Aer Lingus

1. Overview

Aer Lingus welcomes this opportunity to respond to the Commission's Issues Paper, starting the process for setting the next price cap governing airport charges at Dublin airport. We expect to engage throughout the process, providing more detailed comments on individual components feeding into the decision at later dates. For now, our focus is on more high-level matters that should guide the Commission's work in the forthcoming months.

The process leading to the price cap for the regulatory period is the main arena for the operation of Dublin Airport to be scrutinised. This process will look at how the airport will grow and develop, how it will serve the needs of its airline customers and their passengers, and how it will deliver the required facilities and level of service at an appropriate price point i.e. the price point at which an efficient firm in a competitive market would provide those facilities and level of service.

Our starting point is that this is an opportunity to reset the price cap at a lower, more appropriate level to reflect developments since 2014. In its 2014 draft determination, the Commission identified passenger numbers and the cost of capital as two variables that can have a significant bearing on future price caps and which can change significantly between determinations.[1] Between the 2014 and 2019 determinations, both passenger numbers and the cost of capital will have changed significantly in directions that point to a lower price cap.

- Economies of scale mean that customers should benefit from a lower price cap at Dublin airport – in 2019 there are now forecast to be 30+ million passengers, 20 per cent higher than the Commission expected at the time of the last determination
- The financial markets allow companies to raise capital at low cost, a saving that the Commission should pass on to airport customers by setting a lower price cap –the evidence reviewed in the Issues Paper suggests that the current WACC of 5.8% is at least 200 basis points too high.

The Commission previously estimated that the price cap should be about 25 per cent lower if the passenger forecast was just 10 per cent higher and the real WACC just 120 basis points lower.[2] As things currently stand, the Commission will be setting a price cap where the deviation between forecast and actual inputs are about double that assumed in that worked example. The evidence suggests that the prevailing price cap is too high given current market conditions.

In resetting the price cap, we would also ask the Commission to give serious thought as to how it might rectify three related concerns we have with existing determination.

1. The daa has profited too much from beating the traffic forecast used in the last determination
2. There have been delays in the investment needed at the airport to increase capacity and adequately cater for the higher passenger numbers
3. It has not always provided Aer Lingus and other airlines with an appropriate quality of service

[1] Page 12, Commission's 2014 Draft Determination
[2] See Table 2.1, Commission's 2014 Draft Determination

As the Commission identifies in the Issues Paper, the price cap should provide daa with the types of incentives it would face if it was subject to greater competitive pressures. Yet, arguably in the last five years the daa has realised profits by persuading the Commission to adopt a low traffic forecast and then beating that forecast. While a firm, such as Aer Lingus, operating in a competitive environment wants to increase sales, beating a single sales forecast is not however a sufficient condition for earning additional profit – as is the case for Dublin Airport. Nor could we afford to lock into investment plans with no regard to changing market conditions. Moreover, we could not afford to increase traffic with no regard to the experience of our customers.

Identifying the problem is arguably easier than developing a solution, but we suggest that there are approaches used by other regulatory authorities that the Commission should consider as it develops the incentives for the forthcoming determination.

- Check that the rate of return on regulated equity for outperforming different aspects of the determination aligns with the importance the Commission attaches to the various components. Are the daa's incentives suitably balanced, or do they place undue weight on outperforming certain aspects, such as the traffic forecast?
- Consider approaches such as totex to end the artificial distinction between operating and capital expenditure costs, and instead incentivise the regulated entity to minimise overall costs. When traffic outturn deviates significantly from that forecast at the time of the determination, the daa's incentives should be to consider changing either opex or capex.
- Menu regulation has been used by regulators to increase the incentives for regulated entities to provide realistic projections, with subsequent rewards higher for firms who set and exceed challenging targets. There may be scope in adapting this work to ensure daa is not rewarded excessively for "beating" a target that it either knows, or should know, is not challenging, such as the likely level of traffic one year ahead.

We develop each of these ideas further in the rest of our response, as well as providing other comments.

2. Policy Developments since the 2014 Determination

There have been important policy developments since 2014 that the Commission will need to take into account in setting the next price cap. Some of this work is on-going, so it will be important that the Commission's approach in the coming months is sufficiently flexible that it gives parties opportunities to comment on further developments in the policy area that may have important implications for the next determination.

Aer Lingus supports the overriding strategic objective of the Government's policy statement on airport charges regulation. The focus should be on ensuring that "current and future airport customers are presented with choice, value and quality services which also meet the highest international safety and security standards". We have been encouraging daa to make necessary investments at Dublin airport and have always supported airport charges that represent good value to customers.

