption will increase our water charge further from €1.0m in 2019 to €1.4m (nominal) in 2024.

**TABLE 5.34 CONSUMPTION INCREASE CAR ELASTICITY**

	2019	2020	2021	2022	2023	2024
Pax Assumption	32.5	32.9	33.7	34.6	35.4	36.1
% Change		1.2%	2.4%	2.6%	2.4%	1.9%
Elasticity		0.50	0.50	0.50	0.50	0.50
Consumption Uplift		0.6%	1.2%	1.3%	1.2%	1.0%
<b>Consumption uplift (pax * elasticity)</b>	<b>465,585</b>	<b>468,333</b>	<b>474,062</b>	<b>480,286</b>	<b>486,009</b>	<b>490,626</b>
Standing Charge	47,038	47,038	47,038	47,038	47,038	47,038
<b>Nominal Water Charge</b>		<b>€1,358,371</b>	<b>€1,374,413</b>	<b>€1,391,839</b>	<b>€1,407,863</b>	<b>€1,420,791</b>
<b>Nominal Water Charge Cap @10%</b>	<b>€1,080,637</b>	<b>€1,188,700</b>	<b>€1,307,570</b>	<b>€1,391,839</b>	<b>€1,407,863</b>	<b>€1,420,791</b>
% Change		10%	10%	6%	1%	1%
Inflation Assumption		1.3%	1.7%	1.9%	2.0%	2.0%
Real % Change		8.7%	8.3%	4.6%	-0.8%	-1.1%
<b>Real Water Charge Cap @10%</b>		<b>€1,175,090</b>	<b>€1,272,164</b>	<b>€1,330,335</b>	<b>€1,319,205</b>	<b>€1,305,092</b>
CEPA (real)		€938,647	€987,008	€1,037,638	€1,087,600	€1,103,899
Variance		(€236,443)	(€285,155)	(€292,697)	(€231,604)	(€201,193)

Based on historic consumption increases, we believe the 0.5 elasticity is too low.

**TABLE 5.35 HISTORIC CONSUMPTION INCREASES**

Year	Pax	Net Water m3	Elasticity
2015	25.1	337,100	1.15
2016	27.9	361,340	0.64
2017	29.6	379,154	0.82
2018	31.1	392,404	0.68
Average			0.82

**TABLE 5.36 COMPARISON OF CAR WITH REVISED ELASTICITY**

	2019	2020	2021	2022	2023	2024
Pax Assumption	32.5	32.9	33.7	34.6	35.4	36.1
% Change		1.2%	2.4%	2.6%	2.4%	1.9%
Elasticity		0.82	0.82	0.82	0.82	0.82
Consumption Uplift		1.0%	2.0%	2.2%	2.0%	1.6%
Consumption uplift (pax * elasticity)	465,585	470,092	479,523	489,847	499,420	507,201
Standing Charge	47,038	47,038	47,038	47,038	47,038	47,038
Nominal Water Charge		€1,363,296	€1,389,703	€1,418,611	€1,445,414	€1,467,200
Nominal Water Charge Cap @10%	€1,080,637	€1,188,700	€1,307,570	€1,418,611	€1,445,414	€1,467,200
% Change		10%	10%	8%	2%	2%
Inflation Assumption		1.3%	1.7%	1.9%	2.0%	2.0%
Real % Change		8.7%	8.3%	6.6%	-0.1%	-0.5%
Real Water Charge Cap @10%		€1,175,090	€1,272,164	€1,356,383	€1,355,045	€1,348,531
CEPA (real)		€938,647	€987,008	€1,037,638	€1,087,600	€1,103,899
Variance		(€236,443)	(€285,155)	(€318,745)	(€267,445)	(€244,632)

Should the elasticity materialise in line with the average historic rates of 0.82, there would be a greater variance against the Commission allowance of €1.4m.

This cost is a non-discretionary line item and therefore the Commission/CEPA's forecasts should be based on (1) current price information based on published documentation by CRU and (2) historic elasticity levels.

**Utility Costs****Electricity**

There are three key components to the unit price of electricity - Commodity Costs, Use of System (UoS) Charges, and Carbon Costs. CEPA have used the BEISS fossil fuel price index to forecast future electricity prices at Dublin Airport. We believe that this is fundamentally flawed as it ignores the UoS and Carbon components which comprise 30 – 40% of the unit price.

**Use of System Charges (UoS)**

UoS charges consist of levies and costs associated with the generation and network distribution of electricity. At Dublin Airport they comprise

approximately 40% of the total electricity cost and they are not included in the BEISS fossil fuel price index.

The UoS charges are driven by increases in electricity consumption and increases in import capacity. CEPA have assumed net consumption is expected to remain stable from 2020 – 2024, however, they have not considered the impact of increases in import capacity on unit prices. Import Capacity is a direct function of infrastructure and the capital investment plan is expected to have a significant impact on the electricity load requirements for Dublin Airport as detailed in the table below.

**TABLE 5.37 USE OF SYSTEM CHARGES**

Year	2018	2019	2020	2021	2022	2023	2024
Load (MVA)	13	14.1	16.1	18.5	20.6	21.9	27.1

The impact of the increased import capacity at Dublin Airport on network charges and PSO levies amounts to €1.3m over the next regulatory period.

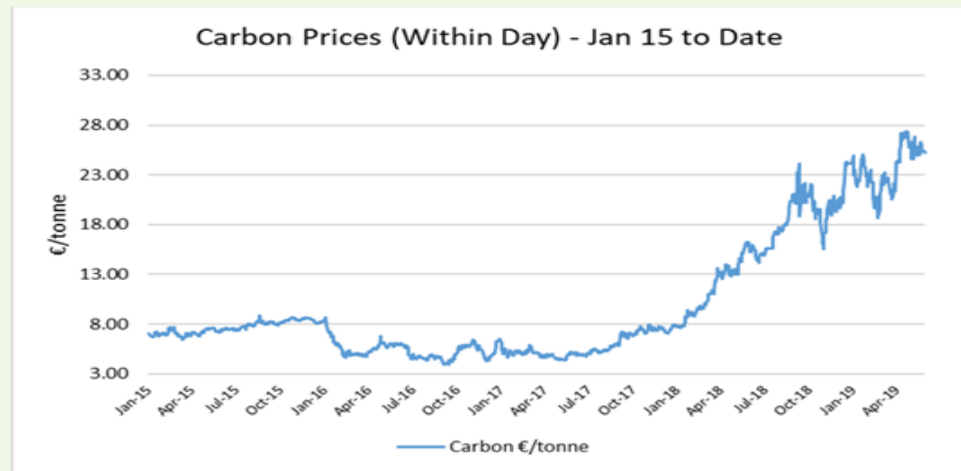
Furthermore, the recent publication of the Climate Action Plan details plans to equalise the electricity tax rate for business and electricity customer to €1/MWh. This represents a €0.5/MWh increase on the current rate and has a cumulative impact 2020 – 2024 of €0.1m.

The total impact of UOS charges not included in the Commission forecast amount to €1.4m.

**Carbon Charges**

Like the UoS scenario outlined above, the BEISS index takes no account of the impact of carbon costs on future electricity prices. Carbon prices have risen significantly since Jan '18 as illustrated in the graph below, rising from €8 to €26 per tonne (225% increase).

**FIGURE 5.13 CARBON CHARGES SINCE JANUARY '15**



All producers of electricity are required under EU legislation to partake in the EU Emissions Trading Scheme. This scheme sets out the value of carbon associated with the burning of fossil fuels and requires the producers to purchase and surrender carbon allowances (EUA) to offset the Carbon emitted. This cost is passed through to the end user.

With increasing Carbon costs being highlighted by all major economic and Government bodies there is a direct effect on the cost of Electricity. Indeed, the Department of Public Expenditure and Reform (DPER) have published a Consultation Paper into Valuing Greenhouse Gas Emissions in the Public Spending Code that sets out a shadow price of carbon of €32 per tonne in 2020, rising by €6.80 a year to reach €59.20 per tonne by 2024. Most recently the Climate Action Plan similarly details a Carbon tax increase to €80/tCO<sub>2</sub>. The contribution of carbon cost in the BEISS Energy forecast is not apparent.

We anticipate carbon price increases will have a €2.2m cumulative impact on electricity prices between 2020 and 2024. This assumes the Carbon Charges are in line with the Department of Public Expenditure and Reform (DPER) consultation paper quoted above.

**Natural Gas**

CEPA has also used the fossil fuel price index as the basis for forecasting future gas prices which ignores the impact of UoS and Carbon Charges.

<b>Financial Impact</b>						
	2020	2021	2022	2023	2024	Total
	€'00	€'00	€'000	€'000	€'000	€'000
Item	0	0	€'000	€'000	€'000	€'000
<b><u>Carbon Charges</u></b>						
Dublin Airport pay a fixed rate per tonne on gas of €20 for which an 80% rebate is received due to the site holding a greenhouse gas emissions permit that has been issued by the Environmental Protection Agency (EPA). On the assumption that Carbon Charges will increase as indicated by the DPER consultation report, Dublin Airport expect gas prices to increase by approx. €400k cumulatively over the next regulatory period.						
<b><u>Summary</u></b>						
The table below sets out the financial impact of each of the points made above. This cost is non-discretionary and therefore the Commission/CEPA forecasts should be based on all relevant price information based on published documentation and historic elasticity trends in capacity and carbon related costs and tax levels. The cumulative value of the variance is €4.1m.						
<b>TABLE 5.38 FINANCIAL IMPACT OF UTILITY CHARGES</b>						
<b><u>Electricity - Use of System Charges</u></b>						
Network Capacity Charge	52	92	127	148	235	653
Public Service Obligation (PSO)	49	87	121	141	224	622
Electricity Tax	26	26	26	26	26	128
<b><u>Electricity - Carbon Charges</u></b>						
Embedded Carbon Cost (€) High Base Rate, DPER Shadow Cost*	187	321	455	590	724	2,277
<b><u>Natural Gas</u></b>						
Carbon Tax***	83	83	83	83	83	417
Variance to be included	397	609	812	987	1,292	4,097

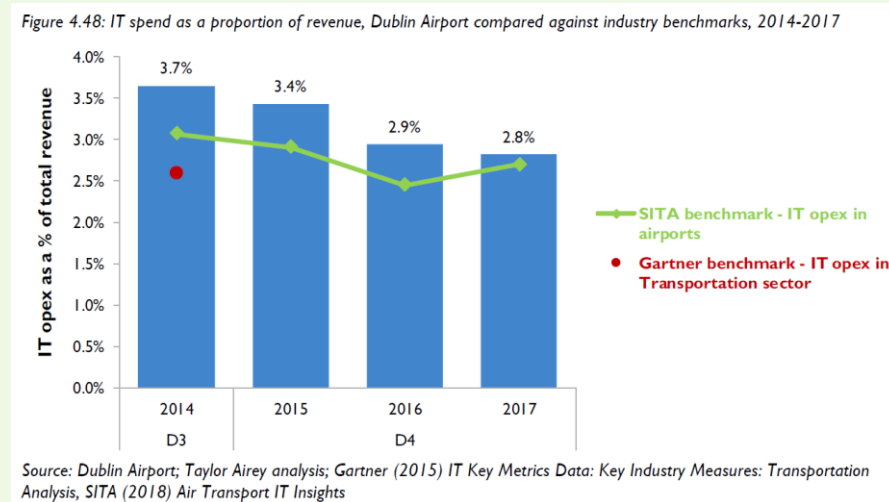


<p><b>Insurance Costs</b></p>	<p>CEPA has projected annual insurance costs at approximately €0.8m less than the Dublin Airport estimate. This will have an estimated cumulative financial impact of €3.5m over the period 2020-2024.</p> <p>We believe that there is no justification for the Commission’s lower projection of insurance costs. These costs are non-discretionary costs that we must absorb to ensure our business have sufficient insurance cost. The increase in costs over the current period are due to:</p> <ul style="list-style-type: none"> <li>• The high level of passenger traffic growth accompanied by the growth in staff numbers at Dublin Airport that has given rise to an increasing number of insurance claims in recent years and has resulted in increases in Self Insured limits for Public Liability.</li> <li>• In respect of Public Liability, we have [REDACTED] and are projected to exceed in 2019 given the growth in passenger numbers and increasing number of insurance claims.</li> </ul> <p>This is not tenable, and insurers respond by requiring higher premia / increased policy Excesses, as they are projected to incur losses for these years. This has already happened in the case of Employer Liability – where we were required to increase excess on Employer Liability policy from [REDACTED] for 2019.</p> <ul style="list-style-type: none"> <li>• There are limitations in the aviation insurance market at present. The aviation public liability market has its origins in the UK where this is a limited market covering airlines / hull liability, component manufacturing, aerospace, and airports – all in the same insurance pool for capital and funding.</li> <li>• The aviation market has experienced contraction over the last year as capital moves away to other less risky markets – Lloyds have shown a reducing appetite for aviation insurance. Recent incidents e.g. Boeing 737 Max and component claims on the international front are negatively impacting the attractiveness of</li> </ul>
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	<p>this sector. This in turn has driven up premium cost – regardless of perception of risk or whether or not passengers remain static.</p> <ul style="list-style-type: none"> <li>• Coupled with all of the above, it should be noted that the Dublin Airport property portfolio is projected to grow significantly over the next 5 years which will also drive up the company’s property insurance.</li> </ul> <p>An illustration of the current issues contributing to higher insurance costs at Dublin Airport are outlined in the following extract from the Marsh 2019 Renewal Report 2019.</p> <div style="border: 1px solid black; padding: 5px;"> <p><b>Aviation Public Liability</b></p> <p>The market background has been outlined in details following our market London meeting of the 6<sup>th</sup> November 2018 with general market pressure in the aviation sector. We have been seeing premium increases for risks with unchanged exposures and claims profiles, as insurers focus more on writing for profit than premium. This has led to Insurers reviewing claims experience on prior years, and where losses have deteriorated to an extent that they have eroded the premium base, they are looking for increased premiums or in worst case situation walking away from risks. We are also seeing insurers who write the risk at differentials (either premium or brokerage) to the Lead insurer looking to narrow these. These factors are magnified on complex risk placements like DAA, which require multi-insurer engagement.</p> </div>
<p><b>IT</b></p>	<p>In setting the 2019 cost baseline for IT non-pay related expenditure, CEPA made an efficiency adjustment by resetting expenditure estimates to 2017 levels. The cumulative impact of this efficiency adjustment over the period 2020-2024 is €14m.</p> <p>CEPA stated that it had failed to find justification for the large rises in non-pay related IT expenditure in 2018 &amp; 2019.</p> <p>The key drivers of increased opex within IT are not to drive efficiency elsewhere in the business. Reviewing the variances to 2017, the analysis shows that 55% of the cost increases in IT have been driven by ‘Reliability &amp; Safety’ activities (such as IT Security Regulation and Risk Mitigation) and ‘IT Infrastructure Expansion’ activities that require ongoing maintenance and support.</p> <p>70% of the top 25 most material contracts have renewal dates beyond 2019 meaning that we have signed contractual obligations and there is no</p>

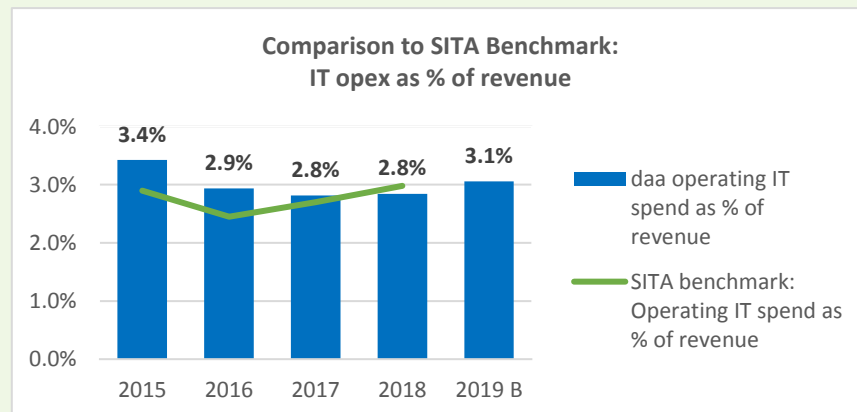
	<p>flexibility to change costs and they are based on competitive tendered prices.</p> <p>The key drivers of incremental costs versus 2017, which account for most of the increase are:</p> <p><u>Reliability &amp; Safety €0.6m</u></p> <p>This covers activities to comply with increased GDPR and IT Security Regulation, IT Risk Mitigation and Safety and also support for key SESAR safety initiatives (e.g. AVDGS).</p> <p><u>IT Infrastructure Expansion/ Volume Growth €0.7m</u></p> <p>This includes items such as FIDs hardware support, CUSS hardware support costs (which drive direct benefit for airlines through reduced headcount), Network &amp; WAN Connectivity, Service desk run costs and Public WIFI (for which the ACI scores have remained well above the Commission's target of 3.1, averaging 4.0 in 2018).</p> <p>Additionally, CEPA made a downward adjustment to the projected level of IT expenditure forecast going forward.</p> <p>CEPA stated that its analysis showed that Dublin Airport IT spend was higher than benchmarks in the early years of the current regulatory period but in 2017 was converging to a similar level to that seen at other airports as shown in the graph below.</p>
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**FIGURE 5.14 CEPA ANALYSIS OF IT SPEND**



When this chart is extrapolated out further to 2018, using the same SITA benchmark referenced by the Commission, we continue to compare very favourably to this metric despite increasing IT support costs as the following chart shows. In fact, our IT operating costs as a % of revenue were 2.8% in 2018 which were below the SITA benchmark of 3.0%. It is unacceptable to disallow operating costs incurred today while running an efficient IT operation, based on these SITA metrics.

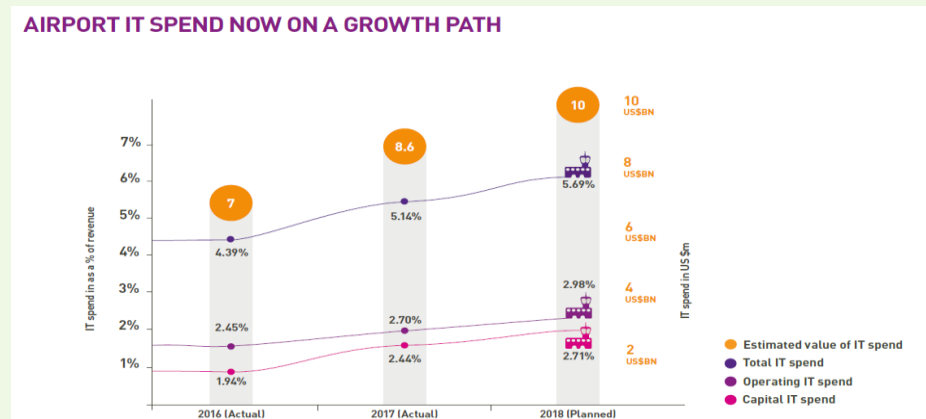
**FIGURE 5.15 DUBLIN AIRPORT ANALYSIS OF IT SPEND**



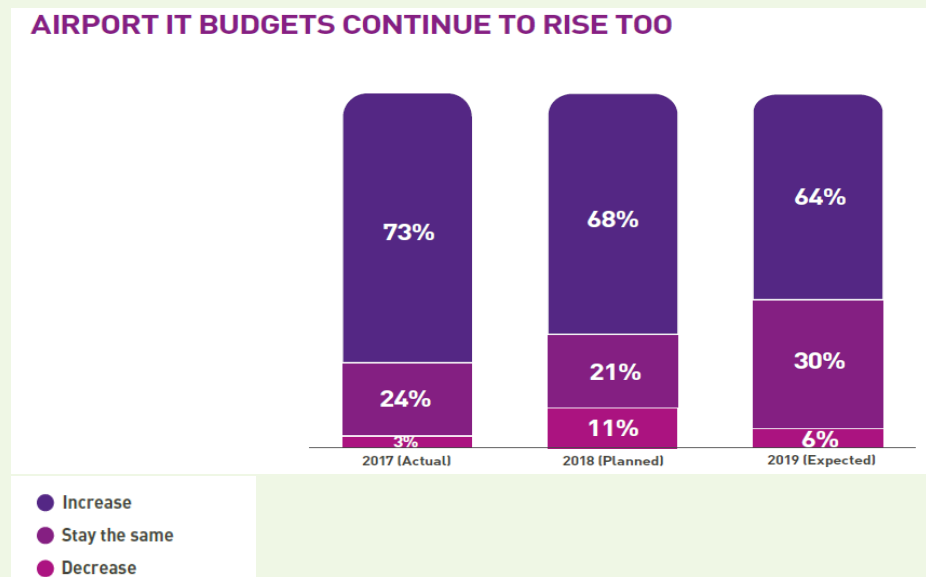
In addition to this, the SITA report entitled 'SITA (2018) AIR Transport IT Insights elaborates by stating that 'Airport IT spend now on a growth

path’ – reference the two charts below which depict this in further detail. 64% of airports surveyed expect their IT operating costs to increase in 2019.

**FIGURE 5.16 VALUE IT SPEND**



**FIGURE 5.17 AIRPORT IT BUDGETS RISE**



**Maintenance**

The Commission has not allowed for any increase in outsourced maintenance costs resulting in a €18m difference with our own forecast. We believe this is fundamentally flawed as the impact of the following have not been considered:

- (a) Wage and tender price inflation trends

<p>(b) Increased passenger volumes</p> <p>(c) Non-CIP opex impacts</p> <p>(d) Achievability of 5% efficiency target</p> <p><u>Wage and tender price inflation trends - (€6m)</u></p> <p>The Sectoral Employment Order is new legislation introduced on 19<sup>th</sup> October 2017 which recommends rates of pay for the construction sector. Under the legislation both the Mechanical and Electrical trades have agreed to a 2.7% hourly increase from September 1st 2019, a further 2.7% increase from September 2020 with a future framework to be agreed from 2021.</p> <p>Furthermore, the Tender Prices Index issued by the Society of Chartered Surveyors Ireland indicates a 7.7% increase in construction prices in 2018.</p> <p>These macro industry trends mean that our outsourced contractors are incurring higher costs which will ultimately be passed onto the Airport in the form of higher contract prices. On this basis, Dublin Airport feels that annual price inflation of 3% should be applied to the 2019 baseline. This has a cumulative impact over the next determination period of €6.1m.</p> <p><u>Increased passenger volumes – (€1m)</u></p> <p>CEPA has ignored the impact of increased passenger volumes on maintenance costs for airport infrastructure. Passengers are expected to increase at a rate of 2.4% per annum which will put extra pressure on existing passenger sensitive equipment in both terminals such as baggage belts, lifts and escalators and security equipment. The outsourced cost per annum of maintaining this equipment is approximately €3m. Dublin Airport is of the view that passenger sensitive equipment outsourced maintenance costs should be inflated at 2% per annum to take into account increased passenger volumes and the resulting wear and tear. The total impact of this is €1m for 2020 – 2024.</p> <p><u>Non-CIP opex disallowed –(€0.7m)</u></p> <p>CEPA has disallowed incremental non-CIP opex associated with lifts and escalator maintenance. The justification CEPA has provided is that there will always be varying amounts of assets requiring maintenance in a given control period and that the increased expenditure on certain assets will be offset by reduced expenditure on other assets elsewhere. Dublin</p>
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	<p>Airport believe this is not a reasonable assumption for the specific assets which have been identified by our engineering teams.</p> <p>The €40k per annum incremental costs for lifts in Terminal 1 relates to 8 new lifts installed as part of the pier 2 segregations and pier 1 extension projects. The warranty for these lifts runs out in 2019 and an opex allowance should be given for their maintenance in the next regulatory determination period as it will be an incremental cost.</p> <p>There are €150k of incremental costs associated with the replacement of step chains for travellers and escalators in Terminal 2 from 2022 onwards. This is a unique cost to the next control period, as the equipment was installed during T2 construction in 2010 and step chains needs to be replaced at 12 – 15-year intervals.</p> <p><u>5% efficiency saving – (€1.5m)</u></p> <p>CEPA has set a 5% efficiency target for non-pay maintenance to be achieved in full by 2024. The basis for this is that as the airport increases in size, it is expected that Dublin Airport will have greater bargaining power negotiating with suppliers. In practice, we do not believe that this 5% efficiency saving is a realistic target. Approximately 70% of the airport’s maintenance contracts relate to specialist equipment and services such as HBS, Security Equipment, Fleet, Runway and Apron, Winter Maintenance and Life Safety Systems. Due to the specialist nature of the equipment and services, there are only a small number of niche suppliers in the respective fields which makes it difficult to achieve economies of scale and competitive pricing. The cumulative impact of removing the 5% target from 2020 – 2024 is €1.5m.</p> <p>Based on the arguments set out above, Dublin Airport are of the view that an additional non-pay maintenance allowance should be remunerated in order to address the impact of industry inflation, ageing infrastructure, passenger growth and the procurement limitations of dealing with specialist contractors. Without these allowances, Dublin Airport’s ability to uphold maintenance standards and asset availability will be adversely impacted.</p>
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## 6. Commercial Revenues

### 6.1 Introduction

- 6.1 In its 2019 Draft Determination, the Commission sets out its commercial revenue forecast for 2020-2024. Dublin Airport believes that these projections are highly ambitious but not unreasonable, with the exception of two factors - the passenger traffic forecast and the car parking revenue projections.
- 6.2 In setting its commercial revenue projections for the period 2020-2024, the Commission has applied its passenger traffic projections which it set for the 2019 Draft Determination. Dublin Airport has outlined its response in relation to this regulatory building block in chapter 3.
- 6.3 The Commission proposed a passenger volume forecast higher than the passenger volume set out in Dublin Airport's Regulatory Proposition. Their proposed forecast is based on an average annual growth of 3.1% while Dublin Airport is proposing traffic growth of 2.1% per annum. This will lead to a 1.1m differential in forecast passenger numbers by 2024. The passenger forecast variance results in higher commercial revenues of c.€40m over the period 2020-2024.
- 6.4 The car parking commercial revenues targets proposed in the 2019 Draft Determination do not take account of the fact that car parking facilities at Dublin Airport are currently capacity constrained. While the Commission has acknowledged this capacity constraint, it appears to be assuming that the car parking expansion projects proposed in the CIP 2020+ will be completed and come into operation on the 1<sup>st</sup> of January 2020. This has resulted in a higher car parking revenue forecast of €14m over the period 2020-2024 when the forecasts are compared using the same passenger trajectory.
- 6.5 The below table summarises the Commission's commercial revenue forecast for Dublin Airport for the period 2020 and 2024 when compared to the Dublin Airport forecast. Financial analysis and projections in this section have been prepared in February 2019 prices<sup>41</sup> and they are based on our regulatory proposition passenger numbers (36m pax by 2024).

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<sup>41</sup> 100.5% February 2019 vs 2017 average.

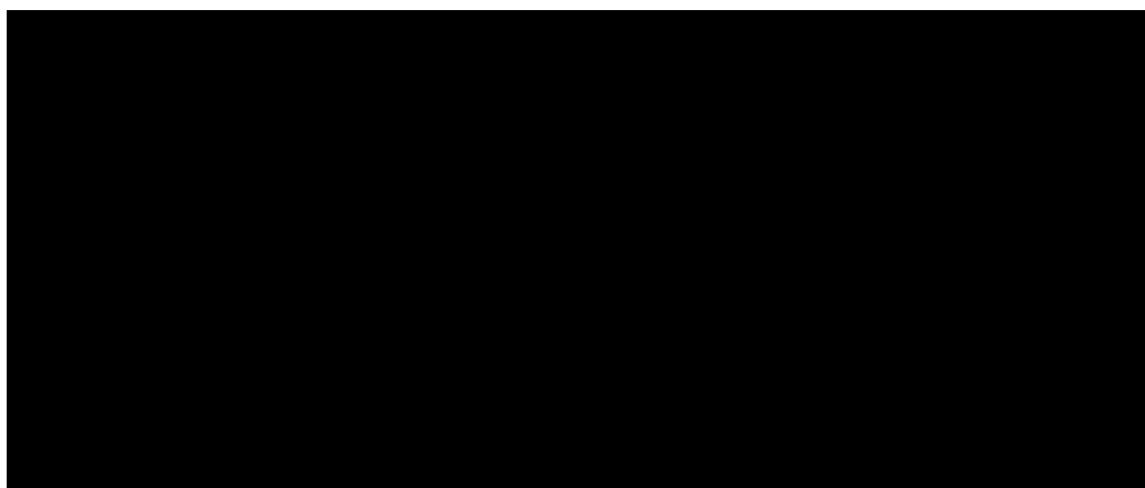


**TABLE 6.1 DIFFERENTIAL OF FORECAST COMMERCIAL REVENUE**

Total Revenue (€ 'm)	2020	2021	2022	2023	2024	Cumulative
Commission Forecast	252.2	260.5	268.2	276.1	283.6	1,340.6
Dublin Airport Forecast						
Differential (excl. Passenger Forecast Variance)						
Passenger Forecast Impact						
Actual Forecast Difference						

*Note - We have increased adjusted the Commission’s forecast to reflect the Dublin Airport expected passenger volumes to ensure commercial revenue forecasts are being compared on a comparable passenger trajectory.*

**FIGURE 6.1 COMPARISON OF COMMERCIAL REVENUE FORECAST**



- 6.6 The divergence between the Commission’s projections and Dublin Airport’s commercial revenue forecast as illustrated in the table above is largely driven by the passenger traffic projections used and an overly ambitious forecast for carparking revenues. This is offset by the Commission also forecasting lower retail revenues for the next determination period.
- 6.7 Dublin Airport would recommend that in the final 2019 Determination, the commercial revenue projections should be recalibrated based on a more realistic forecast of traffic numbers at the airport over the period 2020-2024.

## 6.2 Car Parking Revenue Projections

6.8 As part of its commercial revenue projections in the 2019 Draft Determination, the Commission sets out a forecast for carparking revenues over the period 2020-2024. As illustrated in the graph and table below there is a growing differential over time between Dublin Airport carparking revenue forecast and the Commission's projection.

6.9 The annual forecast variance grows from €3.0m in 2020 to €7.9m in 2023 with a cumulative variance of €27m over the regulatory period 2020-2024.

**FIGURE 6.3 CAR PARKING REVENUE FORECASTS**

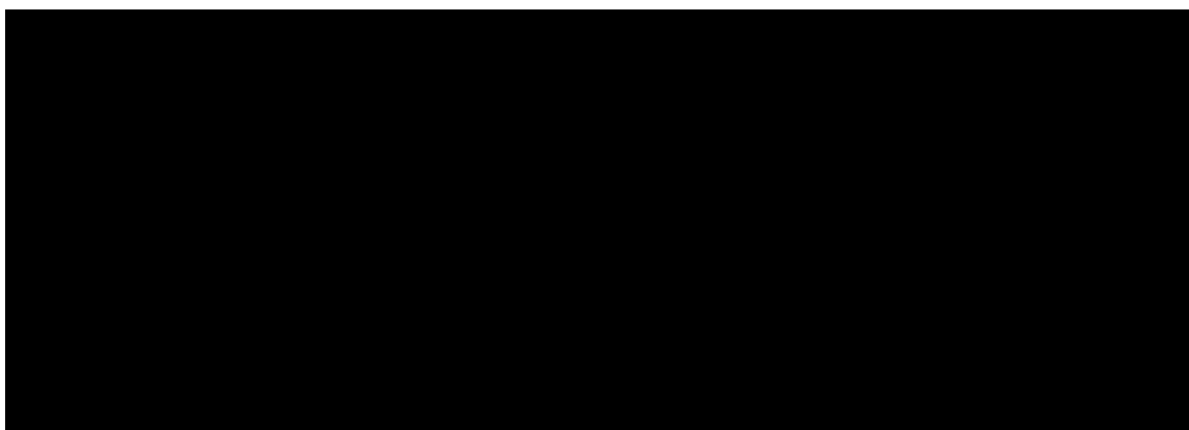


**TABLE 6.3 CAR PARKING REVENUE FORECAST**

Car Parks Revenue (€'m)	2020	2021	2022	2023	2024	Cumulative
<b>Commission Forecast</b>	50.5	52.3	54.3	56.2	57.8	271.0
<b>Dublin Airport Forecast</b>	49.1	49.9	51.1	51.3	56.2	257.6
Differential (excl. Passenger Forecast Variance)	1.4	2.4	3.2	4.9	1.6	13.5
Passenger Forecast Impact	1.6	2.2	2.5	3.0	4.0	13.4
Actual Forecast Difference	3.0	4.6	5.7	7.9	5.6	26.9

6.10 Dublin Airport believes that the Commission's forecast is overly ambitious and not achievable.

- 6.11 The 2019 Draft Determination assumes that car parking revenues will increase from €52.1m 2020 to €61.8m in 2024. This projection is derived on the basis of a passenger demand elasticity of 1.5, this compares to an elasticity of 1 used in the 2014 Determination.
- 6.12 The Commission has failed to take into account the timeframe for delivering adequate car park supply to meet current and future passenger car parking demand requirements.
- 6.13 The car parking commercial revenues proposed in the 2019 Draft Determination do not take account of the fact that car parking facilities at Dublin Airport are currently capacity constrained. Dublin Airport provided estimated project completion dates for new CIP projects for 2022 and 2023, however the Commission have ignored this information and have forecasted a constant increase in revenues over the regulatory period with no stagnation of revenues.



### 6.3 Capacity constraints

- 6.14 The table below highlights the fact that both short and long term car parks are full for extended periods throughout the year.
- 6.15 It is important to note that occupancy rates cover the entire week. Short-term has a ■ occupancy rate the only time the car park usually has capacity is on a Sunday evening when demand is lower, while it operates at capacity for the remainder of the week.
- 6.16 This means that even when the weekly occupancy is below 100%, Dublin Airport cannot increase these rates as excess customer demand is at times when the car parks are at full capacity. Without capacity increases, Dublin Airport will only benefit from passenger growth if this occurs at the times of the week where demand is currently lower (e.g. Sunday evenings).

**TABLE 6.4 OCCUPANCY RATES OF CAR PARKS**

6.17 In line with internal estimated delivery times, no additional parking capacity is expected to be delivered until 2022 (long term) and 2023 (short term). The table below outlines the expected delivery times for the additional car parking capacity.

**TABLE 6.5 ADDITIONAL CAPACITY TIMELINES**

	2020	2021	2022	2023	2024
CIP.20.04.001 Car Parking Management System (Maintenance & upgrade)			N/A		
CIP.20.04.005 Long Term Car Parking – Eastlands (2,000 spaces)					
CIP.20.04.006 Terminal 1 Multi-Storey Car Park Block B (600 spaces)					
CIP.20.04.007 Terminal 2 Multi-Storey Car Park (680 spaces)					
CIP.20.04.009 Staff Car Park					

6.18 It must also be considered that following the delivery of these projects it will take time to rebuild customer bases and fill the additional capacity (+20% capacity). In order to fill the additional car park capacity, price/yield will need to reduce. Additionally, significant investment in marketing and in discounted rates will be required to regain customers who have moved to competitor car parks and/or other modes of transport in the intervening period where car parking demand could not be accommodated.

**6.4 Impact on Passengers**

6.19 In the interim period until car parking capacity increases, revenue growth can only be achieved in the shoulder periods or through yield increases i.e. charging higher prices to car park customers.