Aer Lingus has indicated to the Department of Transport, Tourism and Sport that it supports developing options that would allow airlines and the airport, subject to appropriate regulatory oversight, to agree prices bilaterally, thereby introducing greater flexibility within the current price cap regime. Ideally, we would like our relationship with Dublin airport to be more akin to what happens in more commercial settings, with the supplier motivated to provide a good service at a competitive price. In making its next determination, we encourage the Commission to consider modifications where they would incentivise daa to act with a more commercial focus, rather than focus on beating the regulatory settlement. Our suggestions to look at approaches, such as totex, are consistent with this position.

Aer Lingus also supports the National Aviation Policy's goal of promoting Dublin airport as a hub. This has been reinforced by the National Development Plan which calls for the development of Dublin Airport as an international hub. Consistent with that, we have been making the case that daa needs to make certain infrastructure investments in order to realise this policy priority. We encourage the Commission to consider this policy as it makes its determination particularly as hub operations require specific infrastructure which differs from point-to-point infrastructure. Critical to a successful hub is the ability to connect both passengers and baggage as efficiently and quickly as possible. It is important to ensure that Dublin Airport can in fact offer a competitive and achievable Minimum Connection Time (MCT) for hub carriers.

As the Commission notes, there remains considerable uncertainty about what Brexit will entail and, consequently, uncertainty about how it might affect Dublin airport. However, Brexit should not be seen as an excuse to warrant setting a higher price cap at Dublin airport. The risks with Brexit are not all negative for Dublin airport. For example, it is possible to imagine Brexit scenarios which offer opportunities for Dublin airport to develop its position as a transatlantic hub airport. The Commission also needs to remember that should Brexit threaten activity at Dublin airport, it is not just daa that will suffer economically. So will the airlines. Aer Lingus should not be asked to act as an insurer for daa so that it alone can be spared possible adverse effects.

3. Approach to Regulation

At a high-level, we think that the Commission should continue with its "building blocks" approach to setting the price cap. Where appropriate, the Commission should consider changes that might improve the incentives for the daa to behave commercially, consistent with the idea that economic regulation is there to provide the incentives missing when a firm is not subject to meaningful competition. We outline two possible options, totex and how the Commission allocates risk and reward.

In the absence of long-term bilateral agreements between the airport and its airlines, we think a determination lasting about five years is reasonable although a longer period might be appropriate if the daa was to conclude long-term commercial arrangements with the principal carriers at Dublin Airport. In general, we believe that a five-year regulatory period strikes a balance between providing regulatory certainty for a number of years, while not locking into a settlement that may be superseded by events not anticipated at the time the determination was made (such as traffic levels much higher than expected five years earlier).

We think the Commission should focus on the costs that the daa needs to run the airport efficiently when setting the price cap. This assessment should have regard to the investment needs at the airport, and options that avoid sudden spikes in the price cap. However, the Commission would be straying from its mandate if it rewarded daa with a higher price cap because of an unfounded possible belief that airlines are earning scarcity rents. The current drag on expanding capacity at Dublin Airport is daa – through delayed capital investment - and not the airlines, who suffer the consequences of over-sweated facilities.

3.1 Totex

To date, the Commission's determinations have treated operating expenditure and capital expenditure differently. This may create incentives that would not exist in a more commercial setting, distorting expenditure. In the past, the Commission has been made aware of the risk of "gold plating", with the daa incentivised to favour unnecessary capital expenditure because of a high return on capital.

Recent experience should have made the Commission aware of another risk with the current approach, namely that within determinations the daa may have insufficient incentive to vary capex. Since the 2014 determination, at Dublin airport both traffic and opex levels were higher than forecast. In contrast, the daa has been slow to increase capex in response to this increased demand, despite requests to do so from its key customers. The daa has only been willing to respond when the Commission has indicated that it will include an extra allowance in the RAB. A firm subject to competitive pressure would not respond to a sustained increase in demand in this way, delaying investments for five years and instead relying on varying operating expenditure to service increased demand. Competitive firms would have regard to costs over the whole cycle.

Under the current regulatory arrangements, daa bears all the risk of operational cost overruns within a determination. However, outturn opex has influenced future opex targets, potentially mitigating the costs to the daa of temporarily incurring high operating costs. In contrast, for capex daa assumes 50 per cent of the risk of capital cost overruns within period, but future capex allowances have regard to perceived investment needs rather than past investment spend. In such an environment, it is possible to see incentives for the daa to favour opex solutions to meet increased demand at the airport pending the next determination. Such an approach will result in a higher price cap at the next Determination than a scenario where the daa responds appropriately to the increased traffic levels by increasing some combination of operating and capital expenditures.