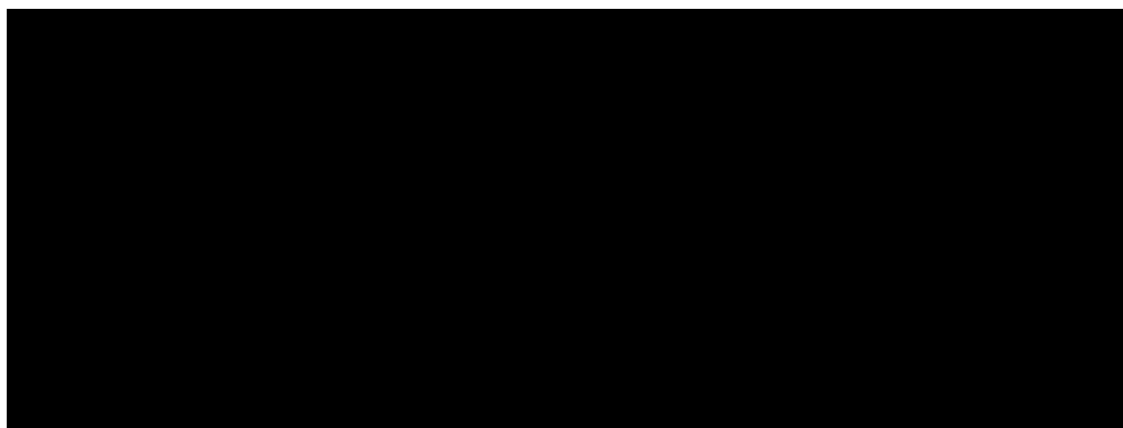
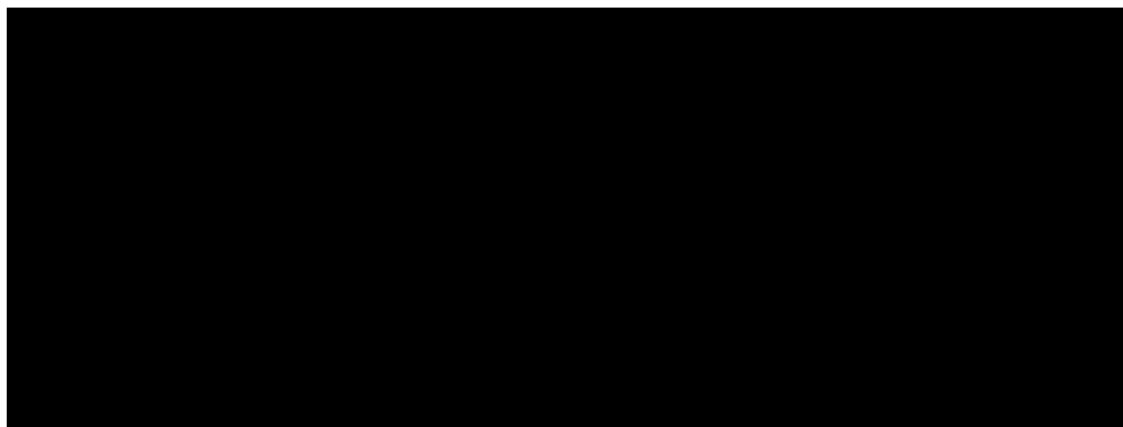
6.20 Revenue generated in the short-term car parks, which the Commission have acknowledged to be at capacity for the entire year, was €24m in 2018. Extrapolating revenue using the elasticity put forward by the Commission of 1.5, would estimate revenue of €29m in real terms (+€5m) by 2022, without any additional capacity being added.

6.21 Similarly, revenue generated in the long-term car parks, which the Commission has acknowledged to be at capacity for the summer period, with an average occupancy of [REDACTED] for the full year, was €22m in 2018. Again, using the elasticity put forward in the draft determination, this would result in estimated revenue of €25m in real terms (+€3m) by 2021 in order to meet the revenue target without any additional capacity.

6.22 The prices required are likely to be above the majority of customers willingness to pay threshold. Drop off rates are monitored on the Dublin Airport website to understand the impact of price on demand. Car parks are in competition with offsite competitors and other modes of transport that are not operated by Dublin Airport. If prices were to increase beyond the tipping point, then revenue will be lost to these competitors and thus lost from the regulatory till.

6.23 Figure 6.2 [REDACTED].

**FIGURE 6.3 IMPACT OF PRICE ON DEMAND IN CAR PARKS**



6.24 There are continual improvements to public transport servicing the airport, indeed in May of this year, Dublin Bus announced its first 24-hour route which runs between Swords and Dublin City Centre via Dublin Airport. We have also incentivised additional bussing routes at off-peak times to improve mobility to/from the airport for passengers in our latest bussing tender. As accessibility improves and capacity constraints remain over the next 2/3 years, passengers and staff will be more likely to shift to public transport as a means of travelling to the airport and this will put increased pressure on the price of car parking.

### 6.5 Car Parking Passenger Elasticity

6.25 In the 2019 Draft Determination, passenger elasticity for car parking has increased from 1 to 1.5 since the 2014 Determination. The Commission accredits this increase with “1) a higher GDP that increases passengers and 2) more passengers with more disposable income”.

6.26 Given that the GDP forecast used by the Commission for the period 2020-2024 is closer to a normalised level of 3% per annum it is inconsistent and illogical to use the higher elasticity that has resulted from the exceptional GDP growth achieved over the last Determination period.

6.27 2014 was the last year when car parks were at full capacity, in advance of the T2 MSCP extension which came into operation in 2015. Then passenger elasticity for short term and long-term car parking was calculated at 0.9. This is consistent with the car parking revenue targets for the period 2020-2024 submitted by Dublin Airport in its Regulatory Proposition. Dublin Airport strongly asserts that this passenger elasticity is more appropriate particularly until additional car parking capacity projects have been completed.

### 6.6 Car Parking a Data Driven Business

6.28 Car parking is a data driven, ecommerce consumer business. Therefore, car parks are priced at a level which is designed to fill, thereby ensuring the efficient use of the asset. Dublin Airport monitors the voice of the customer, customer retention and value for money. Car parks at Dublin Airport are in competition with other modes of transport and offsite competitors that are not subject to economic regulation. Dublin Airport work tirelessly to ensure that it is best in class and that it has international status as a leader in this industry.

6.29 In 2014 Dublin Airport realise that the yield passengers would be willing to pay was maxed out, therefore it attempted to limit its sales to the most profitable customers willing to pay the premium durations stays (1-3 days).

- 6.30 Maintaining the durations at value points, a high percentage of customers were content and loyal to the Dublin Airport product.
- 6.31 The need to keep durations at value points only occurred for a relatively short period of time as new capacity was added in 2015 with 4 floors added to T2 car parks. As soon as this capacity was added Dublin Airport was able to sell all durations once more.
- 6.32 Subsequently, focus returned to profit maximising through differing prices based on duration. Close monitoring of customer behaviours enables Dublin Airport to have a clear understanding of selling at yield points. However, as Dublin Airport car parks are now full, we have experienced a decline in transactions as customer retention has decreased considerably.
- 6.33 It is expected that even when additional capacity comes into operation at Dublin Airport, car park occupancy numbers will not increase as quickly as they did in 2015.
- 6.34 Based on the above evidence, Dublin Airport would recommend that car parking projections for 2020-2024 should be adjusted downwards in the Final 2019 Determination to take account of the capacity constraints and market limitations that will be experienced by this business in the next regulatory period.

## 6.7 Outlook for Commercial Revenues 2020-2024

- 6.35 Dublin Airport would like to urge the Commission to resist any proposals by other airport stakeholders for further increases in the Dublin Airport commercial revenue projections going forward in the Final 2019 Determination.
- 6.36 We believe that the current commercial projections put forward by the Commission are highly ambitious.
- 6.37 When forecasting commercial revenues for 2020-2024, the Commission must be cognisant of the following factors that will restrict Dublin Airport's ability to continue to grow commercial revenues in the next regulatory period.
- 6.38 There are a number of supply-side constraints and capacity shortages that are likely to render revenue growth less responsive to passenger traffic increases.

- **Retail floor space** - in order for Dublin Airport to maintain and improve its commercial performance, it will need increases in retail floor space to match the increases in passenger traffic.
- **Car parking**- car parking operations are facing significant capacity constraints with occupancy rates for the Short-Term and Long-Term Red car parks currently averaging at c.90%.
- **Commercial property** - commercial property is now operating at over 99% occupancy at Dublin Airport and this has resulted in some customer requests for property not being satisfied recently. Even where Dublin Airport has been able to find a potential solution to accommodate its customers, it is often not in the optimal location due to the lack of available space. This has resulted in customers having too little space or being split across the campus in a potentially inefficient way.
- **Commercial concessions (car hire)** - car rental facilities are currently operating at capacity at Dublin Airport, this is imposing significant operational pressure on car hire companies and it is impacting on the customer experience.

6.39 The pace of commercial revenue growth likely in the next regulatory period must be considered in the context of the rapid, unforeseen traffic growth that has been observed in the recent past. As previously outlined, we do not believe that maintaining traffic growth of the current magnitude is likely to be feasible in the medium run. For commercial businesses where passenger numbers are an important driver of the volume and/or revenues, such as retail, we would expect this to result in correspondingly slower growth in commercial income.

6.40 In general, airport's commercial businesses are under threat as the retail and mobility industries undertake fundamental structural transformations. In terms of airport's retail businesses, there is strong competition from the high street, online retailers and airlines' on-board sales. In addition, digital technologies pose a threat to the airport's commercial concessions business.

6.41 Commercial activities at airport's face competition from a wide range of sources and, in many instances, there is evidence to suggest that these competitive pressures will likely increase in the medium run. For example, car parking business faces strong competitive pressures from off-airport car parking and other modes of transport, including taxis and bus operators.

6.42 The macroeconomy climate going forward is also somewhat uncertain. While the Irish economy has grown rapidly over the course of this regulatory period, with growth exceeding 25% in 2015 alone. There are signs that growth is now slowing and reverting to long term growth rates. There are a number of macroeconomic developments on the horizon that we believe could adversely affect its commercial revenue development.



6.43 Firstly, there is considerable uncertainty as to how the advent of Brexit will affect the aviation industry and the Irish economy. It has been widely argued that Ireland faces unique exposure to Brexit due to the high dependency on trade—both in terms of imports and exports—with the UK.<sup>42</sup> The impact of Brexit on the costs of and demand for Dublin Airport’s commercial activities is difficult to predict. However, there are a number of potential avenues through which Brexit could affect our commercial income.

- **Impact on passenger numbers** - a hard Brexit could result in traffic restrictions between the UK and EU countries, particularly if the UK were to leave the European Common Aviation Area (ECAA).
- **Reduction in disposable income** - analysis by the ESRI suggests that a hard Brexit would increase the cost of living for all households in Ireland by 2% to 3.1% per cent—equivalent to an annual increase of €892 to €1360 per household.<sup>43</sup> We would expect this to have a material impact on disposable incomes and consumer spending on luxury goods, which in turn would be expected to reduce passengers’ average spend and potentially reduce the overall volume of leisure travel.
- **Increased operating costs** - Ireland imports around 15% of its goods and services from the UK and it is expected that the cost of these imports will increase post-Brexit due to higher trade costs. If our input costs were to increase as a result, this could result in a lower gross margin.

6.44 Secondly, movements in exchange rates, whether driven by Brexit or other factors, will affect the competitiveness of Dublin Airport’s commercial offering.

6.45 Thirdly, trends from across European markets would suggest a slowdown in retail growth could be on the horizon. Recent Eurostat figures show that growth in retail sales, particularly for non-food items, has slowed across the EU28.

## 6.8 Preclearance

6.46 In the Dublin Airport regulatory proposition document, we set out how the U.S Customs and Border Protection (CBP) facility is now nearing full capacity and the airport is planning to expand the existing facility to allow our CBP revenue to grow in line with increases in passenger numbers. We therefore projected CBP income to grow at a CAGR of c. 6% from 2019 to 2024.

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<sup>42</sup> See, for example, Copenhagen Economics (2018), ‘Ireland and the impacts of Brexit: Strategic implications for Ireland arising from changing EU-UK trading relations’, prepared for the Department of Business, Enterprise and Innovation.

<sup>43</sup> Lawless, M. and Morgenroth, E. (2018), ‘ESRI Special Article—Brexit and Irish consumers’,

6.47 However, it was pointed out that in order to operate the expanding facility there would be a requirement for the deployment of additional CBP Officers. The annual cost of officers in 2019 was therefore expected to be €2.7m growing to €5.8m by 2024 in order to accommodate the 30% growth expected in US Preclearance Passengers

6.48 In its 2019 Draft Determination, the Commission has set an extremely challenging passenger forecast for preclearance for CBP in Terminal 2 as illustrated in the table below.

**TABLE 6.7 US PRECLEARANCE PASSENGER VOLUME FORECASTS**

US Preclearance Passengers (MPPA)	2020	2021	2022	2023	2024	Cumulative
<b>Commission Forecast</b>	2.0	2.1	2.2	2.3	2.5	11.0
<b>Dublin Airport Forecast</b>	1.9	2.0	2.1	2.2	2.4	10.6
<b>Total Differential</b>	0.1	0.1	0.1	0.1	0.1	0.4

6.49 These passenger targets have been set, without allowing for any uplift in costs to fund the additional officers required to expand the service and process the increased levels of passenger throughput. This is an example of the fundamental disconnect and inconsistency across different regulatory building blocks. Dublin Airport believes that this should be corrected in the 2019 Final Determination.

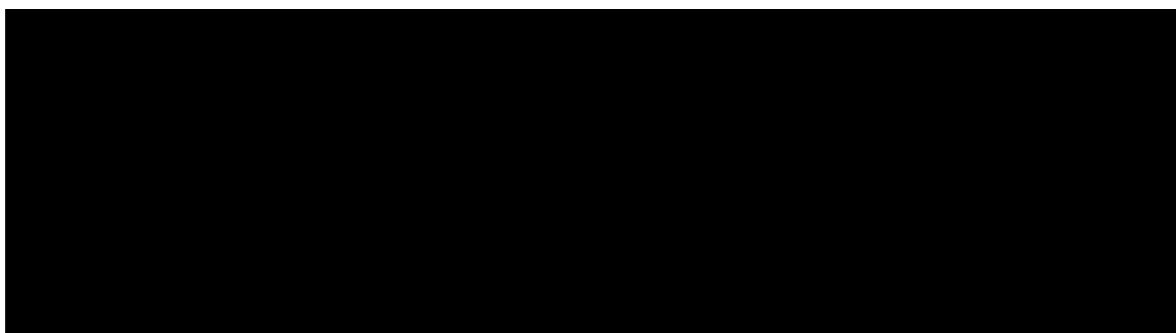
6.50 We strongly support preclearance revenue remaining as a commercial revenue stream. The preclearance service is only relevant for airlines operating US transatlantic services and it is also entirely optional for airlines; i.e. airlines can equally choose to post-clear on arrival in the United States.

6.51 Preclearance is a unique commercial product offering and should remain a discrete commercial revenue stream. Dublin Airport has made a considerable investment in the CBP facility and it has done so on the basis that it will be in a position to maximise its commercial return from this venture. This in turn, does benefit airline users in the form of lower overall airport charges.

6.52 The preclearance service is not constrained to Pier 4; departures can be facilitated from all airport stands. At peak times, the demand for the preclearance service currently exceeds the supply of stands on Pier 4. It is natural that operators willing to pay the charge for this service are accommodated on the associated stands. In a similar vein, if an operator is not prepared to pay the requisite charge for the use of an airbridge, then this service would receive a lower priority on airbridge served stands.

## 6.9 Rolling Incentive Scheme

- 6.53 The commercial revenue rolling scheme was first introduced by the Commission in the 2014 Determination, in order to strengthen the incentives for Dublin Airport to maximise commercial revenues, irrespective of where in the regulatory cycle it undertakes a new commercial initiative.
- 6.54 We would like to refer to the Commission's 2008 consultation process where the merits of rolling incentives were clearly identified and discussed.
- 6.55 At that time, Aer Lingus supported the idea of incentivising Dublin Airport to develop commercial revenues by some form of rolling sharing mechanism akin to the operating cost sharing mechanism.
- 6.56 In the 2019 Draft Determination, the Commission contends that there is no evidence that the rolling incentive scheme has contributed to Dublin Airport achieving the high levels of commercial revenues which it did in the current regulatory period. It also suggests that it would be possible to forgo on opex targets to obtain benefit from commercial revenue rolling incentives without any evidence as to how Dublin Airport may be unfairly benefiting from this to the detriment of passengers.
- 6.57 However, although it is not possible to quantify the full impact of the rolling incentive scheme in driving improved performance over the period to date, there are several examples of new commercial revenue ventures undertaken by Dublin Airport, which historically, without the rolling incentive scheme, there would have been limited incentive for this commercial revenue growth.



- 6.58 We would therefore like to reiterate our original view that the use of a rolling incentive scheme for commercial revenues creates additional incentives for the regulated entity to seek additional increases in commercial revenues over the course of a regulatory review period. Furthermore, the Commission has not put forward an adequate justification for removing the rolling incentive scheme at this juncture.

6.59 Should the scheme be removed going forward, Dublin Airport will not be incentivised to invest in new revenue streams where a pay back is not achieved within the regulatory period or an allowance has been provided for the investment.

## 6.10 Conclusion

6.60 Dublin Airport believes that in the 2019 Draft Determination, the commercial revenue projections set by the Commission are highly ambitious but potentially achievable, with the exception of two factors - the passenger traffic forecast and the car parking revenue projections.

6.61 The Commission's commercial revenue projections are underpinned by passenger traffic targets that are based on an unconstrained demand forecast which assumes that the airport has no capacity impediments for facilitating this growth. However, Dublin Airport will experience severe capacity constraints over the next determination period, which will manifestly constrain passenger traffic growth out to 2023/24.

6.62 The car parking commercial revenues proposed in the 2019 Draft Determination do not take account of the fact that car parking facilities at Dublin Airport are currently capacity constrained and that the airport faces a number of market limitations that will make the projected car parking growth rates unattainable.

6.63 Dublin Airport would request that in its Final 2019 Determination that the Commission readjusts its current proposed commercial revenue targets to reflect more realistic passenger projections and attainable car parking revenue assumptions.

## 7. Capital Expenditure

### 7.1 Introduction

7.1 Dublin Airport welcomes the decision by the Commission to allow all the proposed projects in CIP 2020, discontinue with the trigger mechanisms and propose the introduction of the StageGate process. However, we are disappointed with the following;

- the Commission has not applied its own RAB rollforward principles to the €60m CIP2015-2019 additional expenditure and we believe this is against the principles of economic regulation.
- The significant reduction in rates on CIP 2020-2024 which would question the viability of a number of projects (Although a subsequent meeting held on the 13<sup>th</sup> June 2019, between Dublin Airport and the Commission's consultant, Steer, highlighted several of the key assumptions that were either not made clear by Dublin Airport or not understood by Steer at the time of the assessment)
- The treatment of the PBZ which was consulted on and requested by stakeholders and yet disallowed. We believe this is again against the principles of economic regulation.

7.2 In addition, the 2019 Final Determination needs to include a mechanism to protect Dublin Airport from cost inflation outside of its control, such as the delays being experienced in regulatory planning particularly because of new regulations.

7.3 We support the StageGate process and propose that the number of projects are reduced from 21 to 11 (with some grouped) initially with a suggested upper limit of €50m.

7.4 The following sections detail Dublin Airport's comments in relation to 'Chapter 9 - Capital Costs' of the 2019 Draft Determination.

### 7.2 RAB Roll Forward

7.5 Table 9.3 of the 2019 Draft Determination references the 'need for further investigation' in relation to 3 projects;

- Airside Landside Perimeter Fence
- Airfield Pollution Control
- Airfield Drainage Upgrade

7.6 Dublin Airport considers these projects to be fully complete and will provide any necessary documentation and/or site visits to inspect as evidence.

- 7.7 Dublin Airport acknowledges both the condition to not remunerate a portion of the Terminal 2 capex until passenger numbers reach 33m and the depreciation profile chosen for T2 Box 2 as outlined in paragraph 9.14 of the 2019 Draft Determination.

### 7.3 Reconciling the 2015 -2019 Capital Allowances

- 7.8 Over the 2015-2019 regulatory period, a period of unpredicted growth, Dublin Airport effectively and efficiently managed capital investment to ensure the optimum performance of Dublin Airport for its stakeholder community, through minimising risks and enhancing the passenger experience. It is for this reason that Dublin Airport does not agree with the Commission's decision not to remunerate safety critical and operational critical airport investments which is fundamentally against the principles of economic regulation.
- 7.9 While unprecedented growth in 2015 and 2016 resulted in significant upward pressures on the 2015 regulatory period capital allowances, Dublin Airport chose to maximise the majority of the CIP2015 capex flexibility opportunities within the first two years of the determination period. This was critical to facilitating the growth in passenger numbers at Dublin Airport.
- 7.10 While PACE was later developed to facilitate continued growth in the latter years of the determination (capacity projects only), exhausting CIP2015 flexibility early in the determination to facilitate airline and passenger growth left little or no contingency capex available for critical safety and operational airport investments. The following section outlines why failure to invest by Dublin Airport on five critical projects would have resulted in potential catastrophic safety risks and loss of airport stakeholder and passenger experience.
- 7.11 The necessary additional expenditure associated with these critical projects was consulted on with airport stakeholders on the 3<sup>rd</sup> December 2018. This was the opportunity for opposing this expenditure and no objection was received from stakeholders.

#### 7.3.1 Adjusting the Allowances

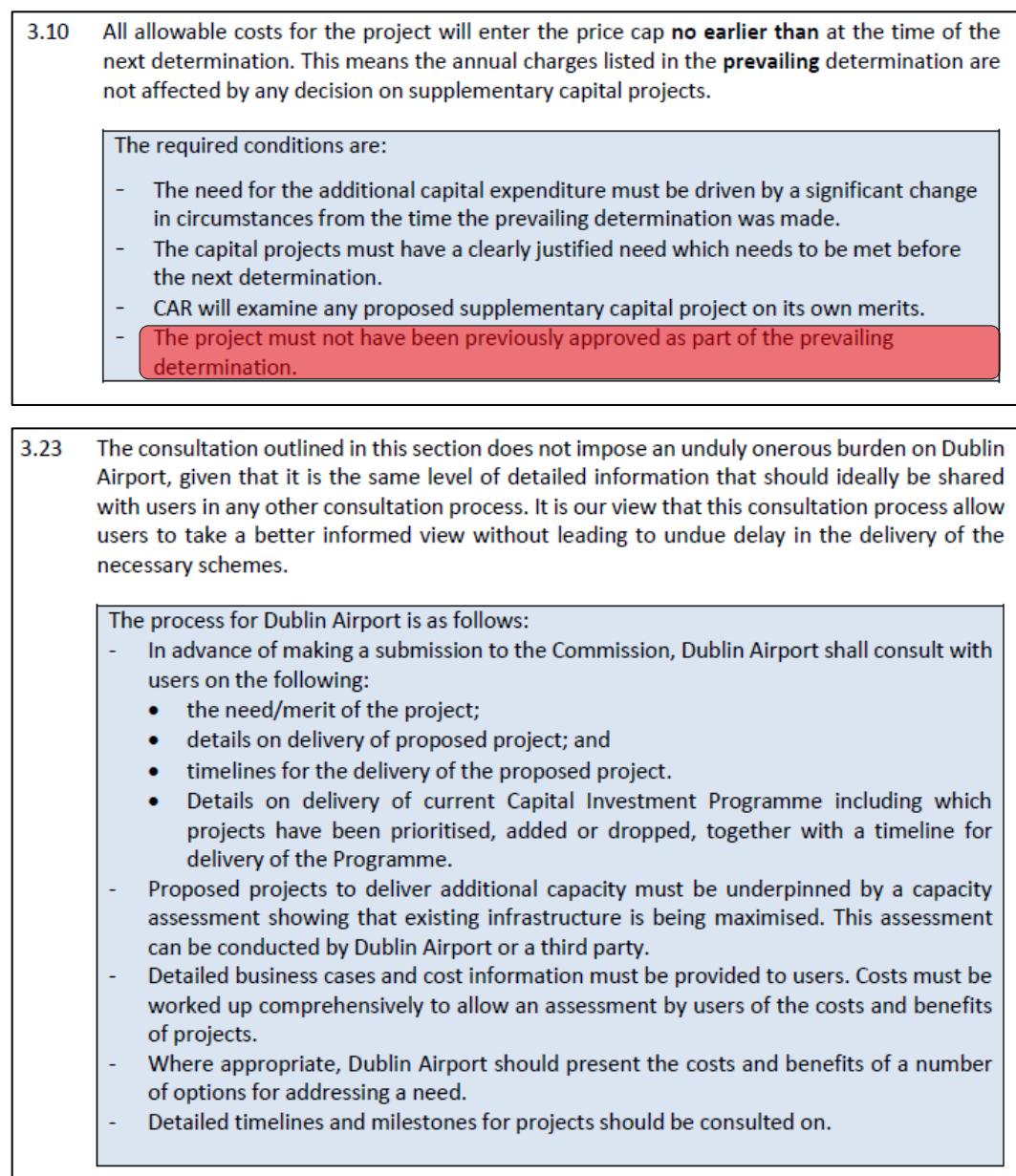
- 7.12 In Section 9.18 of the 2019 Draft Determination, the Commission states that there was a clear process laid out in the 2014 Determination to increase allowances (Reference 7.74 of the 2014 Determination – see below).

7.74 The 2015-2019 capital allowance is a substantial, with a large degree of flexibility. DAA should exercise restraint in spending this allowance to ensure the interests of users are best served. If DAA envisages going over allowance on a particular group it should consult with users. If users agree to that overspend than in 2019 when reconciling spending we would increase the allowance by the amount of the consultation. For a consultation to result in an increased allowance it must have unanimous support of users.

- 7.13 This process stipulates that investments must ‘ensure the interest of users are best served.’ In the case of the 5 non-remunerated projects identified within this section, all projects are unquestionably in the best interest of airport stakeholders. Safety critical (passengers and airlines) and operational critical projects are always in the interest of airport stakeholders.
- 7.14 This process also required “unanimous support of users” which is a flawed process for the projects sought under the capital allowances additional expenditure. This process would have been completely unsuitable and would only have resulted in additional cost and significant increased safety risk, with no guarantee or any reasonable prospect of ‘unanimous support’.
- 7.15 In a two-terminal airport, with many competing airlines, the principle of ‘unanimous support’ is flawed and could only serve to delay critical projects and waste time and resources in a process that is not fit for purpose. This runs contrary to the Commission’s statutory objectives ‘to protect the reasonable interests of current and prospective users of Dublin Airport’ and ‘to facilitate the economic development of Dublin Airport<sup>44</sup>.’
- 7.16 In addition, under Section 9.20 of the 2019 Draft Determination, the Commission claims that there were ‘two mechanisms’ open to Dublin Airport to consult on capital overspend, the other being the ‘Process for Consideration of a Supplementary Capex Allowance – Commission Paper 7/2016’. This again is flawed, and inaccurate and key projects requested through this additional expenditure, would not have fallen within the required conditions of this process (see Figure 7.1);

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<sup>44</sup> [https://www.aviationreg.ie/fileupload/Image/2\\_2001\\_act.pdf](https://www.aviationreg.ie/fileupload/Image/2_2001_act.pdf)

**FIGURE 7.1 PROCESS FOR CONSIDERATION OF A SUPPLEMENTARY CAPEX ALLOWANCE**

7.17 The process for the Supplementary Capex Allowance also, would have been totally unsuitable for these projects in particular as the projects (apart from the CBP Lounge, which was requested by stakeholders and the revenue from which is being included in offsetting airport charges) were urgent and safety critical and of an extremely technical nature, whereby stakeholders would not normally have the expertise commenting on the merit, solution or the delivery of the project.

7.18 We should remember, in particular the Runway 10-28 Overlay, in the 2009 Determination where the Commission was influenced by airline stakeholders on an extremely technical



project, to allow a sub optimal solution (Thin Porous friction Course TPFC) against the advice of Dublin Airport, which resulted in significant safety issues when pavement cracking started appearing in the TPFC, earlier than expected, and continuous jointing had to be applied. This resulted in multiple unplanned closures of the runway to rectify and mitigate the risk of a significant safety incident. Details of the laborious and unsuitable process are highlighted in paragraph 7.26 below;

- 7.19 For the reasons outlined above we believe that the additional consultation process was not suited to deal with the projects requested in the CIP 2015 additional expenditure, apart from the CBP lounge which was requested by stakeholders (which is a clear representation of consultation) and for which the revenue is being used to offset airport charges.
- 7.20 In summary, the proposed processes claimed by the Commission to represent ‘consultation’ are totally flawed and against the principles of Regulation in measuring the efficient spend of essential capex to ensure safety. In the sections below, we examine the projects in more detail to determine how meaningful consultation would have been beneficial under either guise claimed by the Commission.

### 7.3.2 Terminal 1 Departures Floor Structural Works - €6.6m

- 7.21 The Terminal 1 Departures Floor Upgrade works was a simple tile replacement project, which required the removal of the existing life expired floor tiles and their associated structural screed as part of the Central Search Area – New Technologies project (CIP 15.4.004).
- 7.22 During the works, in particular the screed removal process, structural issues were uncovered where some existing structural beams supporting the Departures Floor were found to have significant structural cracks across the web of the beam. When this was discovered, works were immediately stopped, and the project consultant structural engineer was contacted. The Structural Engineer reviewed the condition of the structural beam and immediately put restrictions on the floor to allow full testing to be carried out.



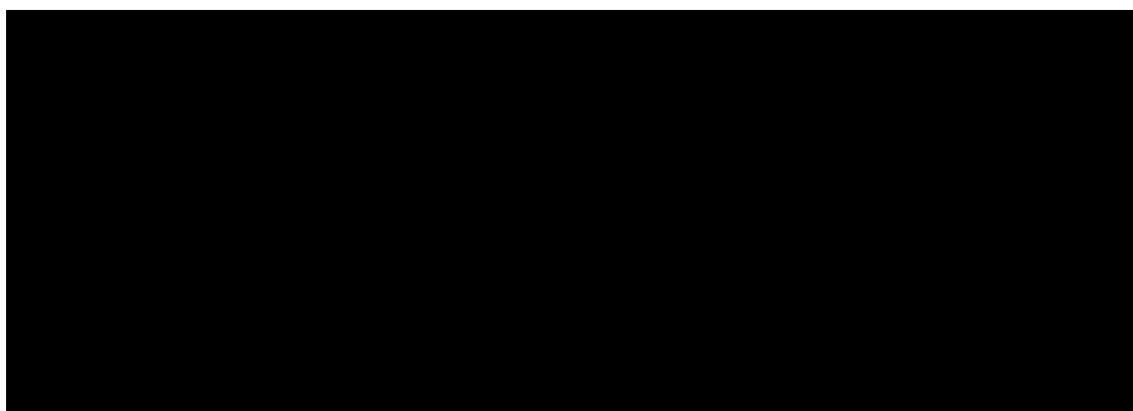
Figure 7.2 shows the structural failure to the beams within the Departure floor.

- 7.23 Utilising CIP2015 flexibility was the initial approach taken by Dublin Airport to fund costs incurred from any potential rectification works on the departures floor. As the magnitude of the works became known the option to utilise available / remaining flexibility was not viable.

**FIGURE 7.2**      **STRUCTURAL BEAM CRACKING & PASSENGER PROXIMITY TO POTENTIAL FAILURE**

7.24 The essential spend that resulted was outside the control of Dublin Airport and the benefits of consultation in this instance are questionable. It is clear that the actions carried out by Dublin Airport in rectifying this urgent safety issue were in the 'best interest' of airport stakeholders and passengers. If Dublin Airport chose to enter into a period of consultation the following issues would arise;

- *How long would the process have taken and what would the interim measures have been to address the issue and progress the remaining works. The contractor also would have had a significant financial claim to 'stand down' works during this process.*



- *What could the stakeholders contribute to this consultation, at this point in the project? How could stakeholders evaluate whether this was essential expenditure*

*or not? Clearly, they would not have had the expertise to assess. Would they have been expected to engage consultants?*

- *What if we did not receive ‘unanimous support’ – would we be expected to stop the project and not carry out these safety critical structural works?*

7.25 It is clear that for certain projects, and certain stages of projects that it is unpractical to expect consultation to be carried out and it is a flawed assumption that consultation can be carried out for every cost variance. In this instance, stopping the project to carry out consultation could have impacted the safety of passengers and staff and it is against the principles of Regulation to not allow this capital expenditure to enter the RAB. The work required under this project was outside the control of Dublin Airport and in accordance with the Commission’s RAB Roll Forward Principles the associated overspend must be allowed in the 2019 Final Determination.

### **7.3.3 Runway 10-28 Overlay and Associated Lighting - €28.6m**

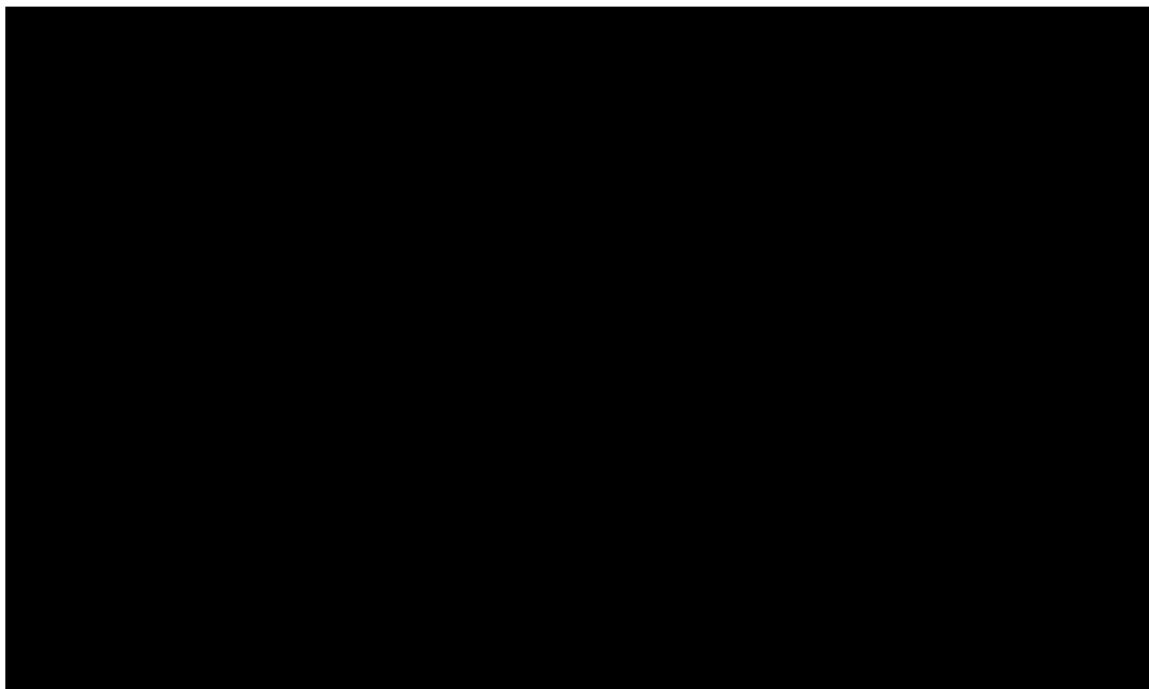
7.26 This project was consulted with stakeholders initially in 2009 and a Thin Porous Friction Course (TPFC) 22mm overlay solution was included as an option in CIP 2010-2014 for the overlay of Runway 10-28. The option preferred by Dublin Airport was a nominal 180mm Marshall Asphalt overlay but was not allowed by the Commission in favour of the inferior TPFC, as this was the option favoured by airport stakeholders.

**FIGURE 7.3 CRITICAL OVERLAY FAILURE**

7.27 As suggested by Dublin Airport, this option proved to be an inferior option and resulted in continuous planned and unplanned closures of the runway to address jointing and pavement cracking. This pavement cracking manifested itself in 2012/2013, and over the next three years, 2014, 2015 & 2016, 174 individual closures were required to undertake jointing repairs. This was becoming a significant safety concern with increasing operational risk. The design and implementation of the current Runway 10-28 Overlay was now urgent and during its peak, the runway required repairs every five days on average. Examples of dangerous cracking and pavement breakup are detailed in Figure 7.3.

**Project Consultation:**

7.28 This project was consulted with stakeholders in January and April 2014 as part of CIP 2015-2019 consultation process. The project was also extensively consulted with airport stakeholders at the Dublin Airport Operations Planning Group (DAOPG), initially on 17<sup>th</sup> January 2015 and at subsequent meetings. This meeting is held monthly and is attended by Airlines, Air Traffic Control, Airport operator and Met Eireann. In total, Dublin Airport consulted with stakeholders at the DAOPG on 32 occasions from January 2015 to September 2017, and beyond. The overlay works commenced on-site in October 2016.

**FIGURE 7.4 RUNWAY OVERLAY RISK MATRIX**

7.29 Figure 7.4 illustrates the increased risk severity to runway operations between 2014 and 2016 as unplanned repairs continued at an increasing rate.



7.30 Throughout this period, stakeholders were engaged / informed of overlay deterioration and the subsequent need to progress with a significant intervention. Intervention in late 2016, in the form of a new overlay construction, was critical to reducing the risk severity of overlay deterioration

This increased risk was outside the control of Dublin Airport due to an earlier CIP Determination where we were forced to implement a sub-standard TPFC solution as that was the only option feasible given the allowance received.

7.31 Extracts from DAOPG meeting minutes, demonstrating the importance of progressing this project, are detailed below;

7.32 20<sup>th</sup> May 2015 – extract from DAOPG meeting minutes

*With regard to the major works which will require the main runway (RWY 10/28) to be closed during the night period (normally defined as 23:00 – 05:00 local) [Dublin Airport Representative], supported by [Consultant Representative] (ch2m - consultants to DAA) gave a presentation (attached to this report) detailing the potential benefits to be gained*

by the DAA in extending the night closures to 21:00 – 05:00 local. Agreement was sought from the airlines to support the extension.

The main element of the proposal comprised

- ‘Normal’ 23:00 to 05:00 (L) closure – works will take 24 months @ 5 days per week
- ‘Proposed’ 21:00 to 05:00 (L) closure – total of 17 months @ 5 days per week
- **This proposal generated extensive comment and opinion including the following:**
- [ANSP Representative] stated that the capacity on RWY16/34 is significantly less than 10/28 – the spacing for arrivals has to be increased to 5NM minimum because of the non-availability of rapid exit infrastructure from the shorter runway. He also stated that the evening rush generally occurred in the period immediately before 23:00 (L).
  - [ANSP Representatives] both asked whether the DAA time saving could be achieved by 7-day week working. [Dublin Airport Representative] stated that this was not possible and might not give associated cost saving.
  - **All the airline representatives were extremely concerned about the extra fuel, extra track miles, delays to aircraft and passengers and effect on crew duty hours limitations which would accompany an extension of hours. They did not see any cost or operational benefit to their companies.**
  - Despite a request from [Dublin Airport Representative] that the airlines reconsider their position, the DAOPG Chairman recognised that the **airlines remained extremely reluctant to agree to the proposal and that, unless further substantial cost benefits to the airlines were identified, agreement would not be forthcoming in this forum.**”

7.33 17<sup>th</sup> June 2015 – extract from DAOPG meeting minutes

**“[ANSP Representative] reiterated the position adopted by the DAOPG at the previous meeting that the 6-hour period for night closure associated with the RWY 10/28 Major Rehabilitation Project should not be extended. [Dublin Airport Representative] confirmed that the DAA had accepted this position and that planning for the work was proceeding accordingly. He stated that survey works for the refurbishment were complete”**

7.34 17<sup>th</sup> June 2015 – extract from DAOPG meeting minutes

**“The DAOPG had made clear to the DAA representatives that extension of night closure hours for main runway renovation was not considered viable (see Minutes from May and June DAOPG meetings). Nonetheless, [Dublin Airport Representative] stated that the DAA and its contractors were still exploring whether the benefits obtained by longer closure hours could mitigate disadvantages suffered by the operators”**

7.35 16<sup>th</sup> November 2016 – extract from DAOPG meeting minutes

*"[Dublin Airport Representative] regretted that, because of the **delayed start of overlay works** on the main runway, it would be necessary to conduct one more daylight inspection walk in November. This announcement was **not welcomed by the airlines**, who felt that further adverse operational impacts would result. [ANSP Representative] said that it could have a more significant effect because of the difficulty in switching back to 10/28 operations if the traffic situation is complex. [Dublin Airport Representative] was asked to defer the walk to the end of November to give an opportunity to conduct the walk at a time when RWY16/34 was likely to **extend into the period until the overlay of the main runway was complete.**"*

**Project Tendering:**

7.36 This project was tendered under the negotiated procedure in the Official Journal of the European Union (OJEU) and on the e-tenders website<sup>45</sup> in line with the Utilities Directive 2014/17/EC in September 2015 and therefore every opportunity was afforded to achieve the most competitive tender for this specialised piece of work. It was outside the control of Dublin Airport in terms of how many compliant tenders were submitted and received.

7.37 Five responses were received, and following the evaluation of the tender submissions, 3 tenders were shortlisted to receive tender documents based on pre-selected criteria detailed in the evaluation process, in relation to experience, technical ability etc. At the final stage of tender submission, 2 tenders were received, [REDACTED]

A Best and Final Offer (BAFO) process was also presented to the 2 final bidders in an effort to reduce cost.

7.38 It was not possible to consider significant project de-scope or retender the project as the works were essential and it was critical that the works commenced immediately to ensure runway serviceability and runway safety. In addition, there was insufficient time to carry out any formal Interim Consultation with stakeholders following tender return once the increased costs were known, as this would have delayed the project and significantly increased the risk to operations. The focus was on completing the essential runway overlay works.

7.39 The benefit of delaying this project to carry out Interim Consultation at this point would have been questionable and would have taken the focus off delivering a critical asset rehabilitation, and the following issues would arise;

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<sup>45</sup> <https://irl.eu-supply.com/ctm/Supplier/PublicTenders/ViewNotice/173754>

- *How long would the process have taken to complete the consultation and what would happen if there was significant pavement failure / increased joint cracking / increased FOD / Increased safety issues while this process was being undertaken?*
- *Where would the responsibility lie in relation to pavement failure if we delayed the project to allow for consultation and what would the stakeholders have realistically contributed to this consultation?*
- *Would stakeholders be able to evaluate project requirements / procurement process / scope of works etc and evaluate whether this was essential expenditure and cost efficient or not?*
- *What if we did not receive ‘unanimous support’ – would we be expected to stop the project and not carry out this project? The project was essential to maintain runway serviceability and had to be completed without delay and it was not practical to have consultation with users to seek ‘unanimous support’ where there was a risk that the project could be delayed, and further runway ‘break-up’ would occur.*

7.40 It can be clearly seen that there was frequent consultation with airport stakeholders and significant pressure to complete the Runway 10-28 Overlay with minimal impact to operations. In addition, the impact of monthly runway inspection walks, since 2013 (due to concerns with runway pavement FOD) and the associated closures were having a significant impact on the operators. It was essential that we progressed with this project without delay to ensure runway serviceability and associated safety. It can be seen in Figure 7.4 that the risk to runway serviceability and safety was increasing. [REDACTED] The additional spend on this project was outside the control of Dublin Airport. Disallowing this additional spend is against the principles of economic regulation and is not in line with the Commission’s own RAB roll forward principles and must be remunerated in the 2019 Final Determination.

#### **7.3.4 Critical Equipment Upgrade (Life Safety Systems) - €10.0m**

7.41 This project was consulted with stakeholders in January and April 2014 as part of CIP 2015-2019 consultation process. The Critical Equipment Upgrade (Life Safety Systems) project served to provide a fully compliant life safety system for all passenger locations in Terminal 1. This project was critical to developing today’s compliant fire evacuation strategy.

7.42 Considering the risk associated with maintaining passenger operations in a facility in need of life safety system upgrades, we proposed “CIP 15.4.006: T1 Critical Equipment

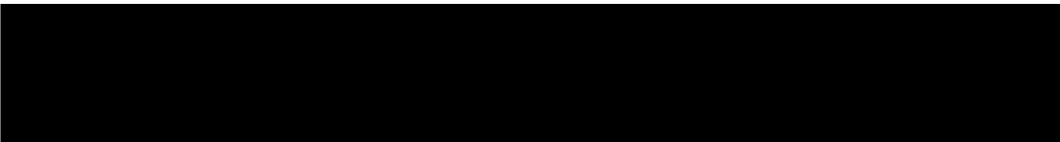


Upgrades” as part of the 2015 Capital Investment Plan based on the limited supporting information available at the time. The estimate at CIP preparation stage was high-level and during the feasibility and surveying phase of the project it became clear that the complexity of delivering the very same scope of works was more significant than originally envisaged and this was outside the control of Dublin Airport.

7.43 In addition, increased complexity during implementation resulted in an increase in cost. While re-consulting, de-scoping or project re-evaluation may be considered in less safety critical projects; this was not possible with the Critical Equipment Upgrade project. It would have been non-compliant with fire safety regulations to delay or compromise the life safety requirements of a facility with a throughput of some 30 million passengers per annum.

7.44 Recent fires, such as Grenfell Tower in London and the Metro Hotel fire in Ballymun have highlighted the importance of having fully compliant fire safety systems in large public buildings.

7.45 Due to the urgency of completing this project to ensure a fully compliant Terminal 1 there was insufficient time to have meaningful consultation with stakeholders, and the benefit of this consultation would have been questionable in this instance, and the following issues arise;

- *How long would the process have taken and what would have happened if there was a fire / emergency evacuation while this process was being undertaken?*
- 
- *What would the stakeholders contribute to this consultation and how would stakeholders evaluate whether this was essential expenditure or not?*
- *What if we did not receive ‘unanimous support’ – would we be expected to stop the project and not carry out these essential fire safety works?*

7.46 The project was essential to maintain a fully compliant terminal and had to be completed without delay and it was not practical to delay for consultation with stakeholders to seek ‘unanimous support’ where there was a risk that the project would be delayed, support

might not be forthcoming, and staff and passengers could be put at risk due to a terminal evacuation / fire.

- 7.47 For the above reasons, we do not consider it appropriate that the Commission would disallow remuneration on the grounds that a consultation process with all airport users was not prioritised at a time when preference was instead given by Dublin Airport to accelerating the resolution of outstanding life safety non-compliances in Terminal 1. The additional expenditure on this project was outside the control of Dublin Airport. Disallowing this expenditure is against the principles of economic regulation and is not in line with the Commission's own RAB roll forward principles and must be remunerated in the 2019 Final Determination.

### 7.3.5 US Preclearance Lounge - €3.3m

- 7.48 This project was consulted on in the response to the 2014 Draft Determination and as identified at that time, this project was requested by stakeholders, i.e. passengers and airlines. This project generates commercial revenue that is used to offset airport charges and in the response to the 2014 Draft Determination in July 2014, Dublin Airport noted that the revenue associated with this project should be excluded from the till in the event that the capital expenditure was not allowed – extract below.

144 | daa **Response to Airport Charges Draft Decision Paper**

**CBP Lounge (€2m)**

daa's executive lounge in T2 has delivered 10% growth for the past 2 years and is currently operating at capacity. Also, daa has received a direct request from airlines to improve the customer experience in CBP, by providing a lounge for business class passengers.

daa had originally planned on refurbishing the T2 lounge during 2014, however due to the capacity constraint being experienced and the interest from customers to a new product after the CBP facility, daa has re-examined its lounge strategy and now plans to deliver a new lounge in 2015 which will be available to customers of any airline operating from CBP.

This investment will cost €2.0m to complete and will deliver an IRR of 11% (nominal). We would expect the associated revenue to be excluded from the till in the event that this capital expenditure is not allowed.

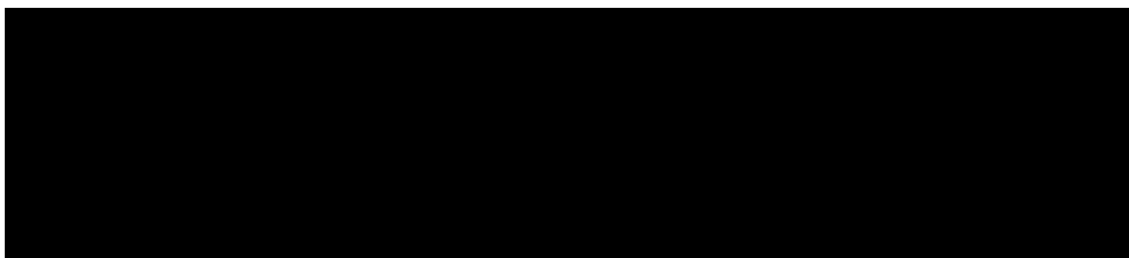
This project provides an opportunity to deliver a "best in class" lounge product, allowing daa to become the pre-eminent operator of lounges at Dublin Airport. The space identified for the lounge is currently unoccupied office space, and has interesting views of the airfield.

- 7.49 The Commission has not complied with this requirement which is against the principle of economic regulation and if the capex is not allowed, then the corresponding revenue should be removed from inclusion within the regulated till. The revenue currently generated (c.€0.8m in EBITDA) significantly outweighs the capital cost being requested.

If future revenues are being considered from this facility, then the capital allowance must be remunerated by the Commission in the 2019 Final Determination.

### 7.3.6 Extension of the CPSRA to Airfield - €6.0m

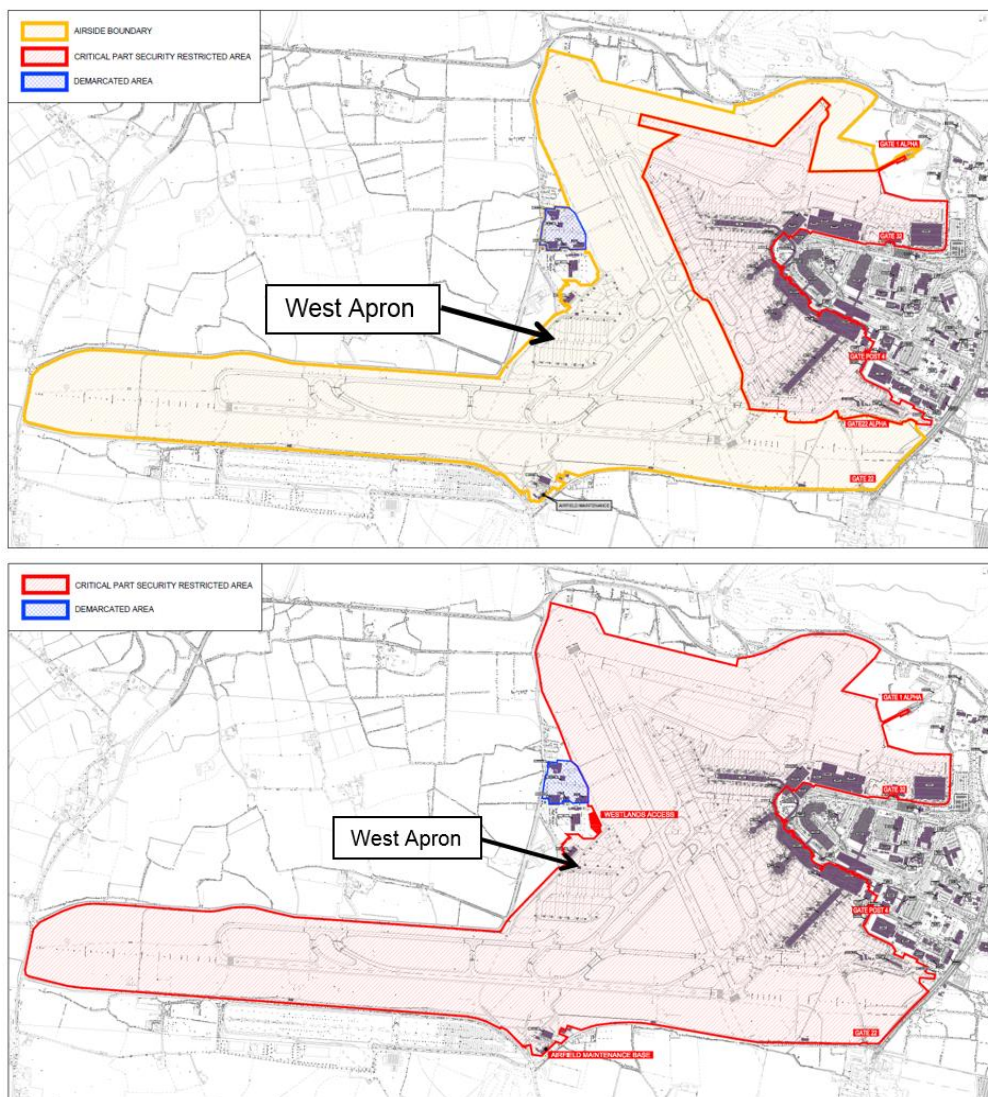
7.50



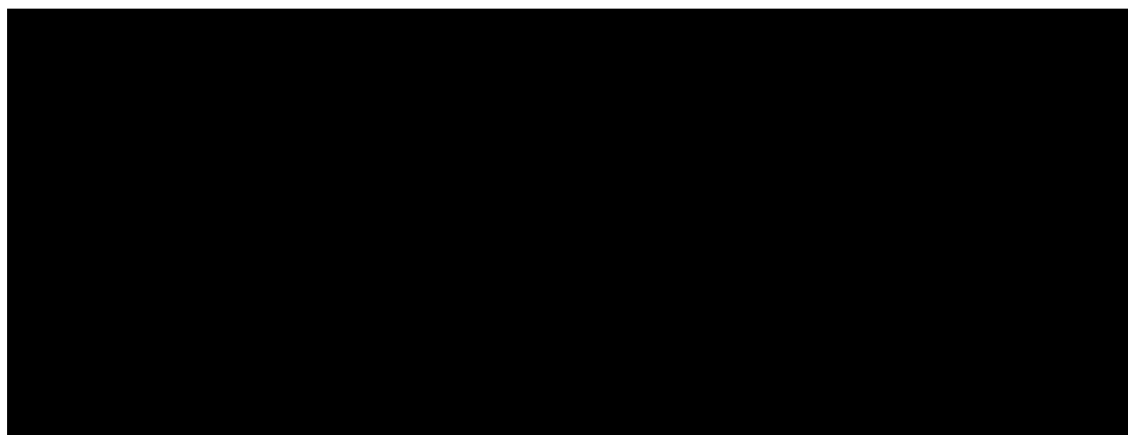
7.51 Prior to this project Dublin Airport airside was divided into critical (CPRSA) and non-critical areas as shown in Figure 7.5 below. In some parts of the airfield the divide was not delineated by a physical barrier but rather a theoretical boundary line on the airfield. Staff (including maintenance, fire and airport operational staff) who moved within the airfield between non-CPSRA and CPSRA areas in the course of carrying out their duties were subject to security screening each time they crossed into a CPRSA area.



**FIGURE 7.5 CPSRA – BEFORE AND AFTER EXPANSION**



7.52



7.53 The extension of the CPSRA also served to provide additional capacity on the East Apron by allowing the relocation of cargo operations from Apron 5G to the West Apron and was

strongly supported by cargo operators who were extensively consulted throughout the process and also took part in live trials in relation to managing integrated cargo.

- 7.54 The West Apron was previously outside the CPRSA area and was not fully utilised due to operational and logistical challenges associated with moving aircraft and personnel between non-CPSRA and CPSRA areas. Extending the CPSRA to the West Apron and consequently to the entire airfield, enables the stands located in this part of the airfield to be used for operations in a similar way to those on the East Apron. The extension of the CPRSA facilitated cargo operations in the West Apron area thereby freeing up stands in the east apron (Apron 5G in particular) for other aircraft. The extension of the CPRSA area was a key enabler for delivering extra capacity throughout the airfield.
- 7.55 Considering this project was [REDACTED] also supported by cargo operators and is currently providing capacity for 6NBEs on Apron 5G which would otherwise not be accommodated on Apron 5G, we disagree with the Commission's decision not to remunerate this project and it is against the principles of economic regulation, it was outside the control of Dublin Airport and is not in line with CARs own principles in relation to RAB roll forward.

### 7.3.7 Conclusion

- 7.56 It can clearly be seen from the above that each of the 5 projects have been of significant benefit to users of Dublin Airport with 4 of them being outside the control of Dublin Airport in terms of the requirement for the additional expenditure and for the project. The CBP Lounge is generating revenue which reduces airport charges, while the associated capital expenditure has not been allowed into the RAB. It is also evident that the condition for "unanimous support of users" is not an appropriate means to develop solutions to address immediate safety risks, particularly safety risks mid project. The treatment of all of these projects is against the principles of economic regulation and not in line with the Commission's own RAB roll forward principles and must be remunerated in the 2019 Final Determination.

## 7.4 Treatment of PACE projects

### 7.4.1 PACE Conditions

- 7.57 The preparation of the CIP 2020 projects followed shortly after the PACE Final Decision was made in June 2018. While preparing CIP 2020 and delivering PACE a significant interface emerged between several of the proposed CIP and PACE projects. Dublin Airport carried out additional design work to the PACE projects to align the design and delivery programme with the CIP projects to gain optimum functional design for the user and

efficiencies in the use of resources and capex. Treating these CIP and PACE projects exclusively would not have been in the airport stakeholders' interest as this approach would have cost more and would have delivered assets with built in and regrettable inefficiencies.

7.58 For this reason, some of the PACE projects have not progressed as quickly as we had initially programmed. In summary, seven of the PACE projects will be complete by the end of 2019, nine will be in progress, and 7 will not commence on site until Q2 2020 for the reasons outlined above. These projects are listed in Table 7.1.

7.59 On this basis we would request the Commission to consider an extension of 6-months to allow Dublin Airport to satisfy the condition of *'the commencement of construction of the project'*.

**TABLE 7.1 PACE PROJECTS REQUIRING SIX-MONTH EXTENSION**

SCP No.	Deliverable	Project
17.2.011	Yes	South Apron Stands Phase 2
17.3.001	Yes	Link 3 Extension Taxiway
17.3.002	Yes	Realignment of Taxiway A
17.3.004	-	Link 6
17.3.003	Yes	Dual Taxiway F
17.3.005	Yes	South Apron Taxiway Widening (Dual Code E)
17.3.006	Yes	Runway 10 Line-Up Points

#### 7.4.2 PBZ Remuneration

7.60 The South Gates (PBZ) project was specifically requested by a key airline stakeholder as an essential development to facilitate growth from 2017 onwards and was expedited on this basis. Currently 1.3 million annual passengers now use this facility, which the airport is essentially not allowed to recover, on the sole basis that the building has not achieved a full planning permission status. We believe that this is a significant over-reach of the Commission's scope.

7.61 The South Gates (PBZ) form a critical part of airport operations on the South Apron, providing five boarding gates serving nine aircraft parking stands. This facility has full user

support, forms part of a current planning application due to be lodged in Q3 2019 (the facility already has permanent planning for a significant part of the works – see detail below) and is of critical importance to address current passenger activity. Despite this, the Commission has incorrectly proposed the non-remuneration of the entire South Gates project costs.

### **Planning Permission**

7.62 In Section 9.27 of the 2019 Draft Determination, the Commission states, “*However, the condition that Dublin Airport obtains permanent planning permission for this structure has not been achieved and now will not be achieved. This means the associated €21.3m will not be remunerated.*” This statement on planning permission is factually incorrect. Dublin Airport received temporary planning permission for the Pre-Boarding Zone building (incl. associated canopy and covered pedestrian walkway) while permanent planning permission was received for all other developments proposed as part of the project<sup>46</sup>. Permanent planning accounts for a significant portion (c.45%) of this project.

**TABLE 7.2 PBZ COST BREAKDOWN**

Description	Permanent Planning	Temporary Planning*
External Designers & Planning	€1,034,899	€689,933
Enabling Works (Elec & Civils)	€4,333,380	€1,211,394
Pier C Bussing	€1,178,869	€0
Bus Lounge Facility (Mod Build)	€0	€8,332,374
Miscellaneous Works	€930,120	€644,891
Management Contractor Costs	€1,994,795	€854,912
Site Supervision	€242,814	€384,012
<b>Total</b>	<b>€9,714,877</b>	<b>€12,117,516</b>

\*Pending Full Planning Permission

7.63 The €9.7m of infrastructure that has already received permanent planning permission is detailed in the table below and at a minimum this amount must be remunerated now with the remainder being remunerated following receipt of full planning permission for the PBZ building.

<sup>46</sup><http://planning.fingalcoco.ie/swiftlg/apas/run/wphappdetail.displayURL?theApnID=F16A/0483&theTabNo=11>



7.64 Dublin Airport is in the process of applying for permanent planning permission for the structure and following a decision from Fingal County Council we expect the Commission to include the remuneration of the full €21.4m in the Final Determination. Irrespective of Fingal County Council’s decision on this (positive or negative), we expect the Commission to revise their allowance to include the full cost of the PBZ in the Final Determination as the FCC decision is outside the control of Dublin Airport and should be remunerated in line with the Commission’s RAB roll forward principles. We cannot be expected to carry the capex cost of infrastructure that was requested by and benefits stakeholders without capex remuneration.

**User Support**

7.65 This decision not to remunerate the spend on the PBZ brings into question the confidence in the proposed StageGate process. The PBZ project was supported (and requested) by stakeholders in order to manage the forecast growth planned for the Summer 2017 season and is now not being allowed – see letter of support from Aer Lingus, submitted as part of the planning application<sup>47</sup>.

**Efficient Spend**

7.66 The cost in the amount of €21.3m was delivered efficiently and this was confirmed by the Commission’s own consultants (Reference: Dublin Airport Supplementary CIP Efficiency Assessment – Final Report, June 2018, Steer Davies Gleave) – see extracts below;

Specifications review	
Table 4.12: South Apron PBZ – Specifications review	
Subject	Comments
Effectiveness of scope	The scope addresses the functional requirements of providing 5 gates for pre-boarding to improve on-time performance of aircraft stands. Passengers access the PBZ via a bussed access from Pier C. It also enables the existing constrained South Apron to provide 9 Code C walk on stands. The number of buses required is also reduced.  The scope successfully optimises the constrained existing South Apron by providing a building of 2,200m <sup>2</sup> for the gates/lounges, new head of stand road, dedicated covered walkway to stands, bussing drop-off area and Code C stands. The scope embraces all the objectives and includes a re-modelled Pier C bus lounge.
Alternative scopes	The carefully planned and phased project would appear to be an optimum solution and it is difficult to envisage a more appropriate result.
4.20	In overall terms, the scope of the project meets the requirements of the objective of increasing the number of gates and walk on stands and appears efficient.

7.67 This project was therefore delivered efficiently, and costs should be remunerated.

<sup>47</sup> <http://documents.fingalcoco.ie/NorthgatePublicDocs/00539290.pdf>



7.68 In summary, the PBZ was requested, endorsed and consulted on throughout the PACE process. It was supported by airlines, and ultimately allowed by the Commission, however Dublin Airport now fail to get remunerated for the capital spend having complied with the principles of consultation and meanwhile stakeholders are, and have been, receiving full use of this facility since it became operational in Q4 2017. This is an adverse benchmark as to how the proposed StageGate process might work, and Dublin Airport request that the Commission revise this position in the 2019 Final Determination and allow the full amount of €21.3m to enter the RAB.

## 7.5 North Runway

7.69 Dublin Airport does not dispute the North Runway conditions as noted by the Commission in the draft determination.

## 7.6 2020-2024 Capital Allowances

### 7.6.1 Introduction

7.70 Dublin Airport has diligently developed its construction estimates based on design information available at the time of submission. A process of continuous review and benchmarking, with the support of external industry expertise, was utilised to refine estimates as additional data/information became available. At the same time further refinement of feasibility designs have been achieved producing specifications for some items that were under developed at the time of submission.

7.71 In Section 1.21 of the 2019 Draft Determination, the Commission sets out a cost variance of €148.5m relative to the Dublin Airport Costings. This cost variance is broken down as follows:

- **↓ €155.2m** of a reduction across 50 CIP2020+ projects, as identified by Steer;
- **↓ €1.5m** of a reduction due to two CIP2020+ projects being disallowed. the Commission do not consider these two projects as capital projects – refer Section 9.37 of the 2019 Draft Determination
- **↑ €8.2m** of an increase across 6 CIP 2020+ projects, as identified by Steer

7.72 On 13<sup>th</sup> June 2019, Dublin Airport facilitated a review with Steer to better understand the estimate variances identified in their report. The meeting was constructive and helped identify estimate assumptions that were either not made clear by Dublin Airport or not known by Steer at the time of the assessment. Following this meeting further information and assumptions were exchanged between Dublin Airport and Steer in the form of

Technical Notes, see Table 7.3. Full details on the Technical Notes are available in Appendix 6.

**TABLE 7.3 TECHNICAL NOTES**

Title	Description	Issue Date	Pages
Technical Note 001	Airbridges	21 Jun 2019	3
Technical Note 002	Fitout	21 Jun 2019	26
Technical Note 003	High Mast Lighting	20 Jun 2019	5
Technical Note 004	Road Pavements	21 Jun 2019	9
Technical Note 005	5M Apron Pavement	21 Jun 2019	5
Technical Note 006	Demolition	21 Jun 2019	21
Technical Note 007	Quantity Variances	21 Jun 2019	23
Technical Note 008	Communication Systems	20 Jun 2019	2
Technical Note 009	Other	02 Jul 2019	8
Technical Note 010	Apron Rehabilitation	02 Jul 2019	2
Technical Note 011	Pier 5 Escalators	02 Jul 2019	6
Technical Note 012	Quantity Take-off	05 Jul 2019	3

7.73 These Technical Notes address each one of the main subjects for discussion raised by Steer in the Capex Efficiency document. These notes provide greater detail on the specific rate constituents as well as comparable construction rates both within the Dublin Airport Campus and the Dublin region.

7.74 The following section addresses the estimate rate variances which contribute to the €155.2m difference between Dublin Airport's costings and that of Steer (not all the €155.2m variance is rate based). It does so by providing a summary of the information included in the Technical Notes shared with Steer and comments on other items that have been impacted through the efficiency review.

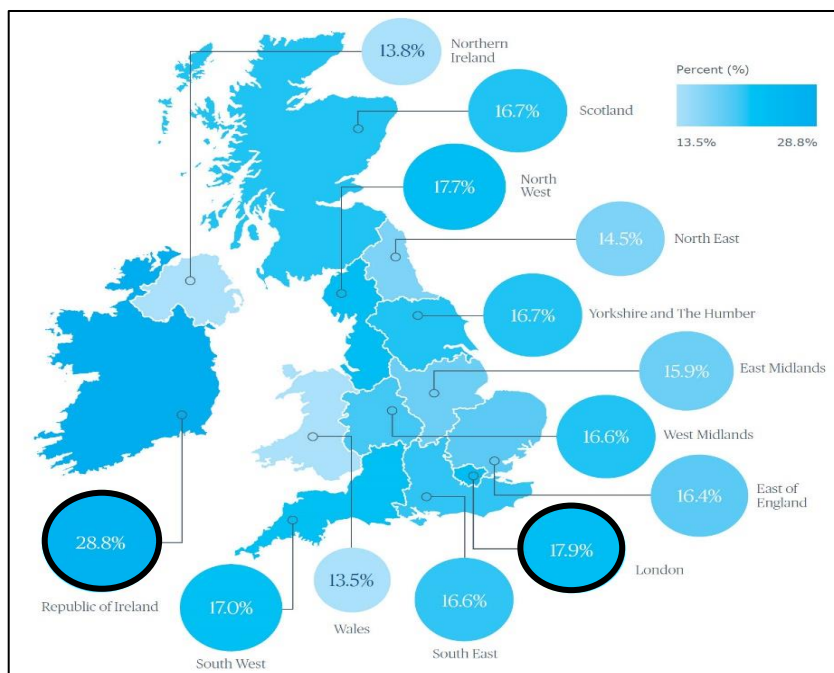
7.75 This section also highlights the unique construction challenges faced by the Republic of Ireland when compared with the UK to explain why benchmarking exercises between both countries may not always be an accurate approach.

7.76 A cost variance matrix is available in Table 7.4 to illustrate the variances between Dublin Airport estimates and Steers assessment. Included are all the Technical Notes shared with Steer that addresses the main reductions as stated above.

**7.6.2 Introduction Dublin Construction Sector – Comparison with South East England**

7.77 It is important to note that estimates developed by Dublin Airport are cognisant of the current buoyant economic conditions in the construction industry in Ireland. Dublin Airport has experienced first-hand how these conditions result in procurement and tendering challenges; ensuring competition and the ability of the local market and supply chains to meet the necessary demand being the key challenges. This is not confined to Dublin Airport alone as several other large-scale construction projects in the region are experiencing similar upward pressures.

**FIGURE 7.6 T&T TENDER PRICE INDEX CUMULATIVE PERCENTAGE CHANGE: 2018-2022**



7.78 According to the Q3 2018 T&T UK Market Intelligence report<sup>48</sup> *‘This surge in interest has turbocharged Dublin’s already hot market, and it now risks overheating. Ireland’s construction sector still bears the scars from an economic boom and bust a decade ago, which was far more severe than Britain’s. As a result, Dublin is less ready for – and more wary of – the current surge in demand, with the city’s construction sector facing acute*

<sup>48</sup><https://www.turnerandtownsend.com/en/perspectives/uk-market-intelligence-q3-2018-contractors-report-order-book-increases-but-brexit-uncertainty-prevails/>

*skills shortages and rapid price inflation.* While there is comparability between Ireland and the UK, real tender returns and outturn costs on specific projects are indicating that the rate of change in Dublin and in particularly Dublin Airport are ahead of the UK. Figure 7.6 highlights the major difference in cumulative UK and Ireland regional TPI (2018 – 2022). It should also be noted that the Republic of Ireland TPI Metrics shown do not emphasise the above average metric for the Dublin region.

- 7.79 This market situation is magnified at Dublin Airport where the limited expertise in aviation infrastructure within the local supply chain and the risks associated with working in a congested, operational and safety/secured enhanced environment deters tenderers from airfield and terminal works. These are critical considerations in the development of estimates for CIP2020 and further emphasises the unique tendering challenges Dublin Airport faces in delivering CIP2020, when compared with similar infrastructure projects in the UK. That is why estimates have been based on historical tenders where available to reflect these constraints.
- 7.80 Dublin Airport is working hard on several initiatives to raise its attractiveness within the market and to address the current market situation. Amongst these initiatives are engaging with the wider European construction market to create project awareness, setting up new procurement strategies and building on the relationship with contractors and suppliers by switching to a more collaborative suite of contracts. This work is critical to delivering the works as estimated.