During downturns, when traffic is lower than expected, the incentives for daa to concentrate on adjusting opex may persist. The current regulatory contract means that if daa incurs allowed capex, it will be included in subsequent RABs, whether or not the environment under which the daa makes the investment coincides with those assumed at the time the Commission made a capex allowance.

Totex (total expenditure) relies on a different approach, instead considering both opex and capex together as the base on which the cost assessment is carried out. The UK water regulator Ofwat, for example, introduced totex in its approach to regulation for the period 2015-2020.[3] The approach increases incentives for companies to deliver overall operating and capital efficiency savings. Ofwat allows water companies the opportunity to determine their own "Pay-As-You-Go ratio", i.e. the amount of totex to be recovered in the year that the costs are incurred. The remaining part of totex is then added to the RAB.[4] A return on and return of capital is then estimated to determine the revenue allowance for each year.

The totex approach establishes a single cost allowance each year, with the intention that it should create incentives for the regulated company to think commercially and look for solutions that minimise lifetime costs. The decision of whether to incur an expenditure should not depend on whether that expenditure will be treated by the regulator as capex or opex.

3.2 Allocation of Risks and Rewards

The Commission should look carefully at the allocation of risks and rewards in making this determination. The general principle that daa should assume the risks that it can manage is right. However, the most recent Determination suggests that the daa may have had distorted incentives to focus on increasing traffic, to the detriment of the interests of current users (evidenced by the poor service we have received at times in the last five years) and future users (evidenced by daa's reluctance to undertake timely investment to address the looming capacity shortfall).

Prior to making its final Determination, the Commission should look at the return on equity that daa will earn if it outperforms (or underperforms) on different building blocks. Are the relative returns available to daa aligned with what the Commission would intend, i.e. is the incentive to grow traffic appropriate given the incentive to find efficiency savings and cut opex and vice versa? This exercise should extend to thinking about whether some of the incentives should be tapered. Relative to the targets implicit in the building-blocks calculations, we want daa to outperform on all fronts and recognise that the gains will be shared with users at future determinations. But if daa has already beaten one target by a significant margin, the Commission needs to satisfy itself that it is appropriate for the daa to continue receiving the same rewards for further outperformance if it is failing to improve with regard to other components of the building blocks. As it became clear that the traffic forecast used in the 2014 Determination was too low, the daa should have faced incentives to undertake appropriate investment and address its users' needs.

We would encourage the Commission to set out its thinking on why it thinks the relative weights given to outperforming different aspects of the price cap are appropriate. One approach might be to set out more explicitly the return on regulated equity (RoRE) that the Commission thinks is appropriate under different circumstances, an approach that the UK water regulator has used. The RoRE is the financial return shareholders receive during a price-control period from the firm's performance under the price control. This return is estimated using definitions for costs and revenue consistent with the determination, rather than accounting conventions. What RoRE does the Commission think daa should be able to

[3] Ofwat, 2013 "Setting price controls for 2015-20 – final methodology and expectations for companies' business plans" https://www.ofwat.gov.uk/wpcontent/uploads/2015/12/pap_pos201307finalapproach.pdf

[4] Ofwat refers to this as the Regulated Capital Value (RCV).

collect if it outperforms the traffic forecast by 10 per cent, or has operating costs 8 per cent lower than forecast? How much should RoRE vary depending on how good a service daa provides users?