### 7.6.3 Summary of cost reductions by rate

- 7.81 Table 7.4 summarises the main items that amount to the total reduction in costs proposed by Steer as part of their efficiency assessment. The impact on the reduction of these items is broken down by project. For simplicity, the Design & Management, Escalation and Contingency component of each project variance is separated out in a separate column (blue heading in Table 7.4). The all-inclusive variance is only shown in the furthest most right column.
- 7.82 The following sections address the various rates by category and provides further detail into the variance between the Dublin Airport cost estimates and the Steer Cost Efficiency estimates as well as further substantiation on the Dublin Airport Cost Estimates.

**TABLE 7.4 ESTIMATE VARIANCE MATRIX**

CIP Number	Project Title	Direct Construction Variance(€m)										Total Direct Construction Cost Variance	*Design & Management/Contingency/Escalation*	Total Cost Variance
		Fit-out	Demolition	Airbridges	Pavement	AVDGS	Communications	High Mast Lighting	Quantity	Other Rates Reductions	*Other Development Costs (DD Prelims & Phasing Allowances)			
CIP.20.03.029	New Pier 5 (T2 and CBP Enabled)	€0.26	€2.90	€2.80	€0.31	€0.60	€1.95	€0.25	€7.50	€0.72	€4.08	€21.4	€13.28	€34.6
CIP.20.03.031	South Apron Expansion (Remote Stands, Taxiway and Apron)	-	-	-	€0.12	€0.45	€0.20	€0.25	€0.79	€8.73	€0.36	€10.9	€8.35	€19.3
CIP.20.03.036	North Apron Development – Pier 1 Extension (Module 1) & Apron 5H PBZ	€0.06	€5.64	-	€1.34	€0.50	€0.81	€0.25	€0.86	€0.98	€1.59	€12.0	€4.68	€16.7
CIP.20.03.013	Terminal 1 Departure Lounge (IDL) Reorientation and Rehabilitation	€8.23									€0.58	€8.8	€5.28	€14.1
CIP.20.03.012	Terminal 1 Central Search - Relocation to Mezz Level	€7.75									€0.55	€8.3	€5.53	€13.8
CIP.20.03.043A	Terminal 1 Piers - New Airbridges (6NBE / 3WB)	€2.39		€2.10						€1.00	€1.14	€6.6	€3.97	€10.6
CIP.20.01.002	Apron Rehabilitation Programme				€4.07						€0.61	€4.7	€1.54	€6.2
CIP.20.03.011A	Terminal 1 Check-In (Partial shoreline)	€1.56								€1.10	€0.19	€2.9	€1.65	€4.5
CIP.20.03.015	Terminal 1 Baggage Reclaim Upgrade & Alterations	€2.95									-€0.96	€2.0	€1.18	€3.2
CIP.20.07.010	Office Consolidation & Refurbishment	€1.97									€0.30	€2.3	€0.88	€3.1
CIP.20.03.051B	West Apron Vehicle Underpass Pier 3			€0.70						€0.25	€0.36	€1.3	€0.68	€2.0
CIP.20.04.025	Commercial Property Refurbishment	€1.50										€1.5	€0.49	€2.0
CIP.20.04.023	Food & Beverage Provision & Fit-out – Post CBP	€1.43										€1.4	€0.43	€1.9
CIP.20.01.003	Airfield Taxiway Rehabilitation Programme				€1.28						€0.26	€1.5	€0.08	€1.6
CIP.20.03.020	Terminal 2 Check-in Area Optimisation	€0.86								€0.14	€0.07	€1.1	€0.50	€1.6
CIP.20.07.030	Large Energy Project - Photovoltaic Farm									€1.30		€1.3	€0.25	€1.5
CIP.20.04.006	Terminal 1 Multi-Storey Car Park Block B (466 spaces)									€0.71	€0.36	€1.1	€0.35	€1.4
CIP.20.04.003	New Food & Beverage Fit-out (T1X)	€0.95										€0.9	€0.28	€1.2
CIP.20.03.033A	Enablement of Pier 3 for Precleared US bound passengers	€0.56								€0.04	€0.16	€0.8	€0.44	€1.2
CIP.20.03.054	New Remote Apron 5M - 17 NBEs				€0.53					€0.02	€0.16	€0.7	€0.37	€1.1
CIP.20.03.034	Pier 3 Immigration (Upgrade & Expansion)	€0.54	€0.02								€0.12	€0.7	€0.35	€1.0
CIP.20.02.002	Second Medium Voltage (MV) Connection Point											-		-
CIP.20.03.017	Terminal 1 Shuttle, bus lounges and injection points	€0.48									€0.12	€0.6	€0.33	€0.9
CIP.20.03.021	Terminal 2 Central Search Area Expansion	€0.55	€0.03								€0.01	€0.6	€0.35	€0.9

CIP.20.02.004	Passenger Boarding Bridges (Maintenance & P3 Enhancement) & FEGP			€0.67								€0.7	€0.21	€0.9
CIP.20.04.005	Long Term Car Parking - Eastland's (2000 spaces)								€0.25	€0.51		€0.8	€0.06	€0.8
CIP.20.03.004	Gate Post 9 Expansion (West Lands)			€0.34					€0.01	€0.01	€0.12	€0.5	€0.25	€0.7
CIP.20.04.030	New Kitchen in Terminal 2	€0.39									€0.10	€0.5	€0.26	€0.7
CIP.20.01.004	Apron Road Rehabilitation Programme								€0.15	€0.34	€0.03	€0.5	€0.20	€0.7
CIP.20.06.042	ATRS - Central Search Areas (T1 and T2)									€0.54		€0.5	€0.16	€0.7
CIP.20.01.046	Staff Car Parks Critical Maintenance									€0.07	€0.02	€0.1	€0.04	€0.1
CIP.20.04.021	West Apron - Accommodation & Welfare Facilities									€0.53		€0.5	€0.16	€0.7
CIP.20.01.020	Terminal 1 Façade, Roof & Spirals									€0.37	€0.07	€0.4	€0.21	€0.6
CIP.20.01.006	Airfield Southern Perimeter Road Upgrade Programme									€0.30	€0.10	€0.4	€0.20	€0.6
CIP.20.01.034	Campus Roads Critical Maintenance									€0.30	€0.09	€0.4	€0.21	€0.6
CIP.20.07.004	Metro Coordination											-		-
CIP.20.07.014	Terminal Operations Improvement Projects									€0.32		€0.3	€0.07	€0.4
CIP.20.04.002	Car Hire Consolidation Centre									€0.38		€0.4	€0.02	€0.4
CIP.20.03.016	Terminal 1 Rapid Exit Arrivals	€0.15									€0.03	€0.2	€0.14	€0.3
CIP.20.05.001	Airfield Optimization									€0.30		€0.3		€0.3
CIP.20.01.039	Airport Roads Critical Maintenance									€0.14	€0.04	€0.2	€0.08	€0.3
CIP.20.01.023	Piers & Terminals Critical Maintenance									€0.15	€0.03	€0.2	€0.06	€0.2
CIP.20.04.009	Staff Car Park									€0.18		€0.2	€0.05	€0.2
CIP.20.04.007	Terminal 2 Multi-Storey Car Park (680 spaces)									€0.01	€0.10	€0.1	€0.04	€0.1
CIP.20.06.007	Full Body Scanners									€0.16		€0.2	€0.03	€0.2
CIP.20.06.014	Screening and Logistics Centre									€0.08	€0.01	€0.1	€0.05	€0.1
CIP.20.01.049	Public Carpark Critical Maintenance									€0.04	€0.01	€0.0	€0.02	€0.1
CIP.20.03.057	Airside GSE Charging Facilities (Ground Handlers)									-€0.06	€0.15	€0.1	€0.03	€0.1
CIP.20.01.016	Airfield Maintenance Base Improvement Programme									€0.06	€0.03	€0.1	€0.04	€0.1
CIP.20.05.009	Network Components - Lifecycle & Growth									€0.08		€0.1		€0.1
CIP.20.02.006	Airport Water & Foul Sewer Upgrade									€0.03	€0.01	€0.0	€0.01	€0.1
CIP.20.03.006	Terminal 1 Kerbs		€0.00							€0.03	€0.01	€0.0	€0.01	€0.0
<b>TOTAL</b>		<b>€33</b>	<b>€9</b>	<b>€6</b>	<b>€8</b>	<b>€2</b>	<b>€3</b>	<b>€1</b>	<b>€9</b>	<b>€20</b>	<b>€12</b>	<b>€101</b>	<b>€54</b>	<b>€155</b>

### 7.6.3.1 Fit-out / Refurbishment rates (Technical Note 002)

7.83 The total variance associated with fit-out / refurbishment works is €33m (Direct Rate Cost Variance) with €31.5m covered under this Technical Note 002 and €1.5m covered under Technical Note 009. Direct Rate Cost Variance relates to the variances between the construction component rates not including associated reductions in allowances for phasing, design development, preliminaries, risk & contingency, design and management costs and escalation costs.

7.84 Dublin Airport have issued Technical Note 002 (TN002) Fit-Out Rates to Steer in advance of this report on 21st June 2019. The purpose of the Technical Note was to provide further clarity on the scope included within each rate as well as further substantiation on the rates within the cost estimates. The substantiation provided was in the form of cost data from relevant Dublin Airport projects and other relevant airport project benchmarks.

**TABLE 7.5 DIRECT FIT-OUT RATE SUMMARY**

Project No.	Project	Description	Variance (€m)
CIP.20.03.011A	Terminal 1 Check-In (Partial shoreline)	Extra over for full Fit out of the area previously occupied by security to create new check in area	-1.0
		Extra over allowance for Provision of new airline offices	-0.6
CIP.20.03.012	Terminal 1 Central Search - Relocation to Mezz Level	Refurbishment of existing mezzanine level for new security operation (equipment excluded)	-7.8
CIP.20.03.013	Terminal 1 Departure Lounge (IDL) Reorientation and Rehabilitation	Strip out existing security Area and provide new fitted out retail / F&B	-7.8
		New IDL Wait Gate / F&B	-0.4
CIP.20.03.015	Terminal 1 Baggage Reclaim Upgrade & Alterations	Allowance for new floor and ceiling finishes to baggage hall	-2.1
		Refurbishment of baggage hall & circulation space, including widening of corridor	-0.7
CIP.20.03.017	Terminal 1 Shuttle, bus lounges and injection points	General allowance for refresh works within OCTB (new paint, renew floor finishes)	-0.5
CIP.20.03.020	Terminal 2 Check-in Area Optimisation	Terminal 2 Check-in Area Optimisation	-0.7
CIP.20.03.021	Terminal 2 Central Search Area Expansion	Allowance for the New Fit out to the above mention area	-0.6
CIP.20.03.029	New Pier 5 (T2 and CBP Enabled)	F&B	-0.3

<b>CIP.20.03.033A</b>	Enablement of Pier 3 for Precleared US bound passengers	Constructing of new CBP bus waiting lounge in Pier 4	-0.5
<b>CIP.20.03.034</b>	Pier 3 Immigration (Upgrade & Expansion)	Allowance for electrical rooms	-0.2
		Allowance for alterations to the queue space	-0.3
<b>CIP.20.03.043A</b>	Terminal 1 Piers - New Airbridges (6NBE / 3WB)	Fit-out of the F&B Areas	-0.5
		Refurbishment of the Existing lounges / Gate rooms	-1.6
<b>CIP.20.04.003</b>	New Food & Beverage Fit-out (T1X)	Basic Fit-out for Proposed F&B	-0.9
<b>CIP.20.04.023</b>	Food & Beverage Provision & Fit-out – Post CBP	Basic Fit-out for Proposed F&B Area	-1.1
<b>CIP.20.04.025</b>	Commercial Property Refurbishment	Basic Fit-out for Office Space	-1.5
<b>CIP.20.04.030</b>	New Kitchen in Terminal 2	Strip back to basic fit-out of Proposed F&B	-0.4
<b>CIP.20.07.010</b>	Office Consolidation & Refurbishment (primarily Level 4 & 5, Terminal 1)	Full Fit-out for Office Space	-2.3
<b>Total</b>			31.5m

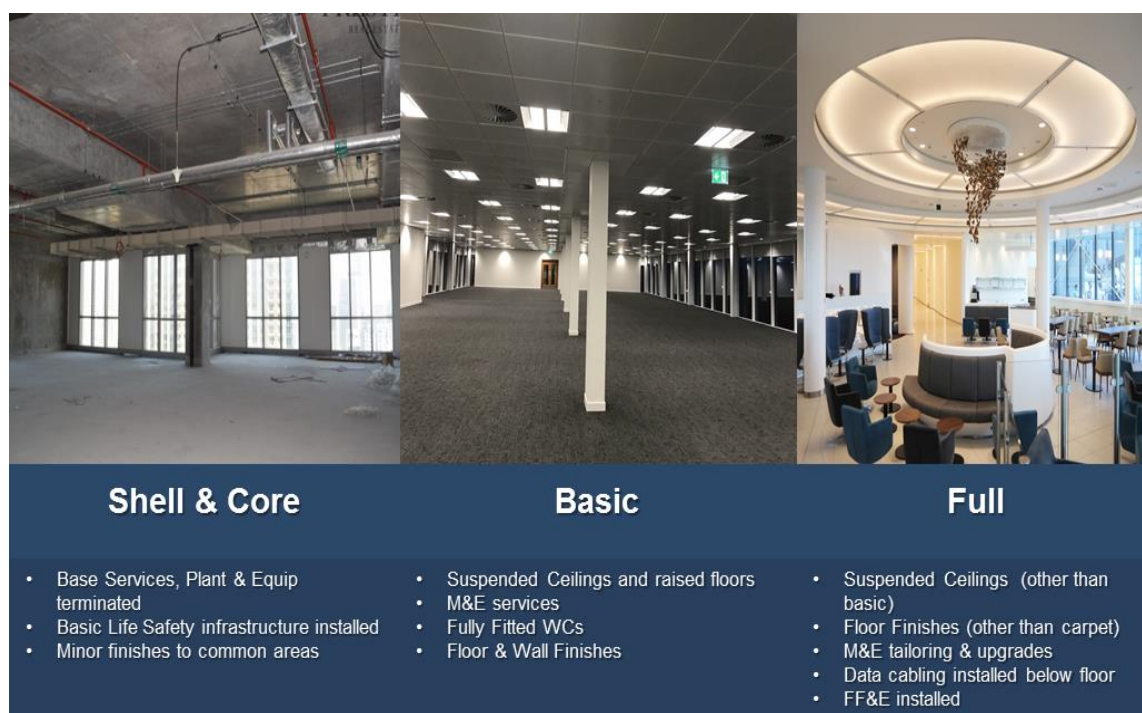
7.85 At feasibility stage, the overall approach adopted by Dublin Airport has been to apply a fit-out rate throughout a refurbished/new area based on a fit-out category. The category specifies the level of works required and depends on the future intended use and ownership of the space. There are three categories which can generally be used to identify the different rates within the Dublin Airport cost estimates:

- Shell & Core: for undesignated space for future development
- Basic Level: used for concessionaire space
- Full Fit-out: used for Lounges, Dublin Airport operated retail (non-concessionaire), office space and security areas

Note that special equipment and bespoke works have been kept out of these rates.

7.86 Dublin Airport is somewhat unique in relation to the retail operation whereby a large proportion of retail operations at Dublin Airport are owned and operated by daa, and not through third party concessions. This requires a full fit-out to be fully completed in areas where daa manage the retail operation directly. This was clarified at our meeting on 13<sup>th</sup> June 2019 with Steer and would expect the fit-out rates to be revised to reflect this.



**FIGURE 7.7 FIT-OUT CATEGORIES**

7.87 The fit-out rates included within Dublin Airport cost estimates include costs for demolition of existing walls, floors, ceilings and services to redevelop a space to meet the specified requirements of the space and to complete the associated fit-out/refurbishment to Basic or Full fit-out. For example, CIP.20.03.011A - Terminal 1 Check-In (Partial shoreline) allows for refurbishment of existing security area into a check-in area. This rate allows for the demolishing of an existing space with a specific requirement as a security area and fit-out to meet the requirements of a check-in space. This requires significant changes to all finishes as well as services in this space to meet the future demand.

7.88 Key cost drivers within the Dublin Airport rates are as follows but not limited to:

- New construction i.e. walls, partitions, ceilings, floor space & services
- Level of refurbishment of existing facilities including services
- Upgrade of existing service infrastructure to meet intended use
- Specification of finishes and services
- Fixture, Fittings & Equipment requirements
- Location Requirements (Landside/Airside)
- Operational Requirements

7.89 Reviewing the findings of the Cost Efficiency report in the presence of Steer confirmed that additional info on full project scope was required. As noted above, this information has now been provided to allow for an updated assessment. It must be noted that the initial proposed cost reductions, as issued on the 9<sup>th</sup> May, would render several of the projects listed in Table 7.5 as undeliverable.

### 7.6.3.2 Demolition/Disposal (Technical Note 006)

7.90 The total variance associated with a reduction in the rate of Demolition/Disposal works is **-€8.58m**; most of this variance is spread across five projects in Table 7.4. The largest variances are listed below. Direct Rate Cost Variance relates to the variances between the construction component rates not including associated reductions in allowances for phasing, design development, preliminaries, risk & contingency, design and management costs and escalation costs.

**TABLE 7.6 DIRECT DEMOLITION/DISPOSAL RATE VARIANCE SUMMARY**

Project No.	Project	Description	Variance (€m)
CIP.20.03.029	New Pier 5 (T2 and CBP Enabled)	Cargo Centre 1 -Workshop GF Cargo Centre 1 – Office 1st floor Cargo Centre 1 – Office 2nd floor Cargo Centre 2 – End block GF Cargo Centre 1 – Removal of ACMs Cargo Centre 2 – Removal of ACMs Cargo Centre 2 - Warehouse Area	-2.2
		Old Ryanair Building – GF Old Ryanair Building – 1st Old Ryanair Building – 2nd South Apron Accommodation – GF South Apron Accommodation – 1st	-0.4
CIP.20.03.036	North Apron Development	Demo of Hanger 1; incl. Office Block (currently used by Dublin Airport IT) Demo of Hanger 2; complete	-3.3
		Demolition of Sim Building; Annex demo includes Old Fire Station and Workshops	-2.0
		Demolition of North Terminal	-0.3

7.91 Dublin Airport have issued Technical Note 006 (TN006) Demolition Rates to Steer in advance of this report on 21<sup>st</sup> June 2019. The purpose of the Technical Note was to provide further clarity on the scope included within each rate as well as further substantiation on the rates within the cost estimates. The substantiation provided was in

the form of cost data from relevant Dublin Airport projects and other relevant airport project benchmarks.

7.92 To clarify the scope and breakdown of the demolition rates Dublin Airport have provided further breakdown of the rates utilised, as well as benchmark costs from which the estimated rates were derived in consultation with external cost consultants. As advised during the site visit, the following scope is included within the demolition rate:

- Cost of demolishing structures
- Cost of transporting waste materials to licenced tipping/treatment facilities
- Cost savings associated with any salvage value are included in the rates
- Sub-contractor preliminaries
- The rates also include an allowance for cost associated with working in a heavily constrained airport environment

7.93 Further cost benchmarking from external consultants and in house works carried out in Cork Airport are detailed in the Technical Note.

7.94 An important aspect driving disposal prices is the increasing strain due to the lack of active landfill sites for the disposal of waste materials specifically inert construction materials. A recent review by the Construction Industry Federation (CIF)<sup>49</sup> noted the impact of the decrease in active landfills which are now in operation in Ireland. Restrictions in place by the Environmental Protection Agency (EPA) are enforcing a sustainable waste management strategy for Ireland which implements charges on different types of waste. This is also having an inherent effect on tendered rates being received from demolition contractors.

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<sup>49</sup> <http://www.engineersjournal.ie/2016/11/01/threat-to-infrastructure-projects-construction-waste/>

### 7.6.3.3 Road Pavements (Technical Note 004)

7.95 The total variance associated with a reduction in the rate of Road Pavements works is - €2.65m and is spread across six projects, listed in Table 7.7.

**TABLE 7.7 DIRECT ROAD PAVEMENT RATE VARIANCE SUMMARY**

CIP Number	Project Title	Variance* (€m)
CIP.20.03.004	Gate Post 9 Expansion (West Lands)	-0.3
CIP.20.03.029	New Pier 5 (T2 and CBP Enabled)	-0.3
CIP.20.03.031	South Apron Expansion (Remote Stands, Taxiway and Apron)	-0.1
CIP.20.03.036	North Apron Development – Pier 1 Extension (Module 1) & Apron 5H PBZ	-1.3
CIP.20.03.054	New Remote Apron 5M - 17 NBEs	-0.5
CIP.20.03.004	Gate Post 9 Expansion (West Lands)	-0.3

7.96 Each one of these projects includes a different road configuration depending on its purpose and location relative to the airfield. Dublin Airport made the decision to use a fixed rate across all the projects. Whilst some of the features of the airfield roads are the same, the scope captured varies on an individual project basis. The rate can be broken down in the following way:

- Standard access road:
  - Pavement build-up
  - Road markings
  - Drainage
  - Utilities
  - Ancillaries
- Additional scope

7.97 In some projects the rate has been used to price a standard apron road, on others it has been used for public road diversions, some include the construction of bus lay-by's etc. Further granularity on what the additional scope included per project is included in the Technical Notes.

7.98 Information on the following three projects has been provided to Steer and provides a solid benchmark on comparative project costs:

- Source 1: PACE approved project
  - Public road diversion project similar to Apron 5M road diversion

- Approved rate in PACE for public road, Project included airside/landside fence
- Source 2: T&T Airside perimeter road project (Gatwick airport)
- Source 3: AECOM Northern Parallel runway airport road, Airfield road to access terminal areas and remote aprons

#### 7.6.3.4 Apron Rehabilitation (Technical Note 010)

7.99 The total variance associated with a reduction in the rate of Apron Rehabilitation is - €5.35m spread across two projects; Apron and Airfield Taxiway Rehabilitation Programmes. Direct Rate Cost Variance relates to the variances between the construction component rates not including associated reductions in allowances for phasing, design development, preliminaries, risk & contingency, design and management costs and escalation costs.

7.100 Dublin Airport has based its rates for apron rehabilitation on recent approved projects some of which were endorsed by the regulator in the last supplementary Capex determination, PACE. Apron 5H project has been used as the most relevant benchmark for costing these works due to its current nature and similarities in scope.

7.101 Other project benchmarks that reinforce the appropriateness of the rates have been set out in the Technical Note (TN010). We encourage that the re-assessment of Apron Rehabilitation rate considers the already approved rates (by Steer) under PACE.

#### 7.6.3.5 Quantities (Technical Note 007 & 012)

7.102 Variances in the measured quantities by Steer and Dublin Airport has led to a significant variance across three projects, as shown in Table 7.8. The overall floor area variances create significant cost variances to all construction components which are linked to the overall floor area included within the cost estimate including but not limited to substructure, superstructure, external enclosure, fit-out and MEP.

7.103 Information on the areas measured by the Dublin Airport team in the estimates have been shared with Steer through ongoing communications including a meeting held at Dublin Airport on 13<sup>th</sup> June 2019 and through Technical Notes issued to Steer which provide the quantities measured by Dublin Airport. Technical Note 012 was issued to Steer on the 5<sup>th</sup> July 2019; reviews between Steer and Dublin Airport are ongoing.

**TABLE 7.8 QUANTITIES VARIANCE SUMMARY**

Project No.	Project	Description	DUB	Steer	Variance
CIP.20.03.029	New Pier 5 (T2 and CBP Enabled)	Overall Floor Area	19,783m <sup>2</sup>	18,265m <sup>2</sup>	-1,518m <sup>2</sup>
		Internal Fit-Out Area	19,200m <sup>2</sup>	12,770m <sup>2</sup>	-6,430m <sup>2</sup>
		External walls.	8,392m <sup>2</sup>	7,654m <sup>2</sup>	-738m <sup>2</sup>
		Stair/Ramp	52no.	42no.	-10no.
		Escalators	7no.	5no.	-2no.
CIP.20.03.031	South Apron Expansion (Remote Stands, Taxiway and Apron)	Overall Floor Area	2,350m <sup>2</sup>	2,311m <sup>2</sup>	-46m <sup>2</sup>
CIP.20.03.036	North Apron Development – Pier 1 Extension (Module 1) & Apron 5H PBZ	Overall Floor Area	5,500m <sup>2</sup>	5,060m <sup>2</sup>	-440m <sup>2</sup>

**CIP.20.03.029: New Pier 5 (T2 and CBP Enabled) – Escalator Variance**

7.104 A variance of - €0.4m exists between the Dublin Airport estimate and the Steer estimate due to a variance of -2no. escalators in the new Pier 5. Following a further review of the design drawings (following the 13<sup>th</sup> June review), additional escalator quantity variances were identified.

7.105 Table 7.9 summarises the cost variance between the Dublin Airport cost estimate submitted and the revised estimate based on corrected cost estimate. On the 2<sup>nd</sup> July 2019, Technical Note 011 was issued to Steer to provide greater information on the appropriate quantity take-off for Pier 5.

**TABLE 7.9 ESCALATOR VARIANCE**

Description	Quantity (no.)	Description	Quantity (no.)
<b>Dublin Airport original Estimate</b>		<b>Dublin Airport Revised Estimate</b>	
Arrivals Escalators (dual) – Apron to Level 20	4	Arrivals Escalators (dual) – Apron to Level 20	4
Departures Escalators – Apron to Level 30	3	Departures Escalators (dual) – Apron to Level 30	6
		Arrivals Escalators in Fixed Links	4
<b>Total</b>	<b>7</b>	<b>Total</b>	<b>14</b>

### 7.6.3.6 Airbridges (Technical Note 001)

7.106 The total variance associated with a reduction in the rate of airbridges is of -€6.3m spread across three projects; New Pier 5, Terminal 1 Piers and West Apron Vehicle Underpass. The Steer cost estimate is understated due to the unit cost Steer have used for the airbridges, which is significantly lower than the unit costs for airbridges faced by Dublin Airport.

7.107 The relevant documentation showing the units costs received at Dublin Airport is provided in Technical Note 001, which supports the rates for the most recent airbridges procured by Dublin Airport.

7.108 Steer have assessed the rate for the refurbishment of an airbridge on project CIP.20.02.004 Passenger Boarding Bridges. As noted within our Technical Note to Steer, in Dublin Airport's submission the rate was based on the actual refurbishment cost incurred for an airbridge at the airport in 2016.

7.109 All the current airbridges in operation at Dublin Airport are manufactured by one supplier. There are currently 27 airbridges in operation at Dublin Airport (3 section tunnel models with varying detailed specifications); accounting for the majority of the airbridges operated in Ireland. The benefits of economies of scale for maintenance is a key contributor behind operating a single supplier airbridge operation at Dublin Airport. Ensuring efficiency and robustness of operations for what is a critical forward-facing piece of infrastructure is paramount for Dublin Airport, and the single supplier operation has ensured this has been achieved. For the supply of future airbridges, Dublin Airport will prioritise suppliers with the best whole life cycle cost, including, capital cost, opex cost, delivery, quality and maintenance and response time.

### 7.6.3.7 High Mast Lighting (Technical Note 003)

7.110 The total variance associated with a reduction in the rate of High Mast Lighting is -€0.75m which impacts three projects noted below. As noted in all other sections, for simplicity, the Direct Rate Cost Variance is only considered in this passage.

7.111 In order to clarify the scope and breakdown of the high mast lighting rate, Dublin Airport have provided a Technical Note to Steer which provides further breakdown of the Dublin Airport rate as well comparable project costs which were reviewed when evaluating the rates within the estimate. As noted, the rate included in the CIP submission was based on subcontractor costs for similar works as part of Apron Rehabilitation between Pier 3 &

Pier 4 at Dublin Airport. The following scope is included within the high mast lighting rate proposed by Dublin Airport:

- Lighting column, heads & base including excavation and disposal
- Crash protection to column
- Local control point to high mast lighting columns
- Reinforced apron chamber to base of each unit – including heavy duty cover
- Duct & cabling between installations plus connections
- Trench excavation
- Backfilling of trench and new pavement formation
- Lightning protection installation
- Allowance for MCC control upgrade & system integration

**TABLE 7.10 PROJECTS IMPACTED**

Project No.	Project
CIP.20.03.029	New Pier 5 (T2 and CBP Enabled)
CIP.20.03.031	South Apron Expansion (Remote Stands, Taxiway and Apron)
CIP.20.03.036	North Apron Development – Pier 1 Extension (Module 1) & Apron 5H PBZ

7.112 Dublin Airport have provided tendered rates for high mast lighting at Dublin Airport in 2017 which substantiates the Dublin Airport Rate. Through consultation with Steer we believe there may have been a lack of clarity of the scope included within the Dublin Airport rate and our Technical Note and breakdown should provide the necessary clarity to Steer.

#### **7.6.3.8 Communications Systems (Technical Note 008)**

7.113 The variance between Dublin Airport's rate and Steer's rate equates to a direct rate variance of -€3.38m across 4 no. projects which are noted below. Direct Rate Cost Variance relates to the variances between the construction component rate not including associated reductions in allowances for phasing, design development, preliminaries, risk & contingency, design and management costs and escalation costs.



**TABLE 7.11 PROJECTS IMPACTED BY DIRECT COMMUNICATION SYSTEMS RATE VARIANCE**

Project No.	Project
CIP.20.03.029	New Pier 5 (T2 and CBP Enabled)
CIP.20.03.030	Expansion of US Pre-Clearance Facilities
CIP.20.03.031	South Apron Expansion (Remote Stands, Taxiway and Apron)
CIP.20.03.036	North Apron Development – Pier 1 Extension (Module 1) & Apron 5H PBZ

7.114 Dublin Airport have provided further details on the scope and breakdown of the rate for communications systems, within the guidance note previously issued. The Technical Note provides further information on the Dublin Airport rate and cost benchmarks which were used to evaluate the rate. As noted, the rate included is based on benchmark data from UK Airports and an average cost was taken from the cost range for each of the communications systems components. It should be noted that these items have not been allowed for either separately or within any other rates included within the cost estimates which have specific allowance for communications systems. Items included within the rate are as follows:

- Fire, smoke detection & alarms
- Voice/Public Address system (PA)
- Intruder detection
- Security, CCTV, access control
- Wireways for telephones, data, structured cabling
- Structured cabling installation
- Flight Information Display System (FIDS)
- Building Management System (BMS)

7.115 The rates consider the complexity of installing these systems in a live airport environment, considering the interface with existing systems within the airport. It should be noted, where existing infrastructure is unable to be connected into there is a potential requirement to upgrade existing communications systems infrastructure including but not limited to, replacement of full cable runs to a termination point and upgrade of existing control systems to support an increase to system capacity. The Dublin Airport rate and the benchmark rates are typical of the costs associated with undertaking this scope of works in an airport.

#### 7.6.3.9 5M Apron Pavement design (Technical Note 005)

7.116 Within the Capital efficiency document, Steer commented in the CIP2020 Efficiency Assessment (paragraph 6.225) on the suitability of the allowance made in Apron 5M

project for pavement build up. It was noted that the pavement build-up included was deemed insufficient for Wide-Body use.

7.117 Dublin Airport commissioned a specialised consultant to provide a feasibility design of all the airfield elements included in the CIP. Dublin Airport agree with this observation and now has a revised preliminary design of Apron 5M pavement attending to the fleet of aircraft expected to use the remote stands and the expected ground conditions on that location. This design is endorsed by an external consultant and follows international standards of airport pavement design.

7.118 The total revised cost for this project is of €84.2m. It should be noted that this is the all-in value of the project including allowances for phasing, design development, preliminaries, risk & contingency, design and management costs and escalation costs.

#### **7.6.3.10 Other Variances (Technical Note 009)**

7.119 In addition to clarifications provided in the subject specific Technical Notes (001 – 008, 010 – 012), we have further examined the following variances which are individually of lower magnitude but represent significant cumulative amount. The following two tables, Table 7.12 and Table 7.13 present the Capacity (-€5.91m) and the Core (-€2.63) project variances respectively.

**TABLE 7.12 SUMMARY OF COST VARIANCES ON OTHER PROJECTS - CAPACITY PROJECTS**

CIP Number	Project Title	Variance (€m)
CIP.20.03.017	Terminal 1 Shuttle, bus lounges and injection points	-0.5
CIP.20.03.020	Terminal 2 Check-in Area Optimisation	-0.9
CIP.20.03.021	Terminal 2 Central Search Area Expansion	-0.6
CIP.20.03.029	New Pier 5 (T2 and CBP Enabled)	-0.3
CIP.20.03.033A	Enablement of Pier 3 for Precleared US bound passengers	-0.5
CIP.20.03.034	Pier 3 Immigration (Upgrade & Expansion)	-0.5
CIP.20.03.036	North Apron Development – Pier 1 Extension (Module 1) & Apron 5H PBZ	-0.1
CIP.20.03.011A	Terminal 1 Check-In (Partial shoreline)	-1.1
CIP.20.03.036	North Apron Development – Pier 1 Extension (Module 1) & Apron 5H PBZ	-0.3
CIP.20.03.043A	Terminal 1 Piers - New Airbridges (6NBE / 3WB)	-1.0
CIP.20.03.051B	West Apron Vehicle Underpass - Pier 3	-0.3

**TABLE 7.13 SUMMARY OF COST VARIANCES ON OTHER PROJECTS – CORE PROJECTS.**

CIP Number	Project Title	Variance (€m)
CIP.20.01.006/34/39	Disposal of Contaminated Material Rates	-0.6
CIP.20.01.020	Terminal 1 Façade, Roof & Spirals	-0.7
CIP.20.04.021	West Apron - Accommodation & Welfare Facilities	-0.7
CIP.20.06.042	ATRS - Central Search Areas (T1 and T2)	-0.7

7.120 Technical Note 009 provides an in-depth review of the estimate variance proposed by Steer. Comparative projects and industry benchmarks are presented in support of the Dublin Airport rates. We request that Technical Note 009 is assessed alongside the other subject specific Technical Notes as part of the Final Determination.

#### 7.6.3.11 Summary

7.121 Dublin Airport recommends that the allowances proposed under the 'Final Investment Plan from 2020 at Dublin Airport – 6th Feb 2019' are retained in full to ensure projects

which are considered in the interests of current and future users of Dublin Airport can be delivered in full.

7.122 This variance is significant enough to prevent Dublin Airport from completing several of the projects identified above, in line with the scope that has been consulted upon. We would therefore encourage the Commission to reassess the Cost Efficiency Assessment having considered the evidence-based reasoning set out in this response, in the Technical Notes provided to date and constructive estimates reviews held on the 13<sup>th</sup> June 2019.

### 7.7 Helios Simulation Modelling

7.123 Dublin Airport welcomes the results from Helios' assessment and simulation of the both the airfield and terminal projects. Helios' results further validate the analysis previously completed by Dublin Airport to support the CIP projects.

7.124 Helios highlighted several key benefits from the airfield and terminal projects as follows:

#### **Airfield**

- The model showed very smooth flows of traffic to/from either runway.
- Despite significantly more flights being proposed in the CIP flight schedule modelled (compared to current traffic levels), the model showed major improvement (decrease) in departure taxi out times compared to existing airfield layout, regardless of which runway the aircraft were taxiing to.
  - Peak taxi out times simulated for both runway ends and measured across the airport as a whole never exceeded 15 minutes.
  - Average taxi out time for RWY 28L was between 10-11 minutes while
  - Average taxi out time for RWY 28R was just above 11 minutes.
  - Performance of arrival taxi in time metric remained similar to performance observed under the existing airfield layout. This result can be primarily attributed to the operating mode modelled, where all arrival traffic used RWY 28L in the same way as it is being used today.
  - Average taxi in time for arrivals on RWY 28L was between 7 and 8 minutes.
- After the morning peak, the stand demand gradually decreases until 2100 when the first Dublin-based aircraft start coming back to Dublin for their overnight stay.
- Proposed CIP projects help alleviate existing stand demand problems.

### **Terminal**

7.125 Dublin Airport accept that the modelling has been undertaken based on the assumption that all areas are fully staffed.

7.126 Where some processes experience sub-optimal wait times, Dublin Airport welcomes Helios' note to indicate this modelling is based on a 'busy day' schedule and it does not expect it to be generally exceeded.

7.127 Dublin Airport has addressed concerns raised re the wait times at the T2 and Pier 4 transfer facility by subsequently proposing increased processing capacity throughput for the transfer passengers in these facilities. The additional capacity proposed is for 1 new immigration booth in the Pier 4 transfer Facility and 2 new immigration booths in the T2 transfer facility.

7.128 This project will be part of Terminal 2's development and is driven by the following:

- The need to provide additional transfer processing capacity
- Maintain appropriate levels of service for passengers
- Maintain and improve transfer times

7.129 It should be noted that the positive results from the Helios assessment and simulation are dependent on the delivery of the full suite of capacity enabling CIP projects in CIP2020+. The financeability of CIP 2020+ is critical to support the development of the full suite of projects and providing the processing capacity at Dublin Airport as identified by Helios.

### **7.8 Reporting Requirements**

7.130 The Commission sets out reporting and delivery requirements in its 2019 Draft Decision, whereby Dublin Airport would report regularly on the progress of CIP projects relative to the timeline for delivery that was consulted on.

7.131 We believe CIP2020+ progress reporting should be broken into the following two categories;

- a. Flexible & Deliverable Projects
- b. StageGate Projects

7.132 The Flexible & Deliverable Projects will be measured against a single baseline (Target Baseline). This baseline will align with the timeline provided as part of the Regulatory Proposition, issued on the 6<sup>th</sup> Feb 2019. The StageGate projects will be measured against two baselines; the 6<sup>th</sup> Feb 2019 Regulatory Proposition timeline as well as a separate

StageGate revised baseline. This approach will highlight where within-period flexibility has been utilised and the subsequent changes to the project schedule.

7.133 As project managers at Dublin Airport routinely track projects and monitor progress, we do not have any issue with a requirement to update a reporting chart (as described in section 9.2 of the draft determination) at the end of each quarter nor do we have any issue with the Commission's intention to publish this update quarterly.

7.134 The Commission notes in section 9.103 of the Draft Determination that Dublin airport must report on the progress of flexible projects along with reallocations. To ensure maximum flexibility we would propose that the reporting on the reallocation of project funds be carried out at the end of the CIP 2020-2024 period. It is possible that an allocation of a new project may need to be changed if a more suitable project becomes apparent later in the CIP period. If the Commission is proposing an alternative to this approach, we would welcome clarity on the following points:

- The regularity on how often reporting will take place.
- Can initial reallocations change later in the CIP

## 7.9 Scale of proposed Capital Investments

7.135 While the scale of the proposed Capital Investment Plan presents a significant and important opportunity for Dublin Airport to establish an infrastructure base to meet the demands of a further 10m ppa passengers and associated growth in ancillary aviation businesses, we accept that this also brings with it significant planning, scheduling and operational challenges.

7.136 Although much of the risk associated with the delivery of this significant investment programme can be managed by undertaking in-depth feasibility analysis, timely engagement with the construction market and implementing a robust portfolio management programme the challenges of greatest concern are associated with funding, regulatory conditions and planning approval.

### 7.9.1 Regulatory Conditions

7.137 To ensure the timely provision of much needed infrastructure, consistent with the needs of airport users, we have progressed at risk with the initial development of several packages of work.

7.138 We are now concerned, following the issuing of the 2019 Draft Determination, that critical conditions have been placed on several of the key projects we have been

progressing to-date. Most notably, the decision to condition the remuneration of the South Apron projects (Pier 5, South Apron Expansion & U.S pre-clearance facilities) on the provision of dual Code E Taxiway Z and Taxiway B1. This condition has the potential to delay these critical projects, increase the cost and expose Dublin Airport to risk of non-remuneration of initial works.

### 7.9.2 Planning Process (598/2014)

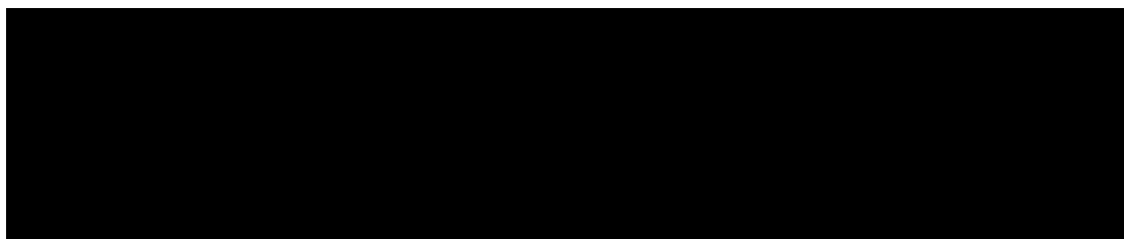
7.139 Since we made our CIP 2020+ submission on 6<sup>th</sup> February 2019, the risk we flagged as potentially arising from the EU Regulation 598/2014 regarding '*Establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Union airports*' is being realised, with the implementation of Regulation 598/2014 potentially adding an additional 12-months to the planning process.

7.140 The impact of this is potentially very significant for CIP 2020 development. In particular, this issue presents significant risk that projects will not be completed within the regulated period and with the later commencement of the construction projects increased costs as a result of construction inflation, which is currently running at 6-7% per annum on these projects. Estimates developed as part of CIP2020+ assumed escalation at project mid-point, for all projects, as the appropriate average escalation to be applied across the entirety of said project. Project schedule delays incurred from changes to existing planning process will significantly impact the escalation allowance currently applied to CIP2020+ projects.

7.141 While we await the final details of the proposed StageGate process, we would propose that this process will provide a mechanism to engage with our principle stakeholders in relation to delayed delivery and associated cost should this risk materialise. Delays to project commencement would result in a significant uplift in the overall capital investment required to deliver the suite of projects.

### 7.9.3 Local Authority Development Rates – Planning Conditions

7.142 In delivering their cost estimates, Dublin Airport have made provision for local authority development rates.



7.143 We request that any variations to assumed local authority development rates be managed as part of the StageGate project development process. Where, local authority development rates are incurred on projects outside of StageGate, we request that said rates can be entered into StageGate via the in-term entry mechanism outlined in Section

### 7.10 Time Profiling and Asset Lives

7.144 For the purposes of time profiling, it is reasonable to assume an even spread of capital spend over the full period of the determination. A mid-determination spend peak will be offset by lower spend at the start and end of the determination period.

7.145 While we agree with the majority of asset lives proposed as part of the 2019 Draft Determination, we do not agree with the asset lives proposed for the following four projects:

**TABLE 7.14 ASSET LIFE VARIANCES**

CIP Ref:	Project	Dublin Airport (years)	CAR (years)	Revised Asset Life (years)
20.03.029	New Pier 5 (T2 and CBP Enabled) <i>Principal component(s): Building with design life of 25 years, asset life less than 25 as a function of mech/elec</i>	25	40	24
20.03.031	South Apron Expansion (Remote Stands, Taxiway and Apron) <i>Principal component(s): Pavement 30 years, Civils (drainage) 50 years and some building 25 years</i>	25	40	32
20.03.036	North Apron Development – Pier 1 Extension (Module 1) & Apron 5H PBZ <i>Principal component(s) Pavement 30 years and buildings 25 years</i>	25	40	28
20.03.054	New Remote Apron 5M - 17 NBEs <i>Principal component(s): Principally pavements 30years and drainage 50 years</i>	30	40	32



7.146 In order to develop a robust asset life for the above 4 projects, we have conducted a bottom-up building-component asset-life assessment. This approach defines the appropriate blended asset life for a given development by combining the component asset lives of said project. Dublin Airport acknowledges this is a more appropriate means to assessing the project asset life for large development projects.

7.147 The proposed asset lives are shown in the furthest right column in Table 7.14 above. The component build-up of each asset life is available in Appendix 7.

## 7.11 Deliverability & Future Reconciliation (Regulatory Treatment of Projects)

### 7.11.1 RAB Roll Forward Principles

7.148 For the most part, we acknowledge the Commission's summary of the RAB roll forward principle in section 9.59 of the 2019 Draft Determination, however, for reasons set out below, we are concerned with the proposed treatment in two scenarios.

**FIGURE 7.8 RAB ROLL FORWARD PRINCIPLES**

Scenario	Treatment
Investment delivers expected output at lower cost than allowed for.	The lower cost enters the RAB. Dublin Airport benefits from the saving within the determination period only, as the additional capital cost allowance earned over that time is not clawed back.
Investment delivers expected output at higher cost than allowed for.	The overspend will not enter the RAB, unless Dublin Airport can demonstrate substantial user support for the overspend or that the overspend was outside its control.
Investment does not take place, output is not delivered.	The RAB is revised down accordingly. The associated capital cost allowance is clawed back.
Investment delivers different output to that initially envisaged.	The RAB is revised down accordingly and the associated capital cost allowance is clawed back, unless Dublin Airport can show that the changed scope was due to user requirements.
Investment abandoned prior to completion	The RAB is revised down accordingly, monies already spent are clawed back unless users supported the decision to abandon the investment.
Existing asset in RAB has become obsolete or needs to be removed for other development.	No effect on the RAB.
Existing asset in RAB has been sold.	The RAB is revised down by the amount for which the asset was sold (provided that this was at or close to market price).

Source: CAR

**Investment delivers expected output at higher cost than allowed for:**

7.149 In the case of demonstrating overspend outside of our control, it is particularly important that the Commission includes emergency capex works under this category. The need for emergency capex, although occurs infrequently, can arise at any point during the five-year determination and should be remunerated. These are typically passenger or aircraft safety critical projects and substantial user support should not be the determining factor in proceeding with these projects.

**Investment abandoned prior to completion:**

7.150 This approach does not address situations where the completion of the project is outside the control of Dublin Airport. This proposal by the Commission does not address scenarios where users are reluctant to support abandoning investment while Dublin Airport cannot progress the project, e.g. statutory planning due to regulatory non-approval.

**7.11.2 Flexible**

7.151 We support the Commission's proposal to group capex allowances to provide a degree of flexibility and agree that outturn expenditure should be reconciled at group level in the next determination, as set out in our CIP submission.

7.152 The provision of flexibility is critical for Dublin Airport to stay abreast of changing airport trends and unforeseen capex investment needs over the five-year determination.

**7.11.3 Deliverable**

7.153 We acknowledge that projects which have been justified in the interests of maintaining existing assets, which cannot be done other than through the works envisioned, can be categorised as deliverable. However, we note discrepancies / corrections with the regulatory treatment of the following two projects:

**TABLE 7.15 DELIVERABLE PROJECTS – DISCREPANCIES / CORRECTIONS**

Project No.	Project
CIP.20.02.008	Terminal Buildings – HVAC Upgrade
CIP.20.06.014	Screening & Logistics Centre

**Terminal Buildings – HVAC Upgrade:**

7.154 We agree with the Commission's proposal that this project be categorised as flexible, especially considering replacement components are determined by monitoring

availability KPIs, in conjunction with monitoring maintenance costs and the availability of spare parts and technical support. We request that Appendix 7 be updated to reflect this project as flexible; in line the commission's proposal in Section 16.61 of the Draft Determination.

#### **Screening & Logistics Centre:**

7.155 While Dublin Airport does not dispute the Commission's proposal to categorise this project as a deliverable, we believe Phase 1 only should be conditioned for completion by the end of 2022. Phase 1 is critical to facilitating the development of the CIP projects.

#### **7.11.4 Opex Projects**

7.156 In paragraph 9.69 of the 2019 Draft Determination, the Commission has proposed that CIP.20.02.002 – *Second MV Connection Point*, be categorised as Opex. We propose that this decision be reversed and CIP.20.02.002 be included in StageGate. The Second MV Connection Point project will need to undergo extensive consultation with external utility providers before design can commence and cost and scope is agreed. Once agreed, we will be keen to progress this highly critical redundancy / backup for Dublin Airport. StageGate is the right mechanism to inform stakeholder of the status of the Second MV Connection point as the design and scope develops.

7.157 In section 9.78 of the 2019 Draft Determination, the Commission has disallowed CIP.20.07.004 – *Metro Coordination*. We request that the disallowed Capex cost associated with this project are reflected in 2019 Final Determination Opex allowances.

#### **7.11.5 StageGate – Project Selection**

7.158 We support the Commission's proposal to introduce a new process, namely StageGate, which would provide increased flexibility in relation to scope and costs for larger scale projects where the full scope is not defined. The following passage highlights the need for project refinement, ensuring an appropriate level of flexibility is retained and key observations about the development of the StageGate process.

#### **7.11.6 Refined Suite of StageGate Projects**

7.159 As part of the draft determination, the Commission designated 21 projects as StageGate Projects with a total value of €1.3bn. While Dublin Airport supports the implementation of the StageGate process, we also encourage the Commission to focus StageGate on projects where its value-creating principles can be maximised.

7.160 Dublin Airport propose an entry requirement into the StageGate process of €50m which would result in a reduction in the number of projects captured under StageGate to 10 (following grouping), to allow for greater focus on larger and more complex projects with the remaining 11 projects designated as ‘flexible’ which is essential to be able to react to changing needs over a 5-year period.

**FIGURE 7.9 STAGEGATE ILLUSTRATION – RETAIN MAJORITY OF VALUE IN STAGEGATE**



7.161 As illustrated in Figure 7.9 utilising StageGate on the top 10 CIP projects will ensure the majority of costs associated with Capacity projects are monitored and managed through StageGate. The StageGate process will not benefit from the burden of too wide an array of projects, particularly smaller projects.

**TABLE 7.16 PROPOSED REGULATORY TREATMENT OF CIP PROJECTS<sup>50</sup>**

CIP Number	Project Title	Value (€m)		Flexible / StageGate	
		DAA Submission	D. Determination	D. Determination	DAA Proposal
CIP.20.01.002	Apron Rehabilitation Programme	€37	€31	<b>S</b>	<b>F</b>
CIP.20.01.003	Airfield Taxiway Rehabilitation Programme	€19	€17	<b>S</b>	<b>F</b>
CIP.20.01.020	Terminal 1 Façade, Roof & Spirals	€26	€25	<b>S</b>	<b>F</b>
CIP.20.01.071	Electric Charger Network Facilities	€2	€2	<b>S</b>	<b>F</b>
CIP.20.07.032	Unit Load Device (ULD) Storage	€5	€5	<b>S</b>	<b>F</b>
CIP.20.03.011 A	Terminal 1 Check-In (Partial shoreline)	€30	€26	<b>S</b>	<b>F</b>
CIP.20.03.012	Terminal 1 Central Search - Relocation to Mezz Level	€43	€29	<b>S</b>	<b>F</b>
CIP.20.03.013	Terminal 1 Departure Lounge (IDL) Reorientation and Rehabilitation	€42	€28	<b>S</b>	<b>F</b>
CIP.20.03.015	Terminal 1 Baggage Reclaim Upgrade & Alterations	€22	€19	<b>S</b>	<b>F</b>
CIP.20.03.028	Terminal 2 Early bag store and transfer lines	€28	€28	<b>S</b>	<b>S</b>
CIP.20.03.029	New Pier 5 (T2 and CBP Enabled)	€324	€289	<b>S</b>	<b>S</b>
CIP.20.03.030	Expansion of US Pre-Clearance Facilities	€50	€55	<b>S</b>	<b>S</b>
CIP.20.03.031	South Apron Expansion (Remote Stands, Taxiway and Apron)	€90	€71	<b>S</b>	<b>S</b>
CIP.20.03.036	North Apron Development – Pier 1 Extension (Module 1) & Apron 5H PBZ	€175	€159	<b>S</b>	<b>S</b>
CIP.20.03.043 A	Terminal 1 Piers - New Airbridges (6NBE / 3WB)	€34	€23	<b>S</b>	<b>S</b>
CIP.20.03.051 B	West Apron Vehicle Underpass - Pier 3	€171	€169	<b>S</b>	<b>S</b>
CIP.20.03.052	Surface Water Environmental Compliance	€52	€52	<b>S</b>	<b>S</b>
CIP.20.03.054	New Remote Apron 5M - 17 NBEs	€72	€71	<b>S</b>	<b>S</b>
CIP.20.03.057	Airside GSE Charging Facilities (Ground Handlers)	€5	€5	<b>S</b>	<b>F</b>
CIP.20.03.071	Hydrant Enablement - Pier 2 & 3	€24	€24	<b>S</b>	<b>F</b>
CIP.20.07.031 /33	HBS3- T1 and T2	€182	€182	<b>S</b>	<b>S</b>
	<b>Total</b>	<b>€1,432</b>	<b>€1,308</b>		

<sup>50</sup> StageGate projects in Final Determination will include CIP 20.02.002 Second MV Connection Point

7.162 Table 7.16 identifies the appropriate categorisation for the 21 StageGate projects outlined in the 2019 Draft Determination. We would propose to group a number of projects based on geographical location / intrinsically interrelated etc and these are identified (by colour) in Table 7.16 above;

#### 7.11.7 Maintaining Flexibility

7.163 In CIP 2015 76% (value) of projects, excluding ‘trigger projects’ were designated flexible which was essential to be able to react to changing needs over a 5-year period. In CIP 2020 only 23% (value) of projects are now designated ‘flexible’.

7.164 As identified in Table 7.16, we propose that 11 of the StageGate projects be categorised as Flexible. These 11 projects account for only 18% of the value of the of the StageGate group yet account for +50% of the number of projects. We have selected the 11 projects to be removed based on the following assumptions:

- It is not appropriate to designate critical asset care projects (e.g. Apron Rehabilitation, Airfield Taxiway Rehabilitation and Terminal 1 Façade) as StageGate projects. The specific rehabilitation and façade upgrade works outlined during consultation were selected for inclusion in CIP2020+ as these were identified, following extensive surveys, as experiencing degradation which will ultimately result in becoming unserviceable. Rehabilitation is managed in an agile way to balance critical airport maintenance needs with airport operational need. This agility has been critical to ensuring the appropriate suites of rehabilitation works have been selected to fit around key operational redlines. We are concerned that the introduction of a more complex process would slow-down the decision process for these critical works and remove the current agility which has facilitated the successful completion of upgrade and rehabilitation works.
- In addition, several projects identified as part of StageGate will be undertaken in an integrated or micro phase, distributed both geographically and over the regulated period, are likely to be undertaken in conjunction with other projects and which have a proven track record of success under the ‘Flexible’ category. For this reason, we would propose that these are more appropriately categorised as ‘Flexible’ in the final determination.

7.165 We also propose that a StageGate in-term entry mechanism be applied where a non-StageGate project Anticipated Final Cost exceeds €50m or where substantial ground for entry exist. This mechanism ensures that critical projects, currently identified outside of StageGate, have a viable mechanism to be entered into StageGate should future circumstances require this. We request that this mechanism also allows for new projects,

raised within the determination period, be facilitated by StageGate. New projects derived from unforeseen circumstances (unforeseen at the time of the Final Determination) with substantial grounds for entry should be allowed to utilise underspend and savings from other StageGate projects or be prioritised above less critical existing StageGate projects.

#### 7.11.8 Developing StageGate

7.166 In advance of implementation, we propose that the process of consultation and engagement continue up to, and beyond the 2019 Final Determination, at which point the key elements of governance are agreed and the mechanics of the process established. The implementation of an efficient StageGate process is critical to ensure the delivery of the CIP 2020+ portfolio of projects and to avoid unnecessary programme delays.

##### 7.11.8.1 Engagement

7.167 A key ambition of StageGate is to ensure that there is continuing engagement, awareness and understanding of projects from all key stakeholders. A key component of the success of this proposal is efficient engagement by all parties in a mature and informed manner. It should be noted that this level of engagement will require significant time and resources from stakeholders. In this regard Dublin Airport propose the following;

- The StageGate Committee would meet monthly, where stakeholders are updated on the status of projects.
- The monthly meetings will also facilitate the pre-agreed StageGate control points.
- The appointed Independent Fund Surveyor (IFS) and the Commission will attend each meeting, with the Commission chairing the meeting.
- Information would be shared on a confidential basis and disseminated in line with Dublin Airport's IT security requirements.
- The process aligns with that of the Dublin Airport Infrastructure Project Management Cycles and staged approvals for capital expenditure, to avoid duplication of process and ensure that the projects are developed/approved in line with industry best practice.
- Dublin Airport costs should be remunerated through OPEX.

##### 7.11.8.2 Incurred Costs

7.168 In relation to costs incurred up to StageGate 1 (or whatever decision points are proposed under the final process), Dublin Airport proposes that said costs are approved and can be capitalised in the event that the project does not proceed. If a project does not proceed

beyond a control point due to failure to agree, or external factors such as failure to achieve planning permission, all costs incurred or committed to are capitalised.

**7.11.8.3 Similar processes**

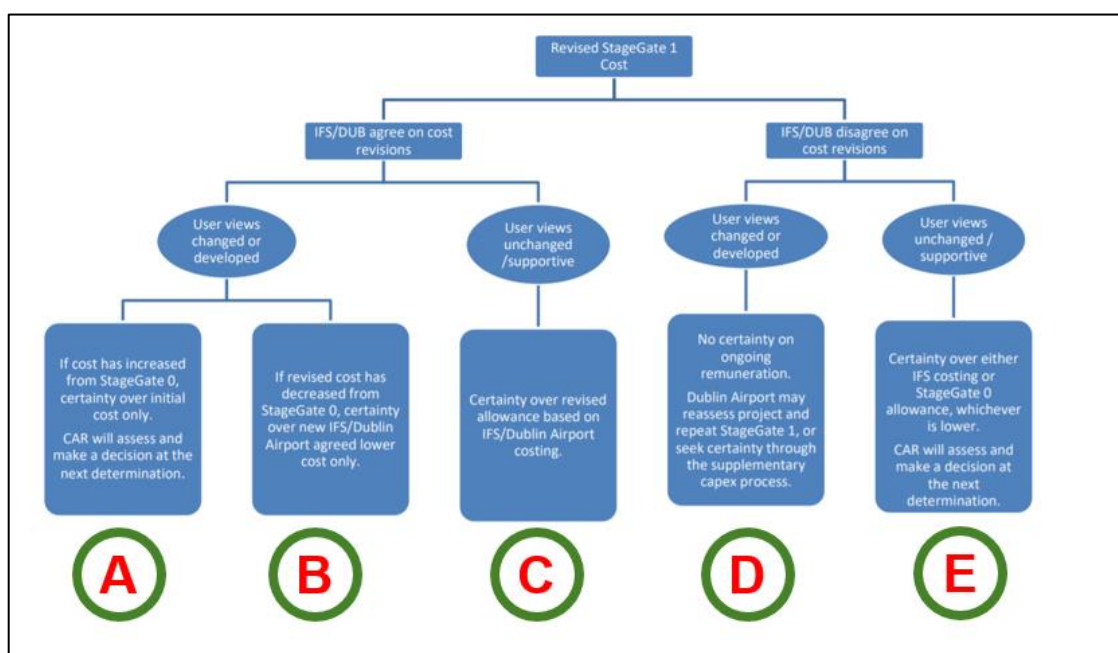
7.169 Dublin Airport have reviewed how similar processes have worked internationally and note the following;

- Achieving maturity of similar processes in other airports has taken several years.
- In line with similar processes internationally, where agreement cannot be reached between the airlines and the airport, a clear set of rules be put in place outlining how a resolution is achieved.
- The IFS is normally appointed by the airport and the airlines.
- Contingency is generally managed at a portfolio level. We propose that contingency on all StageGate projects be managed at a portfolio level and not in an individual basis. To this end consideration should be given to the provision of flexibility in the management of contingency both at StageGate portfolio level, to manage macro risks, and at project levels as appropriate.

**7.11.8.4 Decision Making process**

7.170 In the Consultation Document, the Commission has proposed a decision-making process. This process is shown in Figure 7.10 below, with each of the proposed outcomes labelled for ease of reference.

**FIGURE 7.10 THE COMMISSION DECISION TREE**





7.171 In the above flowchart we are concerned that a single stakeholder (irrespective of operation or market share at Dublin Airport) can veto any project in StageGate, under the ‘user views changed or developed’ stage and this should be addressed by the commission in the final StageGate process. As per the Commission paper “CP4/2019 StageGate Process Consultation, 7 June 2019” stakeholders can veto irrelevant of;

- Size of operation
- Geographical location at the airport
- Relevance to the actual project

This should be revised to ‘substantial user support’ in line with the RAB roll forward principles.

7.172 In the above flowchart we note the following in relation to possible outcomes of the StageGate process;

- **Scenario A:** We are concerned that cost certainty will not be known for projects completed early in the determination period until 2024, despite agreement on cost with the IFS. As this could become applicable, as noted above in Section 7.175 under the veto process, to the majority of the StageGate projects, cost certainty could be unknown for c.€1bn until 2024. This needs to be addressed in the final process.
- **Scenario B:** The cost delta (saving) should be moved into flexible allowance to cater for new projects / contingency. This is how it is applied at other airports, which is shown to encourage overall cost savings.
- **Scenario C:** We agree with this scenario.
- **Scenario D:** This should be revised to include cost certainty on initial cost (StageGate 0) or IFS cost, whichever is higher, with option to reassess project and repeat StageGate 1 or seek additional certainty through Supplementary Capex Process.
- **Scenario E:** This should be revised to give certainty over the cost between the IFS cost or StageGate 0 cost, whichever is higher.

7.173 Safety is of paramount importance to Dublin Airport and capital projects/project increases with a safety dimension should not be subject to airline / stakeholder veto and should be addressed through the IFS only. Dublin Airport shall inform all stakeholders in relation to the status if safety issues and costs arising.

#### 7.11.8.5 StageGate – Next Steps

7.174 While Dublin Airport supports the implementation of StageGate process, we also encourage the Commission to focus StageGate on projects where its value-creating principles can be maximised.

7.175 Dublin Airport propose ongoing consultation with the Commission in advance of the 2019 Final Determination to ensure the most efficient StageGate process is developed.

## 8. Cost of Capital

### 8.1 Introduction

8.1 In its 2019 Draft Determination, the Commission has proposed a real pre-tax cost weighted average cost of capital (WACC) of 4% for Dublin Airport over the period 2020-2024. This proposal is based on a Cost of Capital study prepared by Swiss Economics on behalf of the Commission. In its analysis, Swiss Economics estimated a WACC of 3.49% for Dublin Airport but it recommended a further 0.5% aiming up allowance for the period 2020-2024.

8.2 The components of the Swiss Economics calculation of the 2019 WACC are as follows

**TABLE 8.1 SWISS ECONOMICS WACC CALCULATION**

	2019		2014		Difference
	Range	Estimate	Range	Estimate	
Gearing	45% - 55%	50%	50% - 60%	50%	-
Tax rate	-	12.50%	-	12.50%	-
Risk Free Rate	-0.72% - 0.45%	-0.14%	0.0% - 2.0%	1.50%	164bps ▼
Total Market Returns	6.05% - 6.80%	6.43%	4.5% - 7.0%	6.50%	7bps ▼
Equity Risk Premium	6.19% - 6.94%	6.56%	4.5% - 5.0%	5.00%	156bps ▲
Asset Beta	0.43 - 0.46	0.45	0.5 - 0.6	0.60	0.15 ▼
Equity Beta	0.81 - 0.86	0.84	1.0 - 1.5	1.20	0.36 ▼
Cost of equity	4.75% - 5.94%	5.38%	5.1% - 10.3%	8.60%	322bps ▼
Cost of debt	0.65% - 1.04%	0.85%	2.5% - 3.0%	3.00%	215bps ▼
<b>Pre-tax WACC (before aiming up)</b>	<b>2.80% - 4.20%</b>	<b>3.49%</b>	-	-	-
Aiming up		0.50%	-	-	50bps ▲ -
<b>Pre-tax WACC</b>	<b>2.80% - 4.20%</b>	<b>4%</b>	<b>3.8% - 5.9%</b>	<b>5.80%</b>	<b>181bps ▼</b>

Source: CAR Draft Determination 2019

8.3 In preparing its 2019 regulatory proposition, Dublin Airport commissioned the firm of economic consultants NERA to conduct an independent valuation of the WACC for Dublin Airport. It should be noted that despite the additional aiming up allowance, 4% is significantly lower than the range of 5% to 6.2% estimated by NERA as the appropriate WACC for Dublin Airport for the next regulatory period 2020-2024.

**TABLE 8.2 COMPARISON OF WACC RECOMMENDATIONS**

	CAR Recommendation	NERA Lower Bound Recommendation
<b>Gearing</b>	50%	40%
<b>Tax Rate</b>	12.5%	12.5%
<b>Risk Free Rate</b>	-0.14%	0.0%
<b>TMR</b>	6.43%	6.6%
<b>Asset Beta</b>	0.45	0.6
<b>Equity Beta</b>	0.84	1
<b>Equity Risk Premium</b>	6.56%	6.6%
<b>Cost of Equity</b>	5.38%	6.6%
<b>Cost of Debt</b>	0.85%	1.2%
<b>Aiming Up</b>	0.50%	
<b>Real Pre-Tax WACC</b>	4%	5.0%

Source: Dublin Airport 2019

8.4 Following the publication of the 2019 Draft Determination, NERA was asked by Dublin Airport to analyse the cost of capital proposals put forward by the Commission and Swiss Economics. We highlight their main findings in the discussion set out below.

8.5 Dublin Airport contends that a real cost of capital of 4% would represent an inadequate rate of return over the period 2020-2024 and this in turn would lead to a significant deterioration in the company's financeability during the next regulatory determination period.

8.6 Dublin Airport believes that the Commission's recommendation of 4% is based on a WACC analysis provided by Swiss Economics which is flawed in relation to the following aspects

- Technical Errors in the Calculation of the Asset Beta
- Underestimation of the Asset Beta
- Derivation of the Risk-free Rate
- Cost of Debt

## 8.2 Estimating the Asset Beta

8.7 Dublin Airport believes that the asset beta range of 0.45 estimated by Swiss Economics giving rise to the point estimate of 0.45 adopted by the Commission is underestimated for the following reasons

- The approach to estimating the asset beta used by Swiss Economics had a technical error
- The empirical estimates for beta comparators used by Swiss Economics are based on flawed assumptions
- The comparability assessment used by Swiss Economics places undue weight on poor comparators leading to an underestimation of the beta used in the overall WACC calculation which was adopted by the Commission.

### **Approach to Estimating the Asset Beta**

- 8.8 When estimating the asset beta for Dublin Airport, Swiss Economics chose to base its analysis on an international benchmarking exercise where it looked at the observed estimates of nine listed airport companies and the regulatory estimate of the beta for an additional three unlisted airports. Swiss Economics then proposed an asset beta of 0.45 which was broadly in line with the average of this comparator group.
- 8.9 The Commission accepted and adopted this 0.45 value in its cost of capital calculation even though this was significantly lower than the asset beta of 0.6 used in the current 2014 Determination.
- 8.10 Dublin Airport believes that when using international evidence, Swiss Economics and the Commission should have taken account of the inherent imprecision of empirical beta estimates and of the significant differences between the risk profiles of airports with different physical characteristics serving different passenger markets with different regulatory regimes. However, as outlined further below, there was no evidence provided to show that either Swiss Economics or the Commission did so.
- 8.11 This was the approach used by Dublin Airport/ NERA and this then resulted in the higher estimate for the Dublin Airport asset beta.

### **Errors in the Empirical Estimates**

- 8.12 Swiss Economics made an error where when carrying out its international beta benchmarking, it estimated the betas of its comparator publicly listed airports by using domestic stock market indices rather than European regional based indices given that
- European markets are highly integrated and there is no evidence of the ‘home bias’ in European investors, indicating that the wider European market indices are superior to domestic indices

- Analysis of comparator airport ownership shows that domestic stock indices do not accurately reflect the investment universe for marginal investors in major airport groups
- The domestic large-cap stock market indices used by Swiss Economics do not include AdP, Copenhagen, Fraport and Vienna, which means that these indices, by definition, cannot represent the investment universe for the investors in these airports.

8.13 The choice of the market index should reflect the investment portfolio of the marginal investor of the comparators. In principle, we consider that an investor in European assets is likely to diversify his or her portfolio across the European market, given the common currency in major countries and free capital movement.

#### **Unconventional Approach to De-lever/ Re-leveraging**

8.14 An important step in estimating the asset betas is the un-levering and re-levering process, which takes into account the difference of financial leverage across the comparator firms. Swiss Economics also used the Hamada formula to un-lever and re-lever the estimated betas, when we believe that the Miller formula would have been more suitable and in accordance with financial theory.

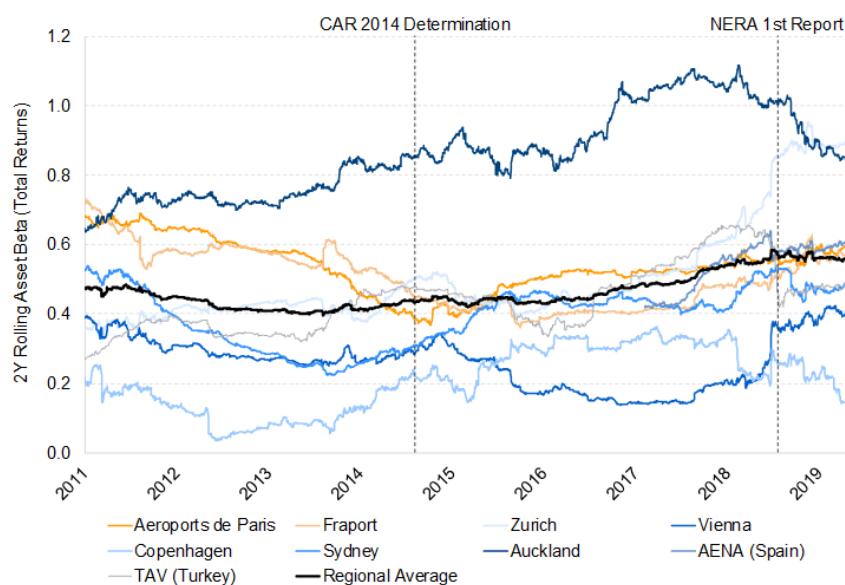
8.15 The Hamada formula, based on the Modigliani and Miller's theorem and the CAPM, is accurate only if the company is financed with a constant level of debt. However, in this case given that the airports' debt levels do tend to change over time, this would suggest that the use of the Miller formula may have been more appropriate.