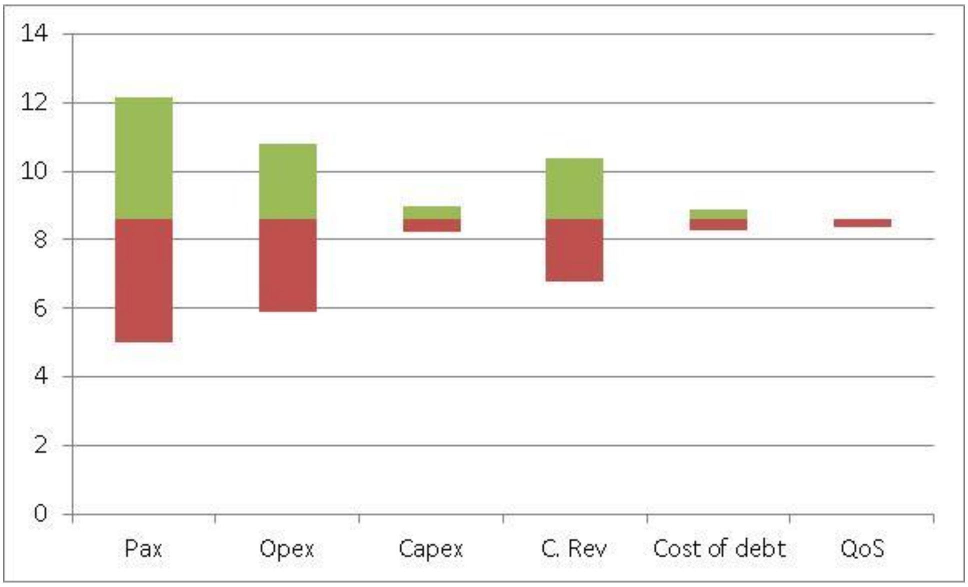
Chart 4.5 in the Issues Paper shows the Commission estimates that the 2019 price cap under the building blocks approach would have been €0.94 lower if it had used a traffic forecast of 27.4 million. Restating this, users under this scenario would pay about €25 million (0.94*27.4m) more in airport charges than the building blocks calculations suggest is appropriate. This €25 million would represent a one-year windfall to daa's equity holder, a return on the regulated equity base of 3.5% over and above the cost of equity used in the WACC calculations. To realise a similar return for its equity holders by finding efficiency savings, the daa would have had to beat the target for operating expenditure by 12.7%, or the target for commercial revenues by 14.3%. A crude first approximation suggests that the savings on investment spend would have had to be 75%,[5] while the real cost of debt would have had to be zero (i.e. 100% lower that target).

In fact, in 2019 the latest centre line forecast is for passenger numbers of 30.4 million. The extra RoRE from beating the 2014 Determination's target in this manner will be 8.5%, a realisation that the daa could not realise by beating other building blocks. This underlines the importance of setting a challenging traffic forecast, but it also suggests that thought needs to be given to whether the rewards and risks are set correctly. Under what circumstances does the Commission think it is appropriate for daa to earn a RoRE of 17.1 per cent?

The chart below shows the RoRE that we estimate the daa would have realised in 2015 had it beaten the various building blocks targets by 10 per cent (given the elasticities assumed in the Determination for opex and commercial revenues). For quality of service we have adopted a scenario where daa incurs penalties equal to 10 per cent of the total at risk under the prevailing Determination.

[5] This assumes that (1) the capex allowance in the 2014 Determination is spread equally across all five years, (2) that 50% of any savings are credited to the daa, and (3) that the subsequent regulatory treatment of these gains, i.e. the RAB adjustments etc, do not need to be considered.

Figure 1: Return on regulated equity by outperforming various building blocks by 10 per cent in 2015



We suggest that the Commission should look at a variety of different scenarios to satisfy itself that the incentives are correct. Currently the Commission sets out the cost of equity that it thinks is appropriate if the daa exactly meets the targets implicit in the building blocks calculations. What RoRE does it think the daa should earn if outperforms a target by 2% or by 10% or by 25%? This interaction between the different components should also be considered. Growing traffic should only be rewarded if the daa is able to provide a suitable level of service now and into the future, i.e. it should also have to make the investments necessary to sustain a good service at such traffic levels into the future.

4. Passenger Forecasts

With hindsight, it is clear that the past determination would have benefitted from a different treatment of passenger forecasts. The target should have been higher and the daa should not have been able to enjoy such large rewards from beating a target that it had argued was too challenging.

The Issues Paper discusses a number of possible refinements to the approach to estimating the next passenger forecast. We support the need for such work and would encourage the Commission to be transparent in how it generates its passenger forecast. If there are commercially sensitive data that the Commission thinks will help generate a better forecast, then at a minimum it should set out clearly what that data relates to and how the data has been used. All stakeholders need to be treated equally and have the same opportunity to comment on the methodology and identify possible errors in any calculations the Commission has undertaken.

More fundamentally, the Commission should think about the rewards available to the daa from beating traffic forecasts. There need to be incentives for the daa to develop good intelligence about likely traffic levels at the airport and to respond in a timely manner to a changed environment rather than deferring decisions on its investment plans.

There may be merit in applying “bands”, such that the risk allocation varies according to how far outturns deviate from forecast. The daa should have incentives to grow traffic at the airport in a sustainable manner. If traffic is a few hundred thousand passengers different to forecast, it probably does not warrant any major revision to investment plans at the airport. The baseline forecast upon which the prevailing capital investment plan is based remains reasonable; but when traffic levels are out by 20% that plan needs revisiting. The current determination placed no requirement on daa to undertake additional investments to meet the extra demand and has allowed daa to accrue profits on the basis of exceeding a baseline forecast for four years. These profits need to be considered when determining how much future users are asked to pay to fund investments daa should have funded from the extra revenues it earned during the current determination by consistently beating a traffic forecast (upon which the prevailing capex allowance was based) that was evidently too low.