8.16 We believe that the Miller formula as used in in the NERA cost of capital report is the more appropriate method to un-lever and re-lever the betas, since its underlying assumption of constant leverage ratio, rather than constant debt, is more consistent with empirical evidence. There is also regulatory precedent for the use of the Miller formula by regulators such as the CAA in regulating Heathrow Airport in the UK.<sup>51</sup>

8.17 It should be noted that the updated empirical evidence on the betas for the listed airport comparators based on the amended methodologies does show that these values have increased on average in the period since 2014 and this is also consistent with the evidence presented by NERA in their first cost of capital report for Dublin Airport in January 2019. This is illustrated in the graph below.

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<sup>51</sup> PwC (November 2017), Estimating the cost of capital for H7, A report prepared for the Civil Aviation Authority (CAA), p.80.

**FIGURE 8.1 BETAS FOR LISTED AIRPORT COMPARATORS**

Note: NERA calculations use daily data and regional stock indices. Asset beta estimates delivered using net debt. ADP and Fraport estimates based on net debt derived from the annual reports.

Source: NERA

8.18 The empirical evidence therefore supports a higher rather than a reduced asset beta value for Dublin Airport for the final 2019 Determination relative to the Commission's previous decision.

### Flaws in the Comparability Assessment

8.19 In deriving the asset beta, Swiss Economics assessed the various risk factors and assigns weights to comparator betas based on their comparability to Dublin Airport, where the weighting structure is based on the number of comparability measures within each risk factor - the more measures assigned to the specific risk category, the greater weight the specific risk category has, hence the greater influence.

8.20 However, Swiss Economics provided no theoretical basis for the selection of comparability measures for each risk factor category, which would suggest that these were arbitrarily determined. For example, the regulatory environment has a total of five measures while the demand structure and business structure each have two measures but changing the number of measures within an individual category can impact the asset beta.

8.21 In addition, the weighting structure tends to ignore the relative importance of the different risk factors such as the regulatory environment, the demand structure, or the business structure.

- 8.22 This approach effectively dilutes the influence of principal risk factors that should have a higher weighting in the relative risk assessment weights, such as demand risk and regulatory regime, and places a higher weighting on the secondary risk measures. As a result, Swiss Economics' weighting implies that principal risk determinants are considered as important as secondary risk determinants.
- 8.23 In its weighting structure, Swiss Economics seems to have also included the airports that have significantly different risk profiles from Dublin Airport, and as a result we believe there is an unduly weighting on these unsuitable comparators in calculating Dublin Airport's beta.
- 8.24 In its cost of capital report, Swiss Economics did acknowledge that some of the airports included in its sample were not comparable (e.g. Copenhagen, Frankfurt, Sydney and Zurich), however they are still given weights in calculating the average, leading to a downward bias in the beta estimate.
- 8.25 In contrast NERA's preferred approach is to apply a relative risk assessment to identify the closest comparators to Dublin Airport from the airports that have significantly different regulatory risk profiles and other principal risks. This approach is widely used by regulators in the UK and Europe, while the Swiss Economics' approach lacks regulatory precedent.

**FIGURE 8.2 REGULATORY PRECEDENT IN SWISS ECONOMICS APPROACH**

ADP	Swiss Economics		NERA	
Category	Rating	Rationale	Rating	Rationale
Regulatory environment	★☆☆☆☆	5 years, price cap. Regulator approves charges, hybrid till, and adjustments linked to traffic, investments, operating costs etc.	AdP has similar regulatory risk	5-year price cap AdP, protected by the traffic risk sharing mechanism
Demand structure	★☆☆	Similar aeronautical revenue share. Higher passenger numbers.	AdP has lower risk	AdP has greater size, lower low-cost airlines share, more transfer flights than point-to-point flights, indicating lower business risk than daa.
Business structure	★☆☆	Listed. Geographically diversified.	-	
<b>Conclusion</b>	<b>8% weighting factor</b>		<b>Beta should be considered a low anchor point given the similar regulatory risk and lower demand risk factors.</b>	
Fraport	Swiss Economics		NERA	
Category	Rating	Rationale	Rating	Rationale
Regulatory environment	★☆☆☆☆	Period length at operator discretion, regulator approves charge level, till at operator discretion (historically dual), and operator can initiate consultation on charges at their discretion.	Fraport has significantly lower regulatory risk	Lower risk due to operator discretion over length of regulatory period, timing of reviews/ consultations, and till structure.
Demand structure	★☆☆	Similar aeronautical revenue share. Higher passenger numbers.	Fraport has lower risk	Fraport has larger airport size, higher proportion of business flights, lower share of low-cost flights, and more transfer flights, indicating lower risk than daa.
Business structure	★☆☆	Listed. Geographically diversified.	-	
<b>Conclusion</b>	<b>6% weighting factor</b>		<b>Beta should not be considered a good comparator due to significantly lower regulatory risk and demand risk</b>	

Source: Swiss Economics Draft Report, NERA Report



### 8.3 The Underestimation of the Asset Beta

8.26 Based on its benchmarking analysis, Swiss Economics chose an asset beta of 0.45 for Dublin Airport over the next regulatory determination period, this is significantly lower than the asset beta of 0.6 used in the current 2014 Determination. It should be noted that this value of 0.45 is

- Low in comparison to other global airport betas
- Low in comparison to other beta estimates adopted by other airport regulators and
- Low in comparison to the betas that other Irish economic regulators have adopted in sectors such as electricity, water, gas and telecoms.

8.27 The table below illustrates how the Commission's proposed asset beta is significantly lower than the current asset betas for comparable regulated sectors.

8.28 By adopting the Swiss Economics asset beta point estimate of 0.45 for the asset beta in its proposed WACC calculation for the 2019 Determination, the Commission assumes that there has been a substantial reduction in Dublin Airport's systematic risk since the 2014 Determination.

8.29 The Commission supports this downward adjustment to the asset beta on the following basis

- A more flexible regulatory framework in light on the new process for consideration of supplementary capex allowances
- A recovery in the Irish economy with consequent improvement in credit ratings
- Increased traffic demand
- A higher diversification of airlines at Dublin Airport with more routes available
- An increase in the market power of Dublin Airport.

8.30 In contrast to the Commission and Swiss Economics proposed reduction in beta allowance, Dublin Airport believes that its beta risk exposure will in fact increase over the period 2020-2024 due to the additional risk arising from the proposed CIP 2020+ investment programme where capital expenditure is expected to rise from approximately €100 million in 2018 to over €600 million in 2022.

8.31 Investment of this scale is likely to increase Dublin Airport's cost fixity and operating leverage, plus in the case of a demand shock, it will also potentially increase cash-flow volatility leading to greater systematic risk.

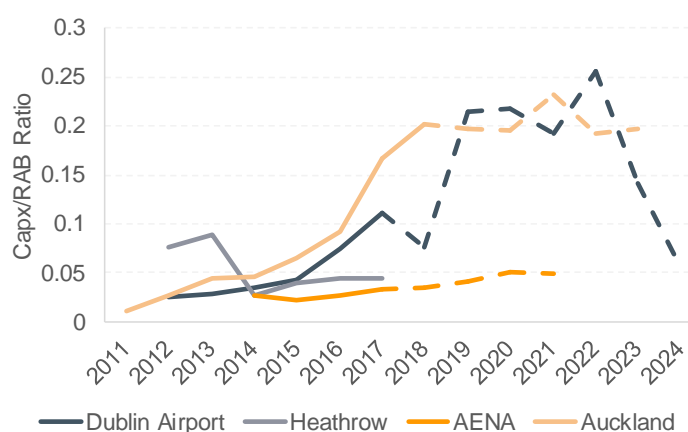
8.32 In the 2019 Draft Determination, the Commission does not accept that Dublin Airport's high operating leverage increases risk exposure, suggesting that other airports were

also making substantial investments of a similar scale without additional risk being reflected in a higher asset beta.

8.33 However, the Commission has not looked at the magnitude of these investment projects proportionally to the regulated asset base (RAB) of the airport, since the impact of the investment programme on the operational leverage and beta depends on the size of the asset base.

8.34 As shown in the graph below, Dublin Airport shows a much higher capex/RAB ratio than other comparator airports (except for Auckland which is the most comparable to Dublin Airport in terms of operational leverage), therefore the risks associated with higher operating leverage are notably higher, particularly given that it is a relatively small airport compared to other major hub airports.

**FIGURE 8.3 DUBLIN AIRPORT CAPEX/RAB RATIO**



Source: NERA 2019

8.35 Therefore, Dublin Airport believes that its asset beta should reflect the prospect of a very large capital investment programme and the airport's ongoing exposure to volume and GDP risks. We believe that this would point to an asset beta value higher than that of Heathrow and Gatwick airports and on a par with other regulated airports, therefore suggesting an asset beta value of at least 0.6.

8.36 In order to be justified, an asset beta of 0.43 to 0.46 for the 2019 Final Determination would require a substantial reduction in risk for Dublin Airport over the next regulatory period, relative to the 2014 Determination as well as compared to other Irish regulated companies. Neither the Commission or Swiss Economics have provided any evidence to support the reduction in beta risk.

8.37 In conclusion, Dublin Airport believes that there is no basis for the Commission to adopt a lower asset beta for the 2019 Final Determination below the current asset beta value of 0.60 set in the 2014 Determination, particularly given that Dublin Airport's level of risk going forward is expected to be substantially higher than in the current regulatory period.

#### 8.4 Derivation of the Risk-Free Rate

8.38 In the 2019 Draft Determination, the Commission adopted the Swiss Economics' proposal for the Risk-free Rate (RfR), this was based on current yields and forward rates of German and Irish government bonds. Swiss Economics derived its estimate based on evidence taken from German and Irish government bond yields with remaining maturity of 8 to 12 years, averaged over a period of 1, 2 and 5 years, inflation rates used to deflate the nominal yields, and a forward adjustment to the real rates aiming to reflect market expectations of an increase in government bonds rates over the regulatory period, 2020-2024.

8.39 This resulted in an RfR range of between -0.72 and 0.45 per cent, with a point estimate of -0.14 per cent. The Commission stated that this -0.14 per cent estimate is consistent with UK regulatory precedent and that the approach used by Swiss Economics was aligned with Irish regulatory precedent and consistent across the WACC parameters.

8.40 Dublin Airport believes that in estimating the Risk-free Rate in their cost of capital calculation, Swiss Economics placed too much reliance on current market evidence while ignoring other existing evidence from long term estimates and regulatory precedent. This then resulted in a notable lower RfR estimate for Dublin Airport compared to both the Commission's 2014 Determination and Irish regulatory precedent.

8.41 Dublin Airport believes that in deriving the RfR, Swiss Economics should have examined a more extensive body of evidence, and it should have taken a more long-term approach to estimating the RfR, as the short-run evidence can be unstable.

8.42 This approach would have been more consistent with the approaches taken by other Irish regulators who have chosen to rely on long-run risk free evidence in order to support stability in regulatory policy for Irish utilities.

8.43 It should also be noted that while the Commission and Swiss Economics have stated their support for the Thessaloniki Forum recommendations, however in this instance they choose to place weight on German government bond yields, rather than on Irish government bonds, which is somewhat inconsistent with the Thessaloniki Forum recommendations.

8.44 In conclusion, we recommend that for the 2019 Final Determination, the RfR should be recalculated based on a wider set of evidence, such as long-run historical averages of government bond yields, current and short-run market evidence and recent regulatory precedent in Ireland.

8.45 This methodology would be similar to the approach used by NERA/Dublin Airport when calculating the risk-free rate of 0% which was recommended in our regulatory proposition.

## 8.5 Derivation of the Total Market Return

8.46 Dublin Airport believes that the Total Market Return (TMR) range of between 6.05 to 6.8%, estimated by Swiss Economics giving rise to the point estimate of 6.43% adopted by the Commission is flawed and unreliable for the following reasons.

8.47 In estimating the TMR, Swiss Economics uses the Blume estimator and it assumes a 10-year holding period of long-run historical returns which is inconsistent with surveys of equity market participants and UK regulatory precedent.

8.48 Regulatory precedent would support relatively short holding periods of 1 to 5 years, even for investors typically regarded as having longer-term investment horizons. Therefore, a holding period assumption of 1 to 5 years is more appropriate for estimating historical TMR than the Swiss Economics assumption of 10 years.

8.49 In deriving its TMR for the Dublin Airport, Swiss Economics used only the European TMR and it failed to consider the World TMR, which is a more reliable investment universe and which has a lower level of volatility and more available information, therefore justifying the use of a world equity returns estimate as opposed to a European one.

8.50 Swiss Economics provides a DDM to estimate the forward-looking TMR, but makes a number of modelling errors that could underestimate its calculation

- relying only on a one-stage DDM which is overly simplistic for a high growth country such as Ireland instead of a multi-stage model is more realistic
- Using a large-cap stock index, Stoxx Europe 50 price index, whereas a broad-market stock index would be more appropriate

Using a dividend growth rate based on the historical dividend growth rate, whereas a forward-looking dividend growth forecast would be more appropriate.

## 8.6 Estimating the Cost of Debt

- 8.51 Swiss Economics estimated the cost of debt for Dublin Airport for the Draft 2019 Determination based on a weighted average cost of embedded and forecast cost of new debt over the period 2020-2024.
- 8.52 This resulted in a cost of debt range of between 0.65 to 1.04 per cent, with a point estimate of 0.85 per cent, which is substantially lower than the Commission's 2014 range of between 2.5 to 3 per cent with a point estimate of 3 per cent.
- 8.53 This cost of debt range of 0.65 to 1.04 per cent consists of a cost of embedded debt of 0 to 0.04 per cent, a cost of new debt of 0.31 per cent to 0.89 per cent, a weighting between embedded and new debt of 67 per cent and 33 per cent respectively, a transaction cost of 50 to 60 bps, and an uptick for notional credit rating of 5 to 12 bps.
- 8.54 Dublin Airport believes that the cost of debt range of 0.65 to 1.04 per cent estimated by Swiss Economics giving rise to the point estimate of 0.85 per cent adopted by the Commission is underestimated for the following reasons
- the cost of new debt is potentially biased downward
  - country-specific risk premium is flawed
  - the uptick for notional credit rating analysis only looks at a small sample of bonds and therefore underestimates the spread between A and BBB rated debt

### **Cost of New Debt**

- 8.55 In its cost of new debt analysis, Swiss Economics relies on a small sample size of comparator bonds, where it looked at bonds issued by three comparator airports, ADP, Amsterdam airport, and Sydney airport, but it did not examine the evidence from bonds issued by other comparators. This resulted in a potentially unreliable and biased estimates for the Dublin Airport's cost of new debt.
- 8.56 Furthermore, the maturities of the comparator bond sample is likely to be biased downward given that Swiss Economics looks at bonds with remaining maturity of 8 to 12 years, which approximates the yield at issue of comparator bonds with tenor at issuance of a weighted average of 8 to 12 years.
- 8.57 However, given that Dublin Airport's recently issued bond has a 12-year maturity, it is likely that the expected average tenor at issue over the next regulatory period will be at the top end of the range of 8 to 12 years, if not higher than 12 years.

8.58 Therefore, using bond comparator sample with average maturity lower than 12 years potentially underestimates the term premium faced by Dublin Airport's bonds. In addition, Swiss Economics' use of rolling averages of traded bond yield, rather than yield at issue, further exacerbates the underestimation of Dublin Airport's tenor at issue.

### **Country Risk Premium**

8.59 In its analysis, Swiss Economics considers that it is appropriate to add a country specific adjustment to the base cost of debt derived from comparator bonds. Swiss Economics estimated the Irish country risk premium to be 1 to 18 bps, based on the one-year and five-year average of spread between Irish utility bonds and other European utility bonds.

8.60 While Dublin Airport does support the use of a country risk premium, it disagrees with the approach used in this instance. Swiss Economics attempted to estimate the country risk premium by comparing the traded yields of Irish and other European utility bonds, but it failed to adjust for credit ratings, maturities and other factors that could significantly influence the yield spread and bias the estimated country risk premium.

8.61 The Swiss Economics reference point for measuring the Irish country risk premium was also ambiguous, since the estimated premium was somewhat determined by the choice of countries and bonds in the comparator sample.

8.62 The Swiss Economics calculation is weakened by the small sample size issue, as it is based on the bond yields from only eight European utilities, which is not enough to ensure that the calculation is statistically robust.

8.63 A preferred approach would be to estimate the Irish country risk premium based on the yield spread between the treasury bonds of the same maturity issued by Irish government and another country with lower sovereign risk, such as Germany. The government yield spread approach provides a more objective and precise measure of the country risk than the Swiss Economics approach, as it reflects only the sovereign risk differential while controlling for other risk factors.

### **Notional Credit Rating Analysis**

8.64 In its analysis, Swiss Economics used an 'uptick for notional credit rating' to take account of the differential between the Dublin Airport's notional credit rating and actual ratings, in order to keep the cost of capital consistent with the notional credit rating from a financeability perspective. Swiss Economics estimated the 'uptick' to be between 5 to 12 bps, arising from the real bond yield spread of a few selected utilities bonds rated A and BBB.

- 8.65 Dublin Airport believes that the Swiss Economics' analysis of the credit spread between A and BBB-rated bond is inaccurate and subject to errors, as it relies on a limited number of observations, in this case four A-rated companies and five BBB-rated companies, which makes the estimate statistically inaccurate and unreliable.
- 8.66 Furthermore, Swiss Economics failed to adequately control for the maturities of the comparator bond sample, and the embedded term premium due to maturity differences can lead to biases in the estimated rating spread. Swiss Economics' bond sample included bonds with maturity of 8 to 12 years, but such screening is insufficient to control for the term spread.

#### **Correcting for Errors in the Cost of Debt Calculation**

- 8.67 NERA using the new debt/embedded debt approach, corrected for the errors outlined above and then estimated the total cost of debt to be 1.19 to 1.43 per cent, based on the weighted average of embedded and new debt cost approach, as shown in the table below.
- 8.68 The NERA approach reflects the current market expectation of borrowing costs for corporate bonds and reflects the current interest rate environment. They did not estimate an explicit country risk premium, nor did they use an uptick for notional credit rating, since the Euro-denominated debt benchmark index already controls for a credit rating that matches and this approach also reduces the risk of estimation error.
- 8.69 The cost of debt from this approach is at the lower end of the NERA proposal of 1 to 3% which was derived from the debt premium approach, this is due to the fact that this new calculation does not consider the long-run historical interest rate evidence, which would have been taken into account in all the regulatory precedent in Ireland.

**FIGURE 8.4 NERA APPROACH TO COST OF DEBT**

	Lower bound	Upper bound	NERA methodology
cost of embedded debt (real)	0.68%	0.68%	weighted average real borrowing cost of existing debt excluding bank margin
cost of new debt (real)	1.24%	1.48%	current yield of BBB-rated Euro-denominated non-Financial Corporate Index (10+Y) adjusted for forward uplift
Weight of new debt (real)	56%	56%	average weight of new debt over 2020-2024
weighted average cost of debt (real)	0.99%	1.13%	weighted average of cost of embedded and new debt
Transaction costs	0.20%	0.30%	Based on regulatory precedent
<b>Allowed cost of debt (real)</b>	<b>1.19%</b>	<b>1.43%</b>	<b>Weighted average cost of debt plus transaction cost</b>

Source: NERA 2019

8.70 In conclusion, Dublin Airport believes that the Swiss Economics derivation of the cost of debt contains some flaws and errors that have led to an underestimation of this variable. Using the same embedded/new debt approach but correcting for the Swiss Economics errors would result in a cost of debt range of between 1.19 to 1.43 per cent, which is on average around 50 bps higher than the Swiss Economics current estimated range of 0.65 to 1.04 per cent.

## 8.7 Aiming Up

8.71 Dublin Airport welcomes the fact that the Commission has recognised that the consequences of under-estimating the true WACC, which would lead to underinvestment and harm passengers in a more substantial long-term way, are more severe than the consequences of over-estimating the true WACC, particularly in the case of Dublin Airport, a key gateway of Ireland's economic growth.

8.72 Dublin Airport agrees with the Swiss Economics proposition that aiming up the WACC is prudent and necessary given the following factors

- the scale of Dublin Airport's CIP 2020+, combined with other ongoing capital projects,
- regulatory precedent in Ireland has implicitly and explicitly included 'aiming up',
- the dynamic effects of air transport due to the industry's strong effects on trade, tourism, and economic growth are relatively larger compared with other utilities.



8.73 Given the importance of the aiming up element in the cost of capital building block, it will be critical for the financial viability of Dublin Airport going forward that the Commission continues to include this allowance in its WACC calculation for the Final 2019 Determination.

## 8.8 Conclusion

8.74 In response to the Draft Determination, NERA carried out a review of the Commission's proposed cost of capital, full details of which are contained in Appendix 8. This review identified a number of errors and flaws in the Swiss Economics methodology which was used by the Commission in the 2019 Draft Determination for estimating the WACC.

- Swiss Economics' estimation method of the listed beta comparators is flawed and underestimates the comparators' betas. After correcting for the errors, including using domestic reference market index and Hamada re-levering formula, empirical evidence on comparator betas supports a higher beta for Dublin Airport for the 2019 Determination;
- Swiss Economics determined Dublin Airport's beta as a weighted average of comparator betas, based on the comparators' similarity to Dublin Airport. However, SE's assessment is flawed as it assigns arbitrarily determined weights to each risk factor, places undue weights on comparators that have significantly lower risk profile and combines current empirical data with outdated regulatory precedent. Instead, Dublin Airport's beta should be estimated based on the closest comparator airports that have the most comparable regulatory regimes and demand/supply profiles; and
- The Commission's point estimate of the asset beta for the 2019 Draft Determination implies a substantial reduction in risk relative to 2014 Determination, and relative to Irish regulated companies, which is unjustified. Instead, evidence supports an increase in Dublin Airport's risk in the 2019 Determination relative to the 2014 Determination.
- Swiss Economics placed too much reliance on current market evidence while ignoring other existing evidence from long term estimates and regulatory precedent when deriving its risk-free rate for Dublin Airport.

- Swiss Economics used the Blume estimator with 10 years holding period when estimating the TMR for Dublin Airport, this is inconsistent with the 1 to 5 years holding period supported by the investor survey
- Swiss Economics used only the European TMR and fail to consider the World TMR when deriving the TMR for Dublin Airport.
- Swiss Economics used a flawed one-stage DDM that underestimate the forward-looking TMR when estimating the TMR for Dublin Airport.
- Swiss Economics relied on a small sample of comparator bonds to estimate new debt cost, country risk premium, and uptick for notional credit rating, resulting in low statistical power and weak robustness, while introducing potential biases.
- Swiss Economics failure to adequately control for credit ratings, maturities and other factors when estimating cost of debt and country risk premium, leading to underestimation of cost of new debt allowance.

8.75 Dublin Airport believes that these errors should be corrected and the flaws amended therefore the cost of capital should then be recalculated accordingly for the Final 2019 Determination.

8.76 We believe that this is vitally important given that this cost of capital estimate will be in place for a considerable period until 2024 and it will ultimately underpin the entire business case for the €2bn capital investment programme planned for Dublin Airport.

## 9. Financeability and Pricing Proposition

### 9.1 Introduction

9.1 The Commission has a statutory objective “to enable Dublin Airport Authority to operate and develop Dublin Airport in a sustainable and financially viable manner”. This objective is particularly key at times of significant investment and ensures that both the Commission and Dublin Airport maintain a longer-term view of the development of airport infrastructure than would otherwise be achievable by taking a simple “building blocks” approach. It would not be expected that the “building blocks” can give a financeable outcome where the RAB is being doubled, as the level of debt required is so significant that a financeability adjustment would inevitably be required. As the proposed level of investment in the upcoming regulatory period is unprecedented, and as the Commission itself has identified that “all capital projects in the CIP are in the interests of both current and future users”, appropriate, robust consideration and application of this objective is the only way that the Commission can achieve its other two statutory objectives and allow for the future, sustainable development of Dublin Airport to proceed in line with user requirements and economic need over the next five years.

9.2 CAR’s draft determination fails to address these issues in the following ways:

- The Commission incorrectly identifies BBB as an appropriate minimum stand-alone credit rating for Dublin Airport given Dublin Airport is not in a position to encumber the State-owned airport assets and provide security and covenants to lenders;
- The Commission targets metrics which do not in themselves achieve BBB, even in CAR’s base case, which includes an incremental €50m EBITDA target;
- The Commission has focused solely on two financial metrics in determining the financeability adjustment required and has not taken into account wider debt market considerations or directly looked at how Dublin Airport will finance the €2bn of capital investment that is required;
- The Commission has based its financeability assessment on a ‘hypothetical entity’ with €50m of opex targets that are unachievable as a base case;
- The Commission has not applied an adequate range of thoughtful sensitivity analysis which is imperative given the cyclical nature of the aviation sector;
- While the Commission has acknowledged the requirement for a financeability adjustment, its application is not logical and appears to be targeting a consistent price of €7.50 rather than addressing the required credit metrics. As illustrated below, an adjustment of €1.15 is made in 2021, bringing the Net Debt / EBITDA metric to 4.9x while only a €0.34 adjustment is made in 2024 when the same metric is 6.1x.

**FIGURE 9.1 CAR’S INCONSISTENT FINANCEABILITY ADJUSTMENT**

	2020	2021	2022	2023	2024
Base Price cap (€)	7.05	6.35	6.64	6.91	7.16
<b>Financeability adj</b>	<b>0.45</b>	<b>1.15</b>	<b>0.86</b>	<b>0.59</b>	<b>0.34</b>
Proposed Price cap (€)	7.50	7.50	7.50	7.50	7.50

CAR ratios using CAR opex forecast					
	2020	2021	2022	2023	2024
EBITDA	236.0	254.0	259.4	280.6	298.0
Net debt	958	1,241	1,445	1,635	1,812
FFO/ net debt (%)	22%	18%	16%	15%	15%
Debt/ EBITDA	4.1	4.9	5.6	5.8	6.1

9.3 Failure by the Commission to give proper consideration to its objective and the financial viability of this draft determination would result in the following:

- (a) the proposed investment plan and/or major maintenance and/or service quality, safety or security levels [REDACTED]
- (b) [REDACTED]
- (c) Dividends are foregone by the shareholder either as [REDACTED] (requiring more investment by the State through retained earnings).

9.4 We have explored these issues in more detail in the remainder of this chapter and have provided substantive data to support our assertions.

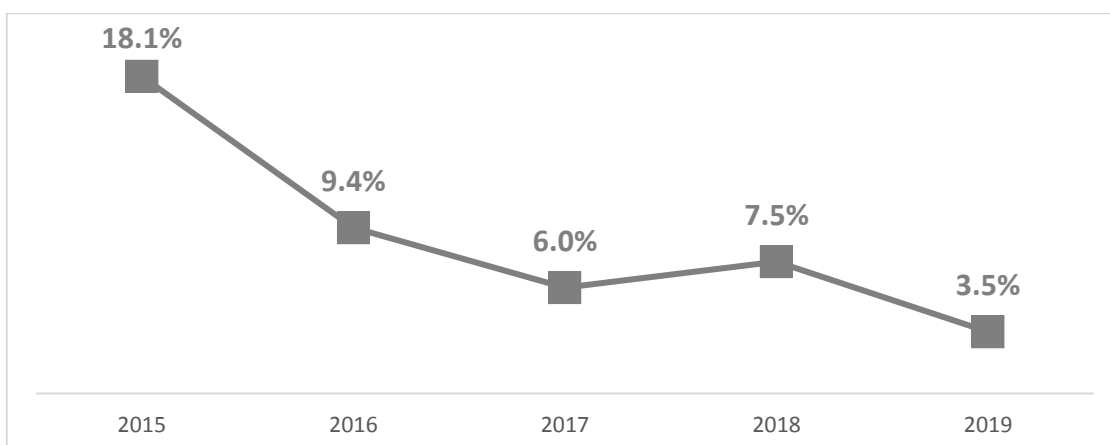
**FIGURE 9.2 CAR’S APPROACH TO FINANCEABILITY INCONSISTENT AND NOT ROBUST**

Level of capital investment is unprecedented	✓	10.3 Dublin Airport has not previously invested this level of capital for a sustained period
Equity investment is not available so Financeability is key	✓	10.33 Dublin Airport cannot raise equity and so is reliant on the debt markets. This underpins the importance we give to the financial viability assessments and is why we are prepared to adjust the price to enable Dublin Airport to have efficient access to debt markets.
Delivery of the CIP is key	✓	10.13 ...we have already identified that all capital projects in the CIP are in the interests of both current and future users. Therefore, such an adjustment would not align with our statutory objectives. 10.29 ...if the Programme is not delivered the welfare of users will be lower, at some point in the future.
Nevertheless, non delivery of the CIP seen as a key lever to achieve financeability	✗	10.16 The increase above 6 will either resolve itself through Dublin Airport not delivering the CIP exactly to plan, with some of the debt requirements falling to years after 2024
There is no consideration of Business Risk Profile	✗	N/a
A BBB rating required an FRP of “Intermediate”	✓	10.7 The target for investment grade would be intermediate
However, leverage targeted is not “Intermediate” and not improved with the financeability adjustment made	✗	[PRE ADJUSTMENT] 10.10 ...the Debt/EBITDA ratio increases over the period moving from Significant to Highly Leveraged [POST ADJUSTMENT] 10.15 ...the Debt/EBITDA now remains below 6 for all years except 2024
Analysis uses forecast that include €50m EBITDA target	✗	10.16 Achieving our ratios requires Dublin Airport to achieve our targets
There is no consideration of how it will be funded and on what terms or government approval of borrowings	✗	N/a
Detailed sensitivity analysis not applied which is imperative given the cyclical nature of the aviation sector	✗	N/a

9.5 As with all airport infrastructure businesses, Dublin Airport is required to make long-term investment decisions sufficiently in advance of additional demand while bearing the financial risks of a major multi-year capex programme in a [REDACTED]. Air travel is derived demand and as such is highly correlated to economic change. While the past

number of years has seen unprecedented and significant growth in passengers using Dublin Airport, CAR’s Final Determination for 2020 – 2024 will be set against a back drop of much lower growth and heightened risks in the economy. In June 2019 both the ESRI and the Irish Fiscal Advisory Council have highlighted the current uncertainty that exists in the Irish economy. Also in June 2019, Germany’s Business Climate Index fell to the lowest level since November 2014, U.S. consumer confidence fell to the lowest level since September 2017 and, in the UK, EY ITEM Club forecast consumer spending growth in 2019 to be slowest in six years. Within aviation we have seen Dublin Airport’s largest customer posting two profit warnings in 2018, announcing much reduced results and signaling less certainty in 2019. European airlines are seeing increased failures (WOW, FlyBMI, Primera, Small Planet, Azur, Skyworks, Cello, Cobalt, VLM & Germania) and reducing capacity (Norwegian & Ryanair). For Dublin Airport this has been evidenced by a reduced passenger growth rate of 3.5% in June 2019, down from a growth rate of 7.5% in 2018.

**FIGURE 9.3 DUBLIN AIRPORT JUNE YEAR ON YEAR PASSENGER GROWTH 2015 TO 2019**



9.6 Having reviewed the Draft Determination it is clear that CAR’s assessment of the financial viability of the draft price is not sufficiently robust to address the required objective and its conclusions are fundamentally flawed. CAR’s financial viability analysis in the Draft Determination has concluded that credit metrics of 6.1x Net Debt / EBTIDA and 15% FFO: Net Debt would secure a BBB credit rating. [REDACTED]  
 [REDACTED] Dublin Airport will be unable to finance the proposed Capital Investment Plan that the Commission has determined is “in the interests of both current and future users” on acceptable terms at a credit rating of BBB or lower.

- 9.7 In order to perform a valid assessment of financeability, Dublin Airport is strongly of the view that the Commission needs to engage relevant external expertise. This expertise needs to appropriately consider the specific characteristics of Dublin Airport i.e.
- A State-owned airport (with Government policy to remain so);
  - On an island nation with a large proportion of origin-destination passenger traffic;
  - No access to equity funding; and
  - No shareholder appetite to grant security or covenants to lenders
- 9.8 In addition, it needs to consider the entirety of Dublin Airport's funding requirement, particularly the second or third funding round when the markets will already have invested ██████████ in Dublin Airport's debt and ██████████. We note that the Civil Aviation Authority ("CAA") in the UK have engaged a financial advisor to assist with their financeability assessment on Heathrow's expansion plans. We would strongly recommend that the Commission access similar expertise, which holds proven and current experience of the bond and financing markets (including for Irish infrastructure agencies) that Dublin Airport will be accessing, to consider this critical component.
- 9.9 When looking out at a five-year determination period, it would be appropriate that a base case of an achievable financial forecast is reviewed, and that sensitivity analysis is performed on this. The Draft Determination is totally insufficient in this regard for the following reasons:
- (a) The Commission uses its own financial forecast which includes EBITDA targets (relating mainly to opex) in excess of €50m p.a. and a capital cost target of €150m as the base case. In doing so the Commission both i) sets an unrealistic base case and ii) makes no allowance for the capital cost of achieving the opex reductions (circa ██████████ staff Vs 2019 staffing levels) which would increase leverage.
  - (b) The Commission reviews a "no growth" sensitivity on this base case which it states can be mitigated by ceasing capital investment, with no examination of i) the level of investment that will have been committed to, ii) the time gap between commitment and spend, and iii) the interrelated activities within the CIP. The Commission have simultaneously suggested that ceasing or slowing down capital is an appropriate lever to the obvious problem that 'there would likely be some pressure on Dublin Airport to maintain financial ratios consistent with an investment grade rating in the later years of the period' (para 10.25) while also acknowledging that "if the Programme is not delivered the welfare of users will be lower" (para 10.29). This obvious contradiction

within the Draft Determination is key indicator of an inadequate assessment of the financial viability of the CIP proposition.

- (c) There is no analysis of the impact of other credible downside risks such as an economic shock or prolonged excessive construction inflation. In the absence of such sensitivity analysis we have included an externally sourced reference to issues which have been encountered where downside risk has not been acknowledged or provided for in other scenarios. We would point to the level of sensitivity analysis that was advised following the review of NATS financial difficulties as best practice. Dublin Airport has considered some sensitivity analysis in section 9.7 below.

## 9.2 Defining 'financeability' in Dublin Airport context

9.10 For any entity, being "financeable" means being able to access the funding and liquidity required to run its business. This is an incredibly broad and nuanced concept with many factors to be considered. It is evident that the Commission have simplistically focussed on a small number of financial metrics directly linked to the financial risk profile element of a credit rating and have not given any consideration to other key elements such as the business risk profile of the Airport, other intangible factors considered by the rating agency and also an understanding of the perspective of a debt investor and other constraints, such as the Shareholder approvals.

9.11 S&P's credit rating is comprised of a business risk profile (BRP) and a financial risk profile (FRP). CAR's analysis to date has been solely focussed on forecasts achieving a set of financial ratios which solely, but incorrectly, inform the FRP and ignore the impact of the Determination of the BRP. A key element of Dublin Airport's BRP is the fact that it is deemed to be operating in a supportive regulatory environment.



### Supportive Regulatory Environment and Business Risk Profile

A key element of S&P's assessment of Business Risk Profile at "Strong" is the view that it operates in a "favourable regulatory regime" that is seen as predictable and supportive. This assessment is based on a history of steady and predictable charges and regulatory decisions.

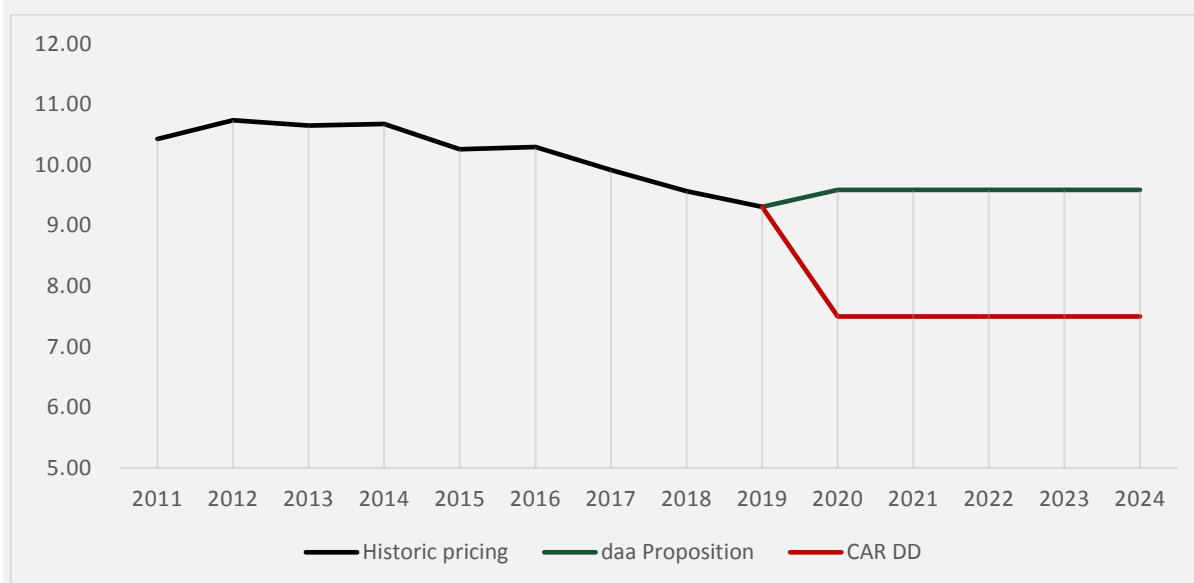
This assessment of the regulatory regime is likely to come under pressure following the Draft Determination:

1. Ending of 10 years of flat pricing and introduction of a 22% reduction at a time where users had signed up to a proposal of €2bn capital investment at flat charges. In the S&P Research update in July 2019 it is stated that "such a steep decline in ratios

between two regulatory periods could imply a higher volatility of earnings than we currently assess.”

2. Gives rise to future uncertainty for the next regulatory decision with dual uncertainty of another price change coupled with Dublin Airport’s ability to increase prices.
3. CAR’s decision in the Draft Determination to disallow €21m of capex (8% of the total PACE set of projects) which was previously requested by users, consulted on and deemed to be an efficient cost.

**FIGURE 9.4 AVERAGE AIRPORT CHARGES 2011 TO 2024**



The draft determination decision to reduce pricing by 22% affects the Business Risk Profile in two further ways:

- Adding pricing volatility to a business that is already viewed by S&P and the market as having higher passenger volatility than peers
- Further reducing profitability of an entity that is already viewed as having lower profitability than peers

S&P have raised both issues in their July 2019 publication.

9.12 For Dublin Airport, as equity investment is not available, funding requires access to the debt markets. Given the scale of the capital investment, it is imperative that Dublin Airport has access in all market conditions (i.e. throughout the cycle) and on terms that are acceptable to its shareholder.

9.13 For the period 2020 to 2024, Dublin Airport will need to access the debt markets on a number of different occasions in order to raise the total quantum of debt that is required to deliver the capital investment that has been agreed.

### **Dublin Airport as a State entity**



- 9.14 Consideration of the financeability of Dublin Airport must include an understanding of the mandate from Government.
- 9.15 Under the Air Navigation and Transport (Amendment) Act 1998 daa is responsible for managing, operating and developing the State's airports. In carrying out its mandate daa must seek to balance:
- operating key infrastructure for aviation users,
  - meeting future anticipated capacity needs,
  - its ability to recover its investment from the airport charges regulatory regime and other commercial investments,
  - the financing of its business and the delivery of a return to its shareholder.
- 9.16 The Shareholder mandate to the daa Board is that it is 'imperative that daa remain strong financially' and able to invest commercially and "maintain financial policies and a capital structure, taking account of future obligations, which facilitate the payment of dividends to the Shareholder<sup>52</sup>."
- 9.17 Under the 'Air Navigation and Transport Act 1998 and Borrowing Powers of Certain Bodies Act 1996', all borrowings made require approval by Department of Transport, Tourism and Sport and Department of Public Expenditure and Reform/Finance. In advance of Departmental approval, Dublin Airport must engage with and seek approval from NewERA. NewERA have previously set out the priority that a minimum Stand Alone Credit Rating of at least BBB+<sup>53</sup> be maintained. This has been reconfirmed in June 2019 and is consistent with its approach to other State bodies<sup>54</sup>. It would be highly unlikely, therefore, that any further borrowings would be approved were Dublin Airport to have a credit rating lower than BBB+. Given NewEra are required to approve any funding raised by Dublin Airport, we do not understand why the Commission have targeted a rating one notch lower than NewEra's BBB+ minimum rating target.
- 9.18 Dublin Airport currently holds unencumbered, uncovenanted debt. Irish State entities similarly do not give security over their assets on any debt issued. The "Terms and Conditions of Facility Agreements; Guidelines for State Bodies" states in the Covenants section (page 13) "... *not create, incur, assume or suffer any Encumbrance of any nature upon or with respect to any of its undertakings, property or assets now owned or hereafter acquired*" with "Encumbrance" being defined as "*any mortgage, trust, debenture, pledge, lien hypothecation, security interest charge or encumbrance of any kind or any other agreement or arrangement having the effect of security*". In addition,

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<sup>52</sup> Government shareholder expectation letter to daa April 2016

<sup>53</sup> NewERA Financial Review of daa plc for the Department of Transport, Tourism and Sport and the Department of Public Expenditure and Reform October 2016

<sup>54</sup> [https://esb.ie/docs/default-source/investor-relations-documents/esb-debt-investor-presentation-and-business-update---october-2018.pdf?sfvrsn=ba083bf0\\_2](https://esb.ie/docs/default-source/investor-relations-documents/esb-debt-investor-presentation-and-business-update---october-2018.pdf?sfvrsn=ba083bf0_2) pg 24

Dublin Airport's existing debt contains negative pledge provisions and therefore Dublin Airport would have to seek the consent from all existing lenders to grant security to any future lenders. Existing lenders are unlikely to provide consent as they will be subordinated to any new debt. In that case they could either:

- Seek repayment and as a result Dublin Airport would have to refinance up to €■■■ of debt in addition to raising €■■■ of new debt for CIP; or
- Seek a grant of security to existing lenders. This would require an intercreditor agreement which would be difficult to agree given the diverse nature of Dublin Airport's existing lenders.

9.19 The investment plan for the next determination period will see Dublin Airport's Net Debt increasing to €■■■ (€1.8bn per CAR) with Gross facilities increasing to €■■■. daa currently has a gross borrowing limit governed by statute of €1.8bn. In order to be in a position to attempt to finance the proposed CIP, Dublin Airport will have to demonstrate how the investment is consistent with the Shareholder and National Aviation Policy of it being imperative that it be strong financially and engage with the Shareholder and NewERA to increase its borrowing cap. This will most likely be a lengthy process, requiring a statutory instrument to effect but it is vital that clarity on this is achieved early to allow Dublin Airport to proceed with the total CIP investment with confidence and go to market for funding. If this is not achieved early, Dublin Airport will have to delay the construction of key infrastructure as projects which are programmed to commence in 2020 or 2021 may have to be reprioritised if the full €2bn CIP cannot be funded. Increasing this borrowing limit is a key first step in financing any proposed CIP, and to do so, Dublin Airport will have to be achieving strong and stable credit metrics and be showing forecasts with moderate leverage.

### Debt market access for Dublin Airport

#### Context

- Unprecedented multi-year capex plan driving requirement for very significant multi-year capital funding need.
- Given State ownership Dublin Airport has no access to fresh external equity capital. The only source of external capital is debt.
- Debt service and debt repayment cashflows from existing Dublin Airport assts and new investment is very long term. Therefore, need to be able to access the longest debt maturities (12 years plus)
- Scale of funding requires access to multiple debt markets (bank loans, private placements, public bonds, EIB). Therefore, need to meet the requirements of each market.
- Dublin Airport are not in a position to offer security and/or financial covenants as creditor protections to support the debt requirement. Debt needs to be raised on an uncovenanted and unsecured basis in line with State guidance.

- [REDACTED]
- Commentary**
- A BBB target stand-alone credit rating is below the credit rating of Dublin Airport's peer group.
  - The peer group have credit ratings of BBB+ as a minimum.
  - Those in the peer group that borrow on an unsecured basis generally have Net Debt to EBITDA ratios of between 1x and 4x and credit ratings of BBB+ as a minimum.
  - Those airports with higher leverage will typically be
    1. Offering material creditor protections (e.g. security, covenants); and
    2. Privately owned and as such their shareholders have a different risk perspective than State Governments / Municipalities and are more comfortable offering security and covenants in return for higher leverage
  - The [REDACTED]. Given the long term nature of the repayment profile the target credit rating should include relevant downside sensitivities which show that the company has sufficient financial robustness that it can withstand the downside whilst continuing to meet its financial policy guidance and credit rating target. In addition, maintaining a BBB+ rating should facilitate Dublin Airport to continue to access the required markets in times of volatility which could be crucial in order to deliver the capital investment plan.
  - In a downside scenario, to the extent that new capital is required, the State will be seen as being much more constrained in its ability to invest new capital than a private sector owner may be (e.g. and infrastructure fund or other strategic owner), in particular given the State has not previously supported Dublin Airport with fresh capital to maintain its credit rating.
  - A supportive regulatory framework is critical as the regulatory regime combined with affordable charges will be seen as the mechanism to remedy any material downside shocks. [REDACTED]  
[REDACTED] As such, the regulatory support must be to set pricing at such a level that allows for downsides rather than reacting to them. CAR's statement that all capex that enters the RAB will eventually be remunerated does not provide any comfort to the market that regulatory support is available in a downside scenario.
  - Confidence from lenders around the delivery of the plan and the financial projections will be critical. Pre-funding, liquidity (funding will need to be place c.12 months ahead of expenditure) and working capital needs will require lenders to commit upfront/early in the project. They need to be confident in the plan from day one as the source of their repayment will be from a future refinancing of their debt maturities. Dublin Airport also need lenders to commit to the longest dated maturities to enable it to match cash flows as far as possible and to manage its maturity exposure.

It is clear from assertions in the Draft Determination around the acknowledgment of challenging ratios in the event of a slowdown in passenger growth and the potential to stall capital investment to deal with this (para 10.19) that the Commission do not understand the practicalities of accessing long dated funding and the resultant considerations to be addressed to the investor and lending communities. In order to be able to commence the funding of the CIP proposition for the period 2020 – 2024, Dublin Airport will be required to set out a clear and comprehensive plan in respect of its financial forecasts and likely outturn. A key element of this will require being able to demonstrate a robust and achievable capital plan. Being able to demonstrate this certainty and clarity for a 5 year period will be key to instilling comfort in capital markets participants who are being asked to fund the business for periods of between 12 and 15 years. It is not plausible that Dublin Airport can indicate that capital expenditure may be ceased mid cycle in order to address challenging financial ratios or potential downside scenarios which were not properly anticipated. The Draft Determination also completely overlooks the fact that capital will require to be accessed well in advance of expenditure, not on a month to month basis.

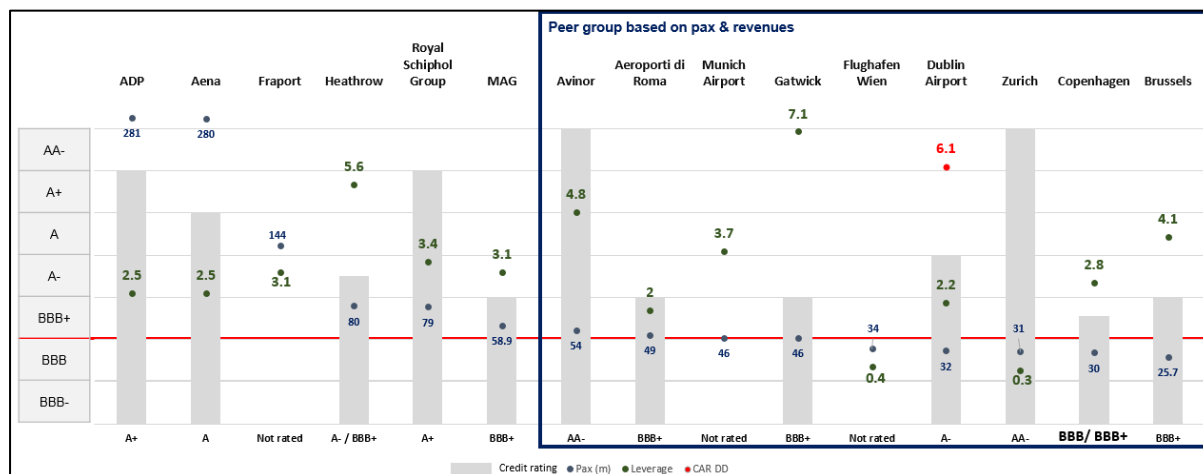
### 9.3 Why BBB+ is required

9.20 Dublin Airport has consistently argued that a BBB+ stand-alone credit rating is the correct minimum target credit rating for the Regulated Entity. A BBB+ credit rating is the most efficient credit rating as it balances the cost of debt within the cost of capital with the overall capital requirement from debt and equity. NewERA have previously clarified that a minimum credit rating of at least BBB+ be maintained. This has been reconfirmed by them in June 2019.

9.21 While a credit rating of BBB is technically an Investment Grade credit rating, most majority State-owned infrastructure companies target strong investment grade ratings in order to access flexible, long-dated, unsecured, uncovenanted debt markets throughout the cycle. This generally aligns to a rating of BBB+ and above. This target also provides a degree of headroom, in a cyclical industry, for a further downgrade to BBB. Aiming for BBB and potentially suffering a further downgrade to BBB- would have negative consequences in relation to Dublin Airport's ability to access capital markets which would be magnified in volatile market conditions. As a BBB credit, Dublin Airport would be highly unlikely to achieve the required quantum of funding at the flexible terms sought by management and the shareholder. In addition, Dublin Airport would be more exposed to market conditions and could experience prolonged unfavourable issuance windows during the CIP.

9.22 Holding a strong, investment grade credit rating (BBB+ and higher) is industry practice for airports. As illustrated below, there is currently only one peer airport with a credit rating of less than BBB+ and many are rated at A- or higher.

**FIGURE 9.5 COMPARATOR AIRPORT CREDIT RATINGS**



9.23 The comparator analysis shows a consensus for credit ratings at or above BBB+ and also a leverage ratio of c.3.0x. Taking a closer look at some of the peer airports rated at BBB+ shows that these companies are all majority privately owned and have specific reasons for being at this lower end of the credit rating range with impacts on their funding structures that Dublin Airport could not employ:

- Aeroporti di Roma has an anchor rating of A+ and suffers a three notch down grade related to both the Italian overall sovereign rating and its group parent company.
- Gatwick Airport takes an aggressive approach to funding and has a securitised structured which gives significant lender controls and protections over the main business. We do not expect NewEra or the State will be comfortable granting similar enhanced creditor protections.
- Brussels Airport at Baa1 / BBB+ borrows on a secured and covenanted basis. Higher leverage is a result of shareholder distributions. Moody's note that it has a "shareholder-friendly financial policy... to distribute 100% of its annual free cash flows." Brussels Airport recently accessed the USPP market securing €500 million and the transaction was secured.

9.24 The only peer airport with a BBB credit rating is Copenhagen (majority privately owned), which has a long-standing policy to distribute 100% of net profit after tax. Copenhagen is rated Baa2 (equivalent of BBB) by Moody's and BBB+ by Fitch. At Copenhagen, debt is held both at holding company and operating company levels with covenants at the holding company level based on consolidated ratios. The secured financing structure includes some elements of senior creditor protection such as six-month debt service

liquidity and a covenant package that incorporates financial covenants. Again, we do not expect that Dublin Airport would be permitted to provide similar creditor protections.

- 9.25 Targeting a strong investment grade credit rating is common practice across State-owned utilities in Europe. The figure below shows Dublin Airport’s Semi-State peers with credit ratings of A and A- while the only three Irish listed entities with credit ratings all are at BBB+.

**FIGURE 9.6 STATE-OWNED INFRASTRUCTURE PEERS**

Entity	Stand-alone credit profile	Credit Rating	Policy / Target if applicable
<b>ESB</b>	BBB+	A-	“Credit rating of A- or equivalent and BBB+ on a standalone basis
<b>Gas Networks</b>	A-	A	
<b>Snam</b>	A-	BBB+	“Snam is committed to maintain its SACP at ‘a-’
<b>Gasunie</b>	A	AA-	“Maintain our solid financial position (minimum credit rating of A3)”

## 9.5 How debt markets work and the impact of CAR’s Draft Determination

- 9.26 When setting out a funding strategy, an entity must consider what sources of funds are available and whether they are acceptable to its shareholders.
- 9.27 For Dublin Airport, all debt must be formally approved by the shareholder. As such, any debt which contravenes its mandate will ultimately not be available.

### Debt market options for Dublin Airport

- 9.28 The following are the borrowing options that are available to Dublin Airport.

### European Investment Bank (“EIB”)

- 9.29 Dublin Airport recently signed a €350 million facility to part fund the existing investment programme at Dublin Airport, (i.e. not part of the €██████████ “new long term debt” required for the CIP). Although this improves the current funding position of Dublin Airport, we would highlight that:

9.30 The facility took two years to negotiate and sign and is based on the existing credit rating of A- and current leverage levels / financial profile;

- EIB's exposure to Dublin Airport is now € [REDACTED] million (has existing drawn debt of € [REDACTED] million) [REDACTED];
- The EIB will only fund 50% of a project; and
- The [REDACTED]

### **Bank market**

9.31 Bank lending is generally limited to 5-7 years. As Dublin Airport are funding assets with 20 year plus lives, bank lending is mainly used for liquidity purposes given drawn bank funding would be sub optimal as it would require refinancing on a regular basis.

9.32 We would highlight that Dublin Airport will require a larger bank facility that currently in place to deal with the liquidity requirements associated with the capital expenditure programme. Liquidity is an important factor for S&P and debt investors.

### **Public Bond Markets**

9.33 The bond market offers access to a deep pool of institutional investors. The instruments are listed and are actively traded on the relevant stock exchange. A credit rating is generally required for this market. Given its size, it is a popular market for large corporates across multiple currencies and tenors.

9.34 Dublin Airport currently has one bond in issue of €400 million due in 2028. This is Dublin Airport's third bond, and its trading level will be a benchmark for future issuance in this market. All three issuances were made when Dublin Airport had a credit rating of A- or higher. This market will be important for the future as it provides Dublin Airport with access to medium to long term funding, which is critical for the airport. As this is a public market, it is more sensitive to market volatility and therefore there are periods where the market is shut for new issuances.

### **ESB experience 2010-2012**

In 2011 and 2012 ESB was a BBB+ rated entity but was locked out of the credit market due to overall market appetite for both Irish and lower credit rated issuances. In September 2012, the company issued a €600m 5 year Eurobond with a fixed coupon of 6.25%. This was a credit margin of 5.89% for a BBB+ rated company and was also very short term. ESB had to return to the market in June 2015 to buy back a €300 million portion of this debt.


### Private Placements

- 9.35 Offers access to US institutional investors. Unlike the bond market these instruments are not listed or actively traded. Although they do not require a credit rating, investors are very sensitive to investment grade credit ratings due to their own associated capital requirements. As a result of the illiquidity (i.e. not easily tradeable), investors generally require covenants. For strong investment grade entities, these can sometimes be avoided, however for BBB issuers, investors will expect covenants. As such, at BBB this market will not be available to Dublin Airport on acceptable terms.
- 9.36 Although the market is dominated by US investors, EUR funding is now common. This market also offers long-dated funding, as such it will likely be important for financing the CIP. We should highlight that there is very limited capacity in this market for sub-investment grade issuers.

### Optimal capital structure for Dublin Airport

- 9.37 As set out below, Dublin Airport will need to raise an additional [REDACTED] from the debt markets over the next five years. Dublin Airport's required capital structure is based on the following key principles:
- a) Wide access to debt markets
    - a. Only funding source: No other capital injection plausible
    - b. Diversification: Need to maintain access to all key markets which offer the most flexible terms (Investment grade bond, bank, USPP, EIB, hybrid bonds)
    - c. Liquidity and flexibility: Given the investment programme, Dublin Airport needs to ensure it has strong liquidity and needs to be in a position to pre-fund.
      - Strong liquidity will also allow Dublin Airport to navigate through difficult or busy market conditions, i.e. avoid Dublin Airport being forced into the market
    - d. Through the cycle access: Imperative that Dublin Airport has sufficient contingency / capacity to withstand a downturn and continues to have access to debt markets. In a volatile market, there is always a flight to quality credits and highly indebted businesses will invariably lose access to the market.
  - b) Long-dated funding
    - a. Long term debt matches the asset cash flow profile
    - b. Given the cyclicity, Dublin Airport needs to have core debt that is in place through the cycle.
  - c) Flexible / non-onerous debt



- a. Given the nature of the shareholder and the assets in question, most State-owned entities borrow on an unsecured basis to prevent against loss of ownership/control of key State-owned infrastructure.
- b. Given the cyclical nature, Dublin Airport should borrow on the most flexible terms (see NATS case study below).
- c. Significantly reduces the risk in the downturn of default and transfer of ownership to Lenders. This would be aligned to the Government ownership position.
- d. 

9.38 When any entity seeks to raise debt from the markets, it must consider two types of “cost” that lenders apply:

- Interest rate cost, which increases and decreases based on the market perception of the riskiness of the entity (closely correlated to credit rating)
- Terms and conditions attached to the debt, which can take the form as security (i.e. mortgaging assets against the debt) and covenants which can make debt repayable in full once certain metrics are breached. Again, the requirement for security and covenants increase as credit risk increases and credit ratings decline.

9.39 Aside from lending at different costs to borrowers, different markets are open to different borrowers depending on their credit rating.

### **Capital Structure key considerations**

9.40 Given the above principles, the following funding parameters must be considered:

A. Market access:

- a) In certain conditions, markets may not be available to Dublin Airport even at BBB+ credit rating
- b) At this level of capital requirement, Dublin Airport is vulnerable to a change in market conditions and some markets not being open (in particular the USPP and public bond markets)
  - This lack of access is pronounced given the debt markets are its only source of funding
  - A BBB rating allows for no buffer in the rating before market access becomes a significant issue

- Should funding not be available, Dublin Airport would have to call on the State for funding, something that we understand it is not willing to do and has not done so in the past.

#### B. Cost

- Each of these markets will have different premia for the change of rating
  - Bank: will be linked to leverage / rating so an increase in margin is expected
  - Bond: Will depend on credit rating and market conditions,
    - As a traded instrument, this spread will always be measurable
  - US Private Placement: This will be similar to the bond market but will also be dependent on the USD / EUR basis swap given the market is dominated by US investors whose own funding is in USD

#### C. Terms and conditions

- Given the funding quantum, multiple markets will be required
- At BBB, Dublin Airport will be required to offer financial covenants to access these markets
- Even at BBB+, some transactions in the sector can be seen to include covenants (e.g. MAG case study below) and are secured
- Although Dublin Airport may be able to still access the bond market on an uncovenanted basis, bond documentation will include a cross default clause. Therefore, should covenants be needed in another market, the cross-default provision would give protections to existing lenders

9.41 Therefore, as has been previously noted, in order to address the key consideration of market access set out above, Dublin airport requires a strong investment grade rating, which is a minimum of BBB+, targeted throughout the period.

9.42 The Commission claims to target a BBB credit rating, however, as set out below, the Draft Determination price cap would result in an even worse outcome. [REDACTED]

[REDACTED] A significant flaw with CAR's financeability assessment is that it, in no way, assesses or addresses the risk of any of these downsides, market driven scenarios arising and setting out how it feels its Draft Determination remains valid in these circumstances.

9.43 For an entity to be able to access funds that the market is willing to provide, the costs and terms of the debt must be acceptable to its shareholder. The shareholder has confirmed to Dublin Airport that its position is for it to have a minimum credit rating of BBB+ with modest leverage. Dublin Airport will have to seek the shareholder approval for all new funding. If the Shareholder does not agree to the terms, then the funding will not be raised and the proposed capital investment which has been asked for and endorsed by airport users will not proceed.

#### **Case Study (NATS – National Air Traffic Services)**

*The case study below clearly outlines the dangers of assuming increasing financial risk based on over optimistic and under stress tested assumptions in a vital infrastructure sector.*

Originally a subsidiary of the Civil Aviation Authority, in 1998, a public private partnership was proposed and in July 2001 a 46 per cent stake in NATS was sold to the Airline Group, a consortium of seven UK-based airlines.

The proceeds of the sale were partly achieved by increasing the level of NATS' bank debt, putting pressure on NATS's finances and making the organisation vulnerable to downturns in traffic, such as what followed on September 11th, 2001.

The UK Department of Transport and their advisers had decided, mainly on the basis of financial projections that assumed constant growth in NATS' traffic and income, that the financial structure of the PPP would be sufficiently robust to cope with short-term reductions in traffic levels. However, the impact of 9/11 was severe with transatlantic traffic dropping by 15% and NATS "en-route" revenues falling by 9%.

The financial situation led to its lending banks withdrawing access to its existing loan facility meaning its ability to re-invest and deliver the vital investment necessary to expand the capacity of Air Traffic Control was severely restricted.

Lenders stated at the time "at present it is unlikely that NERL will be able [to] meet the reinstatement conditions attached to the existing long-term facility for capital expenditure, or to secure new funding from other sources".

NATS noted that if it could not raise new finance and restructure its bank facilities, user interests would be seriously damaged. NATS was required under its license to make substantial investments in its services (£1bn planned over 10 years).

In order to relieve immediate financial difficulties, the government and a group of banks provided a £60m short term loan. In terms of long-term remediation, £130 million in permanent capital was provided by a new investor BAA (Heathrow) and the government. This facilitated a reduction and restructuring of the senior debt facilities. This solution took 18

months to put into place. Further steps were also taken such as the relaxation of the price cap, volume-risk sharing with customers, a one-off uplift to the RAB and a cost reduction programme.

The failure on the part of the Department to carry out extensive robustness tests on the proposed financial structure left both the government and the regulator seriously exposed and in severe financial difficulty when the above scenario arose and could have resulted in administration for NATS.

A Select Committee noted prior concerns regarding the level of debt as a result of the PPP<sup>55</sup>:

*“The financial structure created by the PPP inflated the company's difficulties. The Government failed to give due weight to the concerns expressed by both NATS and the CAA about the high debt levels imposed on the company. The Government failed to heed the warnings about the impact the financial structure would have on the viability of the company in the event of a downside demand shock”*

It is clear that had due consideration been given to carrying out appropriate stress testing that NATS could have avoided such a drastic outcome, requiring urgent remediation from many parties including investors, banks, the government and the independent economic regulator.



We also note CAA has adopted a holistic approach to financeability for their next price control period (H7) where consultation is currently underway. It covers a period of capital expansion and a very significant programme of capital expenditure, similar to Dublin Airport. They note that the “financeability check” is a key part, stating “it will be important to consider reasonable downside scenarios, so that investors and consumers have assurance that the business will remain financeable in an appropriate range of circumstances”<sup>56</sup>.

## 9.6 Dublin Airport assessment of the Draft Determination pricing on credit metrics

9.44 The Commission is forecasting that Net Debt/EBITDA will grow to over 6 times in 2024 with FFO/Net Debt falling to as low as 15%.

<sup>55</sup>

Select Committee on Transport, Local Government and the Regions Eighteenth Report (<https://publications.parliament.uk/pa/cm200102/cmselect/cmtlgr/789/78903.htm>)

<sup>56</sup> Economic regulation of capacity expansion at Heathrow: policy update and consultation – CAP 1782 (<http://publicapps.caa.co.uk/docs/33/CAP1782%20March%202019%20.1.pdf>)

9.45 The Commission's forecast and financeability assumptions assume that Dublin Airport will achieve all the 'targets' or allowances set in each building block. These targets are significantly ahead of Dublin Airport's expectation for the next five years and grow to a difference of circa €50m in 2024. In particular, the level of operating cost reduction is not possible to deliver in this timeframe so therefore the inputs to this assessment are fundamentally flawed.

**TABLE 9.1 CAR FINANCIAL FORECASTS WITH PROPOSED PRICE OF €7.50**

CAR Forecast	2020	2021	2022	2023	2024
EBITDA (€m)	236	254	259	281	298
FFO (€m)	209	227	231	249	264
Net Debt (€m)	958	1,241	1,445	1,635	1,812
FFO: Net Debt (%)	22%	18%	16%	15%	15%
Net Debt / EBTIDA (x)	4.1	4.9	5.6	5.8	6.1

9.46 Using Dublin Airport's financial forecasts with the draft determination price cap, the credit metrics are shown to weaken substantially. FFO: Net Debt is expected to fall to circa ■ by 2024 with Net Debt: EBITDA increasing to almost ■ times. Dublin Airport considers this to be the base case position for 2020-2024. The key difference between the Commission's forecast EBITDA and Dublin Airport EBITDA are flawed assumptions made by the Commission in respect of the future operating cost base for Dublin Airport. These assumptions have been robustly considered in our operating cost submission and on the basis they are not achievable in the timeframe noted, CARs assessment of financial viability is obviously flawed.

**TABLE 9.2 DUBLIN AIRPORT FINANCIAL FORECASTS WITH PROPOSED PRICE OF €7.50**

Dublin Airport Forecast	2020	2021	2022	2023	2024
EBITDA (€m)					
FFO (€m)					
Net Debt (€m)					
FFO: Net Debt (%)					
Net Debt / EBTIDA (x)					

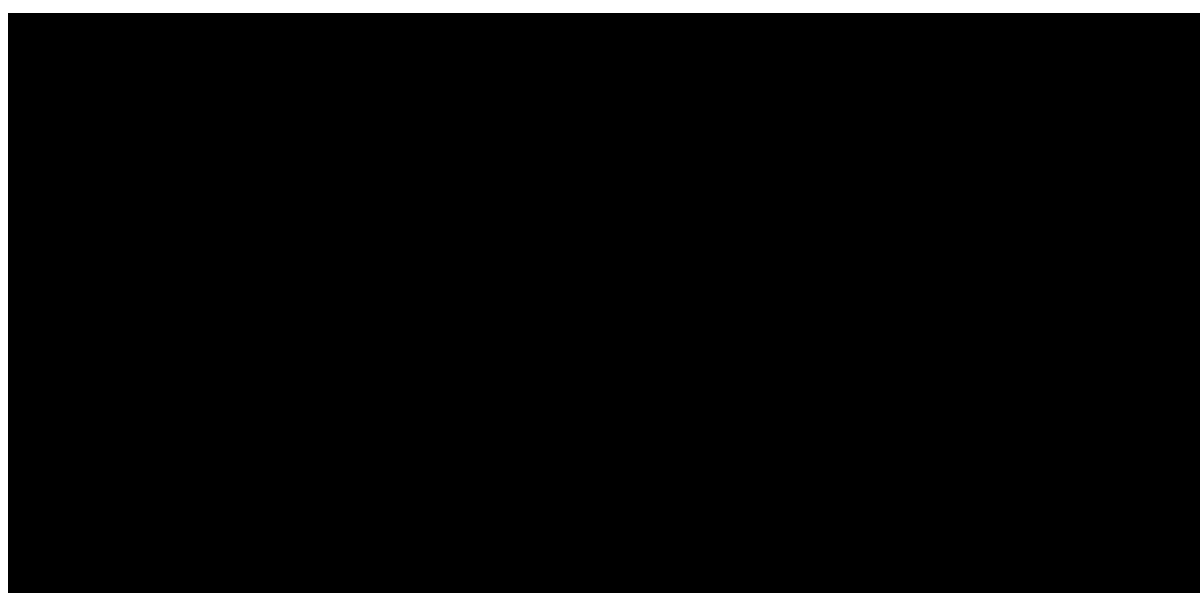
9.47 Dublin Airport does not consider the Commission's proposition or base case to be financeable given the differences in the various building blocks as has been highlighted

throughout our submission. In addition, the Commission's credit metrics do not allow any headroom for a potential downside shock.

9.48 Sensitivity analysis below shows further material downside risk.

### 9.7 Dublin Airport funding requirement for 2020 to 2024

9.49 Under the Dublin Airport forecasts, total facilities are expected to increase from €1.1bn to €[REDACTED] by 2024. New debt in the region of €[REDACTED] will need to be sourced from the market. This excludes a new €[REDACTED] and the €350m EIB loan signed in June 2019.



### 9.8 Risks and sensitivity analysis

9.50 [REDACTED]. If either Dublin Airport's or CAR's passenger forecasts play out Dublin Airport will have had 10 years of uninterrupted growth by 2024 and whilst the general outlook is suggesting continued expansion there is no doubt that growth levels are expected to moderate in the medium term. Having recovered in the past 5 years from a deep recession, the Irish economy is now running at near capacity. As has been highlighted by many commentators<sup>5758</sup>, the current outlook for the Irish economy is uncertain. Major risks are evident in both directions with the risk of overheating on one side and the potential for realisation of downside risks on the other. It seems a slowdown appears inevitable.