4.1 Menu regulation

The Commission should also consider the incentives facing daa to provide accurate traffic forecasts. In 2014, daa was arguing that the Commission had set its traffic forecast too high. Yet daa has benefitted spectacularly from being wrong.

This error was not just for five-years ahead; daa argued for the Commission to adopt lower forecasts in 2014 and 2015. (As the Commission observes in the Issues Paper, the dramatic jump in GDP in 2015 reflects corporate restructuring by multinationals rather than an enormous step change in the fortunes of the Irish economy that nobody, including the daa, foresaw.) The available explanations for daa’s low forecasts do not suggest that it warranted a reward. Either the daa has woeful intelligence about traffic levels at the airport even in the short to medium term; or it was guilty of regulatory gaming, deliberately understating likely traffic levels to realise a more favourable regulatory settlement

Some variant of menu regulation might be worth considering to improve the incentives for daa to disclose information it has that might improve the forecasts used in the final determination. Regulators in other sectors have used this approach to incentivise the firms they regulate to develop and provide more accurate forecasts of their expected costs. These forecasts inform both the final price cap, but also the rewards available if the outturns deviate from expectation.

The Commission might consider adopting such an approach when setting the traffic forecast. The basic principle is that the rewards available to the daa from beating the Commission’s traffic forecast should be lower if the daa argues at the time of the Determination that the Commission has been too optimistic and higher if daa suggests that the Commission should revise the forecast up. Correspondingly, if traffic outturns are lower than forecast, the daa should bear more of the risk if it was arguing for the Commission to adopt a higher forecast and vice versa.

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5. Operating Expenditure

As in previous determinations, we are keen for the Commission to set the daa a challenging (but achievable) target for realising operational efficiency.

Relative to assumptions made at the time of the 2014 determination, outturn operating costs have been higher than would have been expected given the assumed relationship between passenger numbers and operating costs. We would caution against concluding that this suggests economies of scale at the airport are less than previously assumed. As identified in the Issues Paper, the Commission needs to consider the possibility that

- Dublin Airport failed to realise efficiencies, of scale or otherwise, that were available to it
- the increase in scale occurred unexpectedly quickly so as to prevent an efficient response amd
- Dublin Airport placed over-reliance on 'managed solutions' to respond to the increase in traffic rather than more efficient capital investment

The preliminary analysis that the Commission has conducted in the Issues Paper shows that outturn staff costs were higher than expected, controlling for passenger numbers. This needs further exploring. At the time of the 2014 determination, the Commission's consultants identified a number of areas where staff costs were high and suggested that outsourcing would allow daa to realise lower operating costs. The determination set an opex allowance that did not have regard to the scope for such savings. This means that the higher than expected staff costs observed are relative to a target that was itself based on uncompetitively high staff costs.

The daa's incentives may also have muted its efforts to minimise operating expenditure given the higher than expected levels of traffic. First, its ownership structure may mute the incentive for management to realise all available cost savings. Between determinations, the daa's management just need to provide a return deemed satisfactory by their current owner; they do not need to worry about the threat of a takeover by investors spotting opportunities for realising greater savings by installing new management. In the last five years, it has been relatively easy for the daa's management to present favourable results. It is possible that some of the potential available rents at Dublin airport have been retained by management and staff, rather than realised as additional profits.

Second, as discussed previously, the current incentives may have distorted decisions and encouraged daa to favour solutions within the price-control period that rely on increased operating costs.

We would strongly oppose any move to re-allocate the risk of cost overruns away from the daa and onto airlines. The daa is better placed than the airlines to control operating costs at Dublin airport. Even changes in security requirements, for example, do not give rise to a cost totally outside the control of daa – in many cases, it will have had opportunities to consult on the requirements before they are introduced, and even when the requirements are put in place, the daa gets to decide how it will implement them and what costs it will therefore incur.

Long-term contractual arrangements governing operating costs require careful regulatory oversight. Otherwise, there is a risk that such arrangements will dull the incentives for daa to become cost efficient. The obvious risk is that RPI-X regulation will instead become cost-plus regulation, with daa signing long-term contracts confident that the costs agreed will be included in future price-cap determinations without scrutiny. In a worst-case scenario, the daa might structure long-term contracts so that the costs are backloaded, allowing it to realise outturn opex lower than target in the prevailing determination, while the higher costs incurred at later dates will be reflected in a higher opex allowance in future determinations.

6. Commercial Revenues

The scope for commercial revenue is clearly higher than the Commission thought when making the 2014 Determination. Airport charges need to be lower to reflect this reality.

At the same time, airport users do not gain from the daa aggressively seeking to maximise some categories of commercial revenue. We do not see any case for relaxing the Commission's treatment of Access to Installation Fees. The current approach was adopted in 2009, in response to significant increases in ATI fees that daa had introduced in the preceding regulatory period; increases that were made without any meaningful change in the underlying cost of these services.

We also think that the Commission should avoid rewarding daa for collecting higher than expected revenues from charges for Preclearance for U.S. Customs and Border Protection. As with ATI fees, this is a charge for a service for which daa is a monopoly provider at Dublin airport. Moreover, the allocation of aeronautical facilities at the airport – stands and gates – is informed by the use or non-use of the CBP facility; therefore airlines are not only faced with a monopoly provider of this service at Dublin (where they are protected by the price cap in the take-up of other services for which daa is the monopoly provider) but also with a situation where they may not get access to aeronautical facilities for which they are prepared to pay a premium (e.g. contact stand) if they do not wish to make use of this 'commercial' facility.

7. Capex

The regulatory treatment of capex has arguably been the area where it has proved most difficult to design an approach that provides incentives for daa to act as a firm subject to competitive pressures would act. At different times there have been concerns that daa was not consulting with users, undertaking too much investment (gold plating), and failing to control the costs for investment projects.

Recent years have highlighted that the current treatment of capex does not create the right incentives when traffic deviates from forecast. The approach of grouping projects to allow flexibility has avoided the need for daa to lock into a given set of investment projects, providing daa with an opportunity to adapt investment plans for a given budget. However, the incentives to vary the overall investment spend in response to changes in traffic are not those faced by firms in a competitive market.

The daa's Programme for Airport Capacity Enhancements (PACE) was not a sufficient response to the increasing demand at Dublin airport. daa was slow to respond to the demands from users for more capacity, and when it developed its PACE proposals they were insufficient. It was evident as early as 2015 that traffic would outperform the forecast for the regulatory period yet it was 2017 before consultation on PACE began. While daa initially proposed 16 projects at a cost of €169m, this expanded to 23 projects at €284m[6] following consultation with airlines on required investment to address capacity constraints at the Airport. There was a 68% variance between the capital investment which daa considered adequate to address the acute capacity constraints and their final submission, which was informed by the airline consultation process.

We welcome the steps the Commission has taken to develop a more flexible regulatory regime for treating changing capex needs. There are two aspects which we think the Commission needs to consider. First, where capex allowances are increased within a determination to address concerns about higher-than-expected traffic, we do not think that all of these costs should be rolled into the starting RAB for the next period. There should be some recognition that daa is collecting more revenues than expected when the prevailing price cap was set.

Second, the Commission needs to think about how it would respond should there be a downturn that warranted a reduction in investment at the airport. It has demonstrated a willingness to reopen a determination if demand is higher than expected and increase capex allowances. We would expect such flexibility to also apply in situations where it was clear that a commercial operator would reduce capex spend. For example, if, contrary to expectations, Brexit develops in way that leads to a severe downturn in traffic at Dublin airport, the regulator needs to make sure that daa does not continue with an investment plan developed on the basis of an obsolete traffic forecast.

Airport users into the future want a downward pressure on airport charges, but in an environment where investment keeps pace with the needs of users. The approach to setting a capex allowance (and possibly making arrangements to vary this within a determination) should be done having regard to what this means on a per-passenger basis now and in the future. The Commission's projections of capital costs into the future should also be done on a per-passenger basis.