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<sup>57</sup> <https://www.irishtimes.com/business/economy/irish-economy-caught-between-overheating-and-brex-it-slowdown-chief-economist-warns-1.3925092>

<sup>58</sup> <https://www.irishtimes.com/business/economy/chances-of-another-recession-in-ireland-100-says-ntma-chief-1.3946583>

9.51 The Irish Fiscal Advisory Council highlight the unusually uncertain medium-term outlook for the Irish economy stating<sup>59</sup>:

**9.52** *“Although upside risks to the SPU [Stability Programme Update] 2019 forecast mainly relate to the potential for overheating—which would not represent “upside” in any normative sense—the potential for realisation of downside risks has intensified. Among the current downside macroeconomic risks are potential escalation of protectionist measures involving the world’s largest economies, the onset of a cyclical downturn in Ireland’s main trading partners, and adverse financial developments (including related to Italy). Furthermore, Brexit presents an elevated risk to medium-term economic growth in Ireland.”*

9.53 The ESRI have also expressed concerns regarding the decline in consumer and producer sentiment<sup>60</sup>:

9.54 *“Consumer and producer sentiment indices have all reported significant declines in investor confidence about future prospects for the Irish economy. Inevitably, much of this uncertainty reflects the ongoing process of the UK withdrawal from the European Union. While analysis of the impacts of the UK withdrawal has inevitably focussed on the future impacts on the domestic economy, it is clear that Brexit has already had a materially negative impact on the Irish economy. Ongoing trade frictions between the United States and China are also potentially contributing to lower investment due to global uncertainties.”*

9.55 Across Europe economic indicators are also weak. In Germany the IFO Business Climate Index (June 2019)<sup>61</sup> showed that the mood among German company managers has cooled further. The index fell from 97.9 points in May to 97.4 points in June, its lowest level since November 2014. In June 2019, the DG ECFIN flash estimate of the consumer confidence indicator dropped in both the euro area and the EU (by 0.7 points in both cases)<sup>62</sup>. S&P stated in June 2019 “The EU growth outlook remains subdued mainly due

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<sup>59</sup> Irish Fiscal Advisory Council – Fiscal Assessment Report June 2019  
(<https://www.fiscalcouncil.ie/fiscal-assessment-report-june-2019/>)

<sup>60</sup> ESRI – Quarterly Economic Commentary – Summer 2019  
([https://www.esri.ie/system/files/publications/QEC2019SUM\\_1.pdf](https://www.esri.ie/system/files/publications/QEC2019SUM_1.pdf))

<sup>61</sup> <https://www.ifo.de/en/node/43224>

<sup>62</sup> [https://ec.europa.eu/info/sites/info/files/fcci\\_2019\\_06\\_en.pdf](https://ec.europa.eu/info/sites/info/files/fcci_2019_06_en.pdf)

to external demand weakness, with domestic demand held up by a vibrant labor market and high capacity utilization. We see no signs of inflation picking up anytime soon<sup>63</sup>.”

9.56 The [REDACTED] Dublin Airport’s largest airline Ryanair reported its lowest profit in four years for the year ending March 2019. This is largely due to pressure on air fares and higher fuel costs, also citing risks such as Brexit developments, ATC disruption and security events.<sup>64</sup> IATA has also downgraded its 2019 outlook for the global aviation industry from a \$35.5 billion profit forecast, as of December 2018, to a \$28 billion profit forecast as of June 2019 due to rising fuel prices and weakening world trade.<sup>65</sup> Further evidence of this was seen at the Paris Air show, where 2019 was the slowest show for aircraft orders since 2009, falling from a peak of close to 600 orders in 2011 to just over 100 in 2019. Between 10%-25% of full year orders are placed at the air show each year<sup>66</sup>.

9.57 Dublin Airport has its own specific potential downside risks which have not been considered. The existing planning permission for the North Runway includes restrictions on flights between the hours of 23:00 and 07:00 to roughly 50% of current operations. This has a potential to reduce passenger traffic by up to 3 million passengers in the first year of operations and increasing thereafter. This is a key risk for Dublin Airport with a potential impact arising in the middle of the regulatory period, when a majority of the capital investment will have been committed.

9.58 Given the elevated uncertainty regarding the economic outlook, [REDACTED] it must be emphasised that financial viability must be determined by assessing potential downside/shock scenarios to provide strong assurance of robustness.

### **Sensitivity analysis**

9.59 The Commission’s forecasts show limited EBITDA growth (2% GAGR) from 2019 to 2024, while Net Debt grows by €0.7bn to €1.8bn. This results in the Commission’s forecast of 15% FFO: Net Debt and 6.1x Net Debt/EBITDA.

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<sup>63</sup> S&P Global Ratings; “Double, Double Toil And Trouble”; June 27, 2019

<sup>64</sup> Centre for Aviation, May 2019

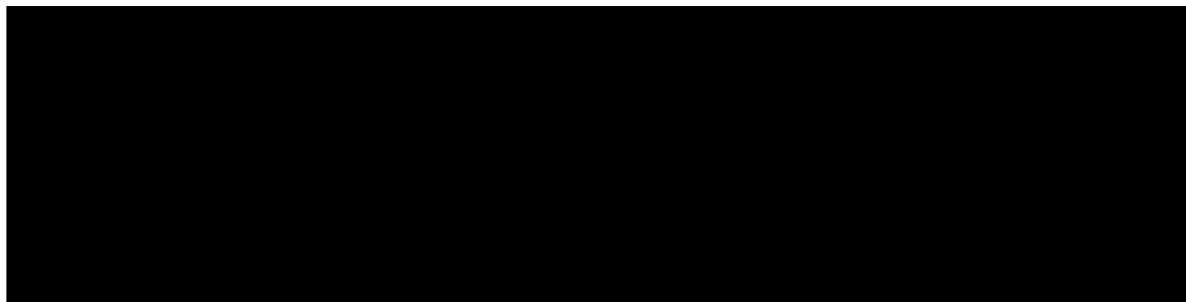
<sup>65</sup> IATA.org, Press Release Number 27, 2<sup>nd</sup> June 2019

<sup>66</sup> Barclays Research: Global Aerospace & Defense – Paris Day 4: Slowest Show for Orders Since 2009



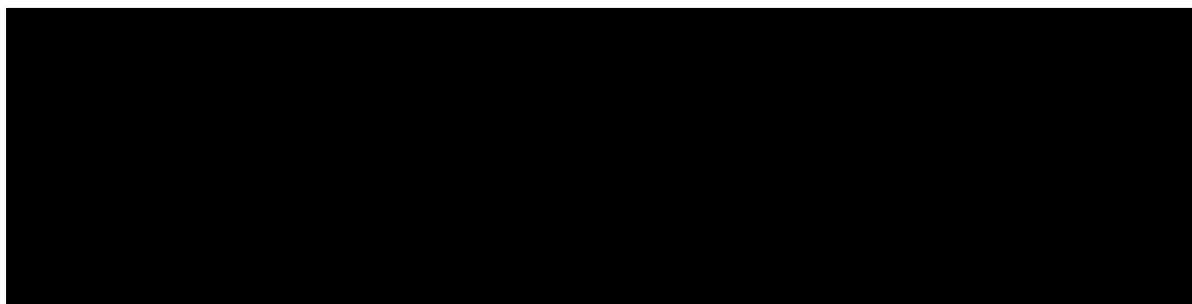
9.60 Sensitivity analysis shows leverage of 7x if Dublin Airport achieves half of the EBITDA target or a low growth scenario arises, 8x if none of the EBITDA target is achieved and as high as 11x/12x in an economic shock.

**FIGURE 9.7 SENSITIVITY ON CAR FORECASTS**



9.61 The impact is even more detrimental on the Dublin Airport forecasts with leverage increasing to over ■ in the low growth scenario and rising to over ■ in an economic shock. Even if Dublin Airport achieved 50% of the Commission's EBITDA target, leverage would only reduce from ■ still maintaining a "Highly leveraged" financial risk profile.

**FIGURE 9.8 SENSITIVITY ON DUBLIN AIRPORT FORECASTS**



9.62 The sensitivity analysis carried out by the Commission in the Draft Determination is too simplistic and does not adequately address the risks that it identifies. The Commission states that Dublin Airport can cut capital investment in order to improve credit metrics in the case of lower passenger growth. The Commission has had full visibility of the nature of the components that make up the €1.8bn capital programme and should fully understand that these are not projects which can easily be paused once they have been designed, commissioned and commenced. The Commission must undoubtedly understand that the capital plan is comprised of significant modules which cannot be easily re-sized or stalled and that all capital expenditure in an airport environment requires significant lead in time to obtain the required planning and other approvals and indeed to address the operational challenge to construct in a live, constrained airport environment. The prioritisation of the five-year capex plan will be completed in

advance of commencement and high priority projects will be spread throughout the regulatory period and therefore cannot be postponed or paused mid-construction. To suggest there is ability to switch off capex on a short-term basis is misleading and ill informed. Ignoring the fact that this contention undermines the achievement of all three of the Commission's statutory objectives, additionally, postponing major development will come at a significant cost to Dublin Airport, as contractors move on to different projects.

#### **CASE STUDY – Manchester Airport Group's approach to transformation programme**

Manchester Airport Group ("MAG") is the owner of Manchester and Stansted airports. MAG has embarked on a £1bn transformation programme at Manchester Airport and is simultaneously planning to increase the capacity at Stansted from 35mppa to 43mppa with a £0.6bn investment plan.

MAG is currently BBB+ rating (Baa1 with Moody's & BBB+ with Fitch) with leverage of 3.1x. Even with a BBB+ credit rating, MAG's debt is secured and includes covenants:

- Lock-up covenant at 6.0x leverage and 2.0x interest cover, and
- Default covenant at 7.5x leverage and 1.5x interest cover.

**Note: at the 6.1x leverage which the Commission has targeted, MAG would exceed its "lock-up" covenant. Lock-up covenants generally mean no dividends and can include a restriction on further indebtedness. It is not clear that the State would agree to a covenant package of this nature given the potential impact on dividends.**

MAG have publicly committed that "leverage will increase through the investment cycle but will be sized to maintain strong adjusted rating metrics aligned with current Baa1/BBB+ ratings<sup>67</sup>". In its November 2018 ratings update, Moody's outline that "management targets a long term Net Debt/EBITDA level of around 4.0x times."

Moody's credit rating report also explains how MAG, at BBB+, has had to enter "into a ring-fenced senior secured debt structure which provides for the raising of bank debt and bonds on a pari passu basis. The structure includes a comprehensive security package and formal intercreditor arrangements." Dublin Airport is satisfied that it would not be possible to achieve Shareholder support for such a structure.

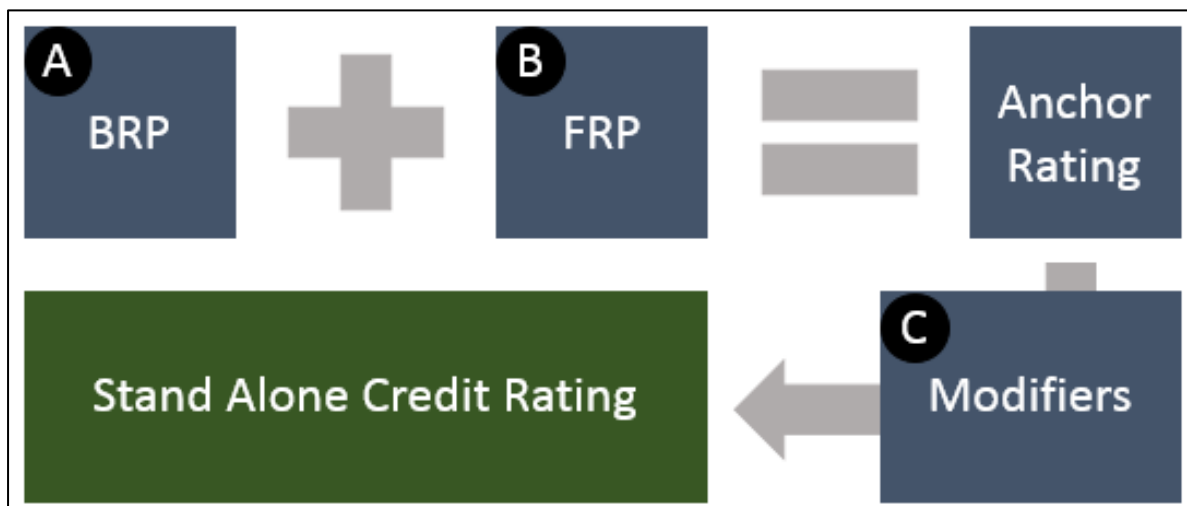
### **9.9 S&P credit rating methodology**

9.63 In analysing an entity, S&P assesses risk, competitive position, published financials and forecast future financials to assign a Business Risk Profile ("BRP") and a Financial Risk Profile ("FRP") to the company. These are combined to give an anchor rating, on which a number of "modifiers" are potentially applied to come up with the Stand Alone Credit Rating. Historically the Commission have focused only on the FRP and have not assessed

<sup>67</sup> <https://www.magairports.com/media/1571/mag-investor-presentation-fy19-interim-final.pdf> pg 25

the BRP and the impact the pricing determination would have on it. This is a fundamental flaw in CARs draft determination and basis of assessment of financial viability thus far.

**FIGURE 9.9 S&P RATING OVERVIEW**



**a) Business Risk Profile**

9.64 BRP incorporates such factors as country risk, environment, company position, business diversification (including regulatory factors), geographic diversification, and management strategy. Dublin Airport currently has a “Strong” BRP. This is due to strength of competitive position, favourable regulatory regime and moderate leverage outweighing the weaknesses of traffic volatility, airline concentration risk, Brexit risk and lower profitability.

**TABLE 9.3 S&P’S CURRENT ASSESSMENT OF BUSINESS RISK PROFILE**

Current BRP of “Strong” based on	
Key Strengths	Key Risks
Strong competitive position within Ireland	Exposure to two airlines
“Favourable” regulatory regime which is “predictable and supportive”	Possible deterioration in metrics from 2020 due to expected capital investment
Expectation of moderate leverage	Brexit uncertainty
Solid balance sheet and liquidity sources to withstand loss of EU traffic in the case of a disruptive Brexit	Lower profitability, as a result of low airport charges

### Likely Draft Determination impact

9.65 This “strong” BRP is under significant risk based on CAR’s Draft Determination:

- S&P may have to reassess their view on the regulatory environment
- S&P may have to reassess their view on the volatility for Dublin Airport
- Profitability reduction causing EBTIDA margin [REDACTED]
- Leverage tripling from current “modest” levels of 2.2x (2018 Regulatory Accounts) to > [REDACTED]

9.66 In the S&P Research paper on daa issued in July 2019, the risk of a reduction to the BRP is highlighted as “such a steep decline in ratios between two regulatory periods could imply a higher volatility of earnings than we currently assess” and “a tariff cap set at too low a level may harm daa’s profitability; the adjusted EBITDA margin of 34.5% for 2018 is already at the lower end of what we consider average for infrastructure companies.”



9.67 Due to the heightened risk of a change to a “Satisfactory” BRP, CAR’s analysis of financeability must consider a scenario where Dublin Airport does not maintain its “Strong” BRP.

### b) Financial Risk Profile

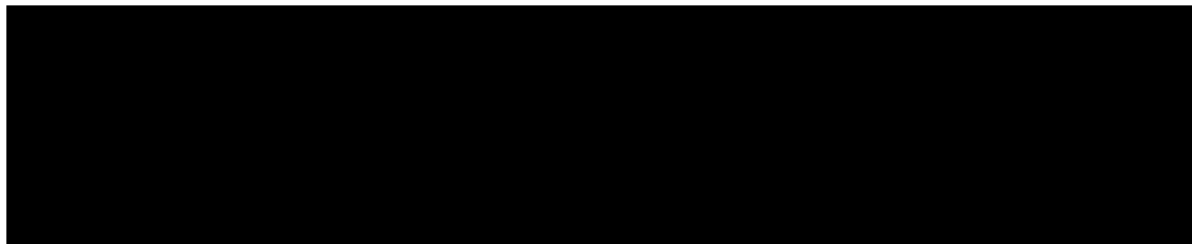
9.68 FRP incorporates such factors as risk management, capitalisation, earnings, funding and liquidity, accounting, and governance. The FRP is assigned based on financial ratios, with most emphasis applied to FFO: Net Debt and Net Debt / EBITDA.

9.69 Dublin Airports 2018 metrics of 2.2x Net Debt / EBTIDA and 40% FFO: Net Debt correspond with a “Modest” FRP.

### Likely Draft Determination impact

9.70 CAR’s Draft Determination targets metrics of 6.1x leverage and 15% FFO: Net Debt which would result in either “Significant” or “Aggressive” FRP. A Net Debt to EBTIDA of 6.1x correlates with an FRP of “Highly Leveraged” and S&P methodology will only allow the final FRP to be one category higher than either FFO: Net Debt or Net Debt / EBITDA.

9.71 As set out above, CAR’s Draft Determination sets out significant targets for Dublin Airport to achieve and shows EBITDA of some €50m higher in later years. Dublin Airport’s base case at €7.50 will result in leverage of c. [REDACTED]. FFO: Net Debt. [REDACTED]

**FIGURE 9.10 S&P'S METRIC THRESHOLD FOR LOW VOLATILITY ENTITIES****c) Modifiers**

9.72 S&P review 6 “modifiers” on the anchor rating:

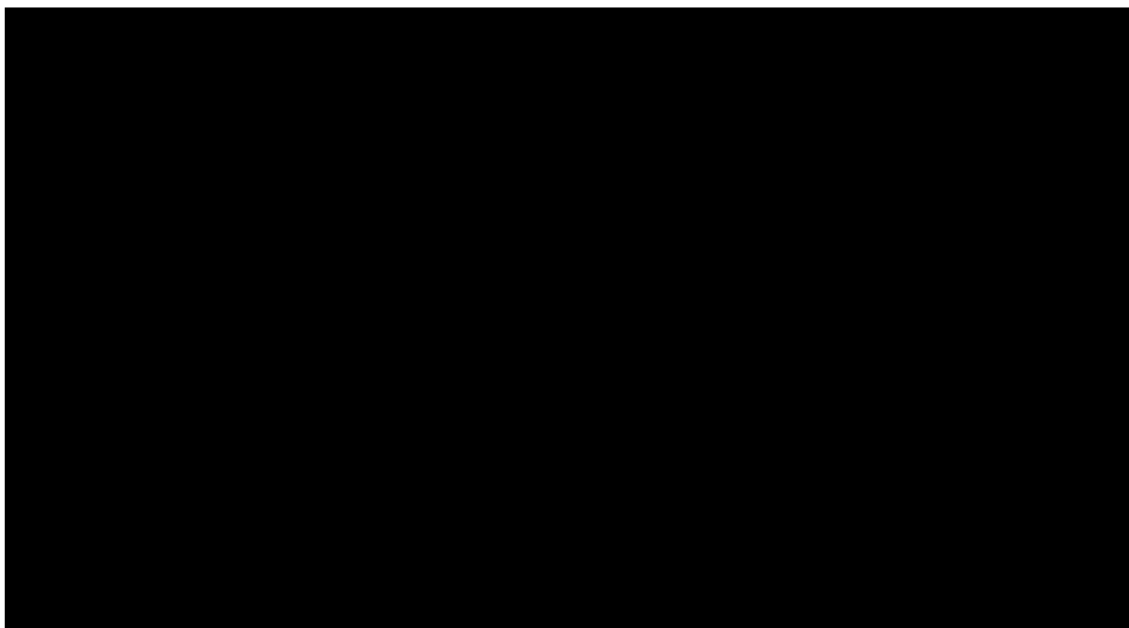
- Diversification / Portfolio effect
- Capital structure
- Liquidity
- Management and governance
- Comparable rating analysis

9.73 S&P currently apply a one notch downgrade based on the comparable rating analysis due to a) relatively low airport charges and b) the lower margin commercial business.

**Likely Draft Determination impact**

9.74 Clearly a reduction in airport charges will amplify the comparable rating analysis. This one notch downgrade is expected to continue.

9.75 The liquidity modifier will also come under pressure. A “strong” liquidity score implies that Sources (undrawn RCF, unrestricted cash, FFO) covers Uses (capital expenditure, dividends) by 1.5x. Given the level of capital investment required, it is imperative that strong liquidity is maintained. Dublin Airport will have to increase its revolving credit facility to facilitate this.



### 9.10 Remedying CAR's Draft Determination

9.76 As we have outlined, the Commission's 2019 Draft Determination does not adequately achieve a financeable proposition:

- The 22% "shock" price reduction destabilises Dublin Airport's "Strong" Business Risk Profile
- The resulting financial ratios do not follow S&Ps methodology [REDACTED]

9.77 For the reasons explained above, Dublin Airport believes that the Commission needs to target an FFO: Net Debt above 20% and Net Debt: EBTIDA of 4.0x<sup>68</sup>.

9.78 As outlined elsewhere in this response to the Draft Determination, Dublin Airport believes that a correct assessment of the individual building blocks would result in a higher base price cap which would increase the likelihood of the overall CIP proposition being financeable. [REDACTED]

9.79 Our analysis of the draft determination pricing has, however, raised serious concerns with the potential for the financeability of this CIP. In order to address this risk, and as delivery of the full CIP is in the best interest of users, Dublin Airport has outlined below how a standalone financeability adjustment could be utilised in order to achieve a financially viable price cap. This is based on what would be required should CAR's building blocks as per the Draft Determination remains as is, which we fundamentally

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<sup>68</sup> This is based primarily on the S&P methodology but also echoes MAG's approach not to exceed 4.0x

disagree should be the case, and shows how a price cap which averages €9.55 would achieve the required financial ratios. This contention is based on the fact that passenger charges at this level are required in order to provide the financial ratios that would be indicative of a BBB+ rating being achieved.

**TABLE 9.4 DUBLIN AIRPORT PROPOSED FINANCEABILITY ADJUSTMENT**

<b>CAR Draft Proposal</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>Avg</b>
<b>Price Cap</b>	<b>7.50</b>	<b>7.50</b>	<b>7.50</b>	<b>7.50</b>	<b>7.50</b>	<b>7.50</b>
FFO/ Net Debt (%)	22%	18%	16%	15%	15%	
Debt/ EBITDA	4.1	4.9	5.6	5.8	6.1	
Base Price cap (€)	7.05	6.35	6.64	6.91	7.16	
Financeability adjustment	0.45	1.15	0.86	0.59	0.34	
<b>Dublin Airport financeability adjustment</b>						
<b>Price Cap</b>	<b>9.25</b>	<b>9.25</b>	<b>9.50</b>	<b>9.75</b>	<b>10.00</b>	<b>9.55</b>
FFO/ Net Debt (%)	28%	24%	22%	22%	22%	
Debt/ EBITDA	3.1	3.7	4.0	4.0	4.0	
Base Price cap (€)	7.05	6.35	6.64	6.91	7.16	
Financeability adjustment	2.2	2.9	2.86	2.84	2.84	

9.80 This pricing level does not guarantee the achievement of the required minimum credit rating and the inherent market and macroeconomic uncertainties still exist but this pricing outcome will de-risk the likelihood of a BRP reduction to “Satisfactory” and give FRP metrics that should achieve a BBB+ credit rating, all other factors being equal.

### 9.11 Conclusion on financeability

9.81 As previously stated, the Commission has a statutory objective to ensure that the Final Determination is financeable. We are satisfied, for the reasons we have set out in this document that the financeability analysis included in the Draft Determination is fundamentally flawed, is not fit for purpose and does not objectively meet this requirement. The assessment is one dimensional with an excessive focus on financial ratios (based on flawed, un-achievable financial forecasts) being the sole indicator of market access for Dublin Airport. It has overlooked many critical factors specific to Dublin Airport which require more informed consideration and is also lacking the critical input from experts in this space who can consider and apply appropriate weighting to

the intangible and market related factors that we have called out above that previously have not been acknowledged.

- 9.82 [REDACTED]  
[REDACTED] The Commission have acknowledged in the draft determination that there is a high risk that the proposition is not financeable, with the sole proposed alleviation of this risk is to delay capital expenditure, simultaneously undermining all three of the regulator's statutory objectives.
- 9.83 Even at the Commission's targeted minimum BBB rating it is unlikely that the total quantum of debt required can be raised as the market for BBB rated airport debt requires security and enhanced creditor protections including covenants that Dublin Airport cannot offer as it would not be approved by the Shareholder.
- 9.84 As the Commission has stated in the Draft Determination, it must "have regard to Dublin Airport's ability to raise debt as it is in the interest of current and future users that Dublin Airport can fund the CIP". In failing its statutory objective to enable sustainable financial viability, the Commission is also failing in its other two statutory objectives.
- 9.85 To ensure that the Final Determination allows for a full delivery of all capital projects in the CIP, "in the interests of both current and future users," the Commission must set a price cap that enables Dublin Airport to maintain a BBB+ credit rating and raise the unprecedented, required level of debt. Dublin Airport requests that the Commission employs external expertise from financial advisors to review the financeability of its Final Determination and engages with NewERA to ensure that the outcome of the final price cap will align with what the Shareholder will approve.
- 9.86 Dublin Airport would welcome the opportunity to continue to explore this topic with the Commission in advance of the final determination so that the full scale of the challenge here is understood and a satisfactory resolution achieved.



## 10. Other Issues

### 10.1 Incentive Schemes

10.1 Dublin Airport would like clarity on the proposal referenced in Paragraph 12.7 regarding the proposed treatment of incentive schemes for the period 2020 – 2024.

### 10.2 Under and Over Collection - K Factor

10.2 Dublin Airport welcomes the fact that the Commission intends to retain its K factor in the price cap formula. Dublin Airport supports the Commission's proposed change to the K factor whereby it intends to set a provisional K Factor which would then be adjusted based on final outturns when the final price cap is calculated in the following year.

### 10.3 Peak Pricing

10.3 Dublin Airport welcomes the Commission's decision not to introduce any sub caps within the price cap formula requiring the airport to offer differential prices.

10.4 Dublin Airport sets its airport charges in a transparent and non-discriminatory manner where in accordance with the European Communities (Dublin Airport Charges) Regulations 2011, the airport engages in an annual consultation process with all airline users relating specifically to the level and structure of airport charges for the forthcoming year. Dublin Airport understands that it is important that within this overall charging framework there is sufficient flexibility to offer airlines a choice regarding optional services.

10.5 Therefore, Dublin Airport currently offers different charges for different types of products and services: contact vs. remote parking and passenger charges; runway usage by MTOW; winter vs. summer. Other charges are levied per usage for a range of facilities such as check-in desks, airbridges, the CBP facility and airline lounges. Airlines can currently decide whether to use those facilities or not depending on their business models. If airlines choose to avail of these optional services they are required to pay additional charges, reflecting this use. Dublin Airport intends to continue to offer this type of differentiated charging structure going forward into the next regulatory determination period.

### 10.4 CPI Adjustment

10.11 In the 2014 Determination, the Commission applied an annual CPI adjustment to the price cap based on an adjustment from July 2014 to October of the relevant year. Dublin Airport believes that we have been penalised by the time frame of this adjustment as the index for October is always lower than for the summer months July in this case.

10.12 The CPI index varies throughout the calendar year with price changes peaking in the summer months and declining in the latter months of the year. By adjusting for CPI changes from July to October rather than from July to July, this deflated the annual CPI adjustment made to the price cap, the effect of this over the 2014-2018 period is illustrated in the table below.

**TABLE 10.1 CPI ADJUSTMENTS JULY 2014 TO OCTOBER 2018**

<i>Price Cap</i>	To	From	CPI Change	To	From	CPI Change
<i>2015 Price Cap</i>	Jul-14	Oct-14	-0.3%	Jul-14	Jul-14	0.0%
<i>2016 Price Cap</i>	Jul-14	Oct-15	-0.5%	Jul-14	Jul-15	-0.2%
<i>2017 Price Cap</i>	Jul-14	Oct-16	-0.8%	Jul-14	Jul-16	0.3%
<i>2018 Price Cap</i>	Jul-14	Oct-17	-0.2%	Jul-14	Jul-17	0.1%
<i>2019 Price Cap</i>	Jul-14	Oct-18	0.7%	Jul-14	Jul-18	0.9%
<b>Total Change</b>			<b>-1.1%</b>			<b>1.1%</b>

10.13 Dublin Airport requests that for the 2019 Final Determination, the Commission applies its CPI adjustment on an equivalent monthly basis such as July to July or August to August.

## 11. Conclusion

### 11.1 Impact of the 2019 Draft Determination

- 11.1 This document and its accompanying appendices constitute Dublin Airport's response to the 2019 Draft Determination. We believe that it is crucial that the material set out here within should be taken into account by the Commission in formulating its 2019 Determination regarding the maximum level of airport charges at Dublin Airport for the regulatory period 2020-2024.
- 11.2 If implemented, the 2019 Draft Determination regulatory proposals will result in an average price cap of €7.50. This will amount to a 22% reduction in the average price cap at Dublin Airport in 2020. Such a sharp decrease in airport charges is unwarranted and acutely damaging for the airport.
- 11.3 The proposed 2020 price cap is also €1 lower than Dublin Airport's current operating cost per passenger, which implies that Dublin Airport will become highly reliant on commercial revenue streams to deliver future earnings.
- 11.4 A unit rate of €7.50 is out of line and substantially lower than the current market pricing at large European airports where for example Brussels Airport is currently achieving aeronautical revenue per passenger of €14.30.
- 11.5 This regulatory decision will essentially paralyse the development of Dublin Airport at a time when all stakeholders are reporting capacity constraints and growth challenges. It will render Dublin Airport incapable of funding the unprecedented levels of debt financing required to deliver the proposed CIP2020+ investment programme.
- 11.6 Consumers will not benefit from the proposed reduction in the price cap. Instead, the airlines will receive a windfall gain of over €350 million. Due to our inability to deliver new infrastructure, Dublin Airport will continue to be a capacity constrained facility where the reduced capital and operating spending will result in a sharp decline in service standards for passengers.
- 11.7 The negative consequences of the 2019 Draft Determination will stretch beyond the confines of Dublin Airport with impacts for the local Fingal area and the broader national economy. It will run contrary to the National Aviation Policy (NAP) which emphasises the need for the continued development and growth of the airport.

11.8 In summary the 2019 Draft Determination will not fulfil the Commission's statutory regulatory objectives

- To protect the reasonable interests of current and prospective users of Dublin Airport
- To facilitate the economic development of Dublin Airport
- To enable daa to develop Dublin Airport in a financially viable manner

11.9 Dublin Airport has given careful consideration to the proposals set out by the Commission in the 2019 Draft Determination concerning each of the regulatory building blocks. We have come to the following conclusions.

### 11.2 Traffic Performance and Passenger Forecasts

11.10 The Commission proposes to set an average annual target of 3.1% for passenger traffic growth at Dublin Airport, which is over 40% higher than Dublin Airport's own forecast. The Commission's target is overly aggressive and unachievable for the period 2020-2024.

11.11 We believe the Commission's approach to traffic forecasting is overly simplistic. The target is essentially an unconstrained demand forecast and assumes the airport has no capacity impediments for facilitating this growth despite the acknowledged capacity constraints facing the airport over the period 2020-2024.

11.12 Dublin Airport commissioned the consultancy firm Mott MacDonald to undertake a review of the Commission's traffic forecast and to develop its own independent forecast to evaluate the appropriateness of the forecast models used. Mott MacDonald concluded that because of Dublin Airport's capacity constraints and the potential downside economic risks, traffic volume risk was asymmetrically distributed. Dublin Airport is unlikely to fully benefit from upside traffic opportunities due to capacity limitations but is fully exposed to the downside traffic risks.

11.13 Mott MacDonald then developed a more detailed market demand forecast, which took account of differential growth rates by market and GDP contributions from both the Irish economy and economies at the other end of the route. This unconstrained market demand forecast results in a lower growth rate than the Commission, with a CAGR of 2.76% per annum over the 2019 to 2024 period, instead of 3.01% as projected by the Commission.

### 11.3 Focus on the Passenger and Quality of Service

11.14 Dublin Airport has shown a high quality of service over the last number of years which was proven when Dublin Airport was named one of the best airports in the world in a

global ranking of passenger experience. It was also a joint winner in its category of European Airports that have 25-40 million passengers per year in the Airports Council International (ACI) World Airport Service Quality (ASQ) Awards.

11.15 We believe that the Commission cannot justify increasing the number of SQM measures, creating harsher targets, and adding complexities to the service quality regime.

11.16 Dublin Airport specifically requests that the Commission re-consider the mechanics of the measure for monitoring the airport's queuing times for Central Search (security) in its Final 2019 Determination. The proposed amendments to this SQM are unnecessarily complex, they will require increased administration, with a substantial increase in security staff costs and an additional requirement for immediate infrastructure enhancements.

#### 11.4 Operating Costs

11.17 The Commission is proposing to disallow €215 million of operating costs over the next regulatory period. The scale of the initial baseline disallowance of €31.5 million in 2020 is exceptional given that it is over ten times the baseline disallowance from the 2014 Determination. We disagree with the assertion that approximately 50% of the increase in operating expenditure over the current regulatory period (2015 – 2019) has been inefficient and should be disallowed.

11.18 The Commission's future efficiency targets are completely unachievable, particularly given that the Commission is proposing that Dublin Airport should reduce payroll costs by over €179 million, without providing any severance allowance for achieving the necessary decrease in staff numbers required to achieve this reduction.

11.19 We are very concerned that the Commission's consultants seemingly have no regard for the nature of employment contracts or Irish labour law, the context in which state company employment operates or the industrial relations and consequential operational implications. The implementation of the operating costs reductions proposed by the Commission will undoubtedly set us on a major collision course with our staff and their representatives and this course of action could result in major passenger and operational disruption.

#### 11.5 Commercial Revenues

11.20 Dublin Airport believes that in the 2019 Draft Determination, the commercial revenue projections set by the Commission are highly ambitious but reasonable, with the exception of two factors - the passenger traffic forecast and the car parking revenue projections.

11.21 The Commission's commercial revenue projections are underpinned by passenger traffic targets that are based on an unconstrained demand forecast which assumes that the airport has no capacity impediments for facilitating this growth. However, Dublin Airport will experience severe capacity constraints over the next determination period, which will manifestly constrain passenger traffic growth out to 2023/24.

11.22 The car parking commercial revenues proposed by the Commission in the 2019 Draft Determination do not take account of the fact that car parking facilities at Dublin Airport are currently capacity constrained and the airport faces a number of market limitations that will make the Commission's projected car parking growth rates unattainable.

### 11.6 Capital Expenditure

11.23 Dublin Airport fully support the Commission's intention to approve all the proposed projects, discontinue the problematic trigger mechanisms and consider the introduction of the StageGate process, which can potentially deliver significant benefits for all stakeholders. The Commission's decision to disallow over €60m of necessary capital expenditure in the current regulatory period is unwarranted. Much of this additional expenditure was required to remedy unforeseen legacy issues, which were only discovered when construction had advanced. Disallowing necessary and efficiently incurred capital expenditure runs contrary to the principles of economic regulation.

11.24 The Commission, upon recommendation from their consultants Steer are proposing to disallow over €150m of capital expenditure relating to proposed future projects. We believe that this decision was made based on incorrect assumptions, which we will be rectified on the basis of the additional information provided in this document.

### 11.7 Cost of Capital

11.25 The Commission has proposed a real pre-tax cost WACC of 4% for Dublin Airport over the period 2020-2024, based on a Cost of Capital study prepared by Swiss Economics. Dublin Airport contends that a real cost of capital of 4% would represent an inadequate rate of return for the next regulatory period.

11.26 NERA has identified a number of flaws in the methodology used by Swiss Economics to derive the Commission's WACC proposal of 4%. These errors should be corrected, and the flaws amended with the cost of capital recalculated accordingly for the Final 2019 Determination.

11.27 This is critical given that this cost of capital estimate will be in place for a considerable period until 2024 and it will ultimately underpin the entire business case for the €2bn capital investment programme planned for Dublin Airport.

### 11.8 Financeability

11.28 The Commission has a statutory objective “to enable Dublin Airport Authority to operate and develop Dublin Airport in a sustainable and financially viable manner”. Having reviewed the 2019 Draft Determination it is clear that the Commission’s assessment of the financial viability of its regulatory proposal is not sufficiently robust to address the required objective and its conclusions are fundamentally flawed.

11.29 The Commission needs to provide a compelling justification for how a price reduction of 22% can fund a record €2 billion capital investment programme; not a theoretical exercise, but one grounded in the specifics of debt financing for Dublin Airport.

11.30 Dublin Airport has consistently argued that BBB+ is the correct target credit rating and that is essential going forward in order to ensure the financial viability of the Regulated Entity.