8. Cost of Capital

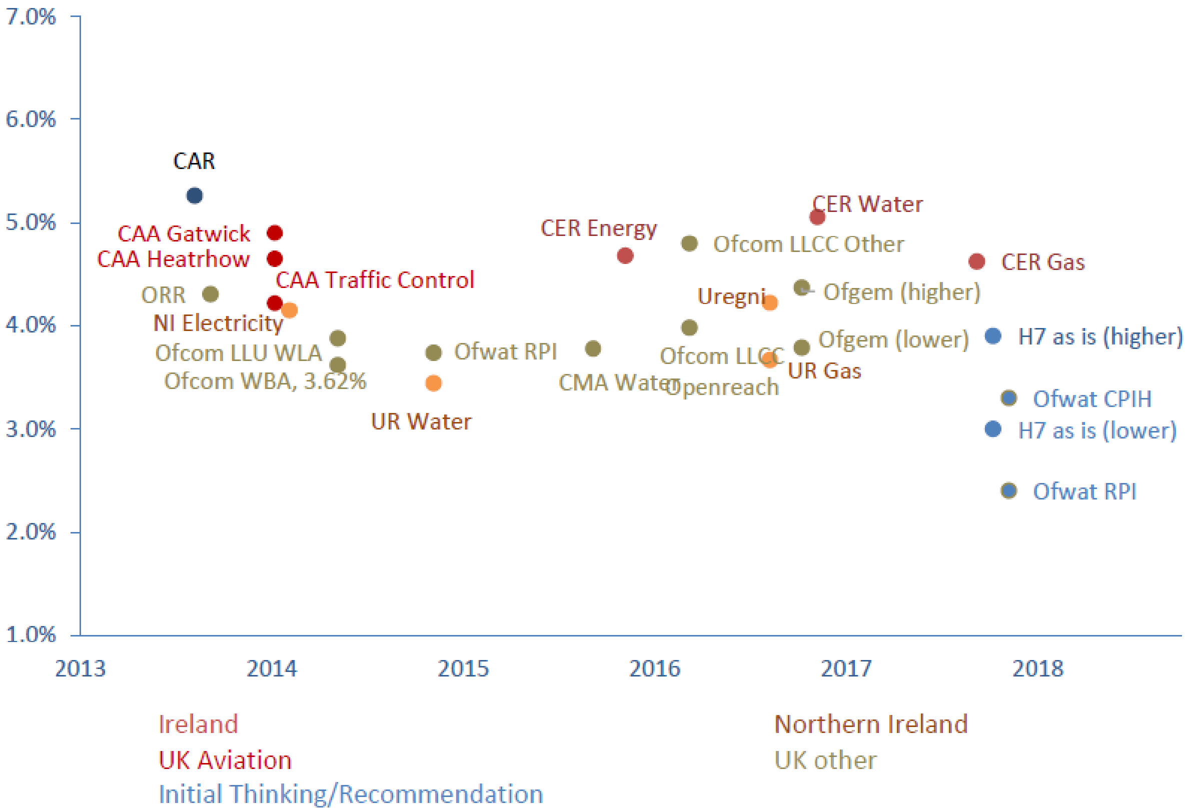
One of the key questions the Commission needs to consider for daa is by how much to reduce the cost of capital allowance. As the Commission's Issues Paper recognised, costs of capital have clearly been falling, both in market data and in recent regulatory decisions. The Commission's daa determination will need to reflect that. Furthermore, potential changes to the Commission's statutory objectives regarding financial viability would remove an

[6] The Final Allowance made by the CAR for these 23 projects is €269m.

asymmetry that may previously have tended to encourage the Commission to systematically over-reward daa.

The issue, then, is not whether the cost of capital should fall, but, rather, how best to decide by how much it should fall.

Figure 2: Lower VANILLA WACC trend in different sectors in Ireland, Northern Ireland and the UK



Source: Commission Issues Paper, Chart 9.4

As noted recently by Ofwat,[7] there are two conceptually distinct ways one can think of the "cost of capital". One is as an underlying equilibrium concept, a "discount rate" measuring the way in which the tastes individuals have for uncertain consumption in the future relates to their preference regarding definite consumption today. Economies have a number of such equilibrium parameters, including the "output gap", "inflation expectations", "the rate of technical progress" and others. Understood in this way, the cost of capital does not necessarily reflect the actual costs (say, in euros) paid by any specific company in practice. Indeed, under this concept the "cost of capital" does not, strictly speaking, apply to a company at all, but, rather, each individual investment project will have its own cost of capital.

By contrast, the second, concrete concept of the cost of capital is the rate of return that a particular company would need to pay (a required "hurdle rate") in order to secure finance,

[7] See section 2.3.3 of http://www.europe-economics.com/publications/europe-economics-final-report.pdf

given the riskiness of its activities and the nature of any new investment projects it is considering.

These two concepts will only sometimes align closely. Perhaps the most obvious case in which they will not align is if monetary policymakers succeed in driving the costs in the market of securing finance below the equilibrium cost, for example in an attempt to stimulate investment. Another case may arise if considerable economic turbulence raises the yields on the natural practical best-proxies for key cost of capital parameters, such as using government bonds to estimate the risk-free rate.

Under some economic conditions, the arguments for the equilibrium approach versus the concrete approach can be fairly balanced. In particular, the equilibrium approach can have some merit when we can be reasonably certain what the equilibrium is, or at least that it differs materially from the current situation and the direction in which it differs. That was, for example, the situation during 2010 to 2012 in Ireland, when it was clear that the use of Irish government bonds yields as a proxy for the risk-free rate would have resulted in a material over-estimation of the risk-free rate and of the cost of capital more broadly. We believe the Commission should not rule out the use of an equilibrium-based approach in similar situations in the future.

However, current economic conditions in Ireland do not lend themselves to the application of an equilibrium approach, or, at least, of an equilibrium approach that assumes the current equilibrium is far from current market parameters. In the early 2010s, market participants assumed that international monetary conditions were on the verge of "normalisation", with interest rates rising and quantitative easing being reversed. However, from 2015 onwards there became a widespread assumption we had entered a "lower for longer" era, with enduring economic stagnation and rates remaining depressed for the foreseeable future.

The pragmatic reality is that a regulator such as the Commission is in no position to second-guess the market. These are economic conditions that cry out for the use of a concrete approach, basing cost of capital parameters closely on market data for actual assets, rather than theories and speculations about why the cost of capital might revert to this level or that in the future.

8.1 Cost of debt

The correct approach, under these economic conditions, is for the Commission to base the risk-free rate of return and cost of debt on up-to-date bond market data on yields, using a combination of Irish and German government bonds data.

The Commission asks for views on the use of a debt premium approach versus an all-in cost of debt approach. In general, the all-in cost of debt approach is a key feature of the concrete cost of capital concept we are recommending here. Indeed, if the risk-free rate is based simply on up-to-date Irish government bond yields, as we recommend, the distinction between a debt-premium approach and an all-in cost of debt approach disappears, as far as Irish data are concerned.

However, in the case of daa, with many of the potentially most relevant comparators being international, some comparator data may come from other countries with different risk-free rates (e.g. from the UK). For those comparators, it may still be best to use the debt premium approach as international debt premiums may give a better indication of the appropriate debt premium to apply in Ireland.

8.2 Cost of equity

At paragraph 9.34 of the Issues Paper, the Commission presents an interesting range of asset betas for other airports. These were universally lower than the 2014 asset beta for daa, reinforcing the message that the key issue, namely how much the cost of capital will fall, applies to daa's systematic risk as well as to the market-wide components (the risk-free rate and equity risk premium). Indeed, Commission produced a useful indicative calculation, suggesting that the average beta for relevant comparators might be in the region of 0.4.

We would not necessarily endorse the list of comparators chosen, nor suggest that these should all carry equal weight in informing an asset beta for daa (not least because they were chosen as potential comparators for UK airports). Nonetheless, we note that even in 2014 the asset beta chosen for daa was at the very top of both the comparator airports' market data and the regulatory determinations for other airports. That was symptomatic of the historic tendency of Commission to choose figures for daa that eliminated any risk that the cost of capital chosen had been "too low", an asymmetry that is no longer appropriate. We suggest that the asset beta should in future be chosen on a more balanced basis: neither intuition nor evidence provide support for the notion that daa faces more systematic risk that any other airport in Europe.

We suggest that as well as being balanced in its selection of comparators and its choice of a point estimate from the data available, the Commission should also consider the evolving thinking on how best to calculate betas set out in the latest UKRN report. [8] This notes, for example, that using OLS in combination with daily data may tend to result in a systematic over-estimation of betas under certain circumstances, and that there is a case for considering GARCH models as a cross-check or some other method that might address this systematic upwards bias. We suggest that Commission should pay close attention to these findings and consider how to avoid a systematic upwards bias in beta estimates in its own work.

Furthermore, if the Commission is to consider introducing elements of risk-sharing, either on the passenger forecast alone or more generally through menu regulation, this should serve to lower the risk profile for daa and should therefore be reflected in a lower asset beta and overall WACC.

8.3 Financial Viability

We think that this Determination is an opportunity for the Commission to adopt a subtly different, but potentially significant variation in its approach to addressing financial viability. As noted in the Issues Paper, the approach since 2004 has typically been to check that when all the building blocks were taken together the regulated entity (daa group and latterly Dublin airport) would be able to raise debt at an investment credit grade rating. This approach has a built-in asymmetry to the detriment of users: if the financial viability test was failed, the Commission would revisit the building blocks and make revisions that increased

[8] See http://www.ukrn.org.uk/wp-content/uploads/2018/03/2018-CoE-Study.pdf

the price cap. In contrast, revisions to the building blocks did not materialise if the financial viability test was passed, even where it was passed with ease.

This approach has a clear upward bias, particularly on the cost of capital. It could be argued that the focus on the "financial sustainability/viability" of the regulated entity created an asymmetry of consideration, such that the regulator, perhaps implicitly, felt obliged to choose a WACC at least as high as the higher of the two concepts of the cost of capital discussed previously. So, if policy had driven the concrete cost of capital below the equilibrium cost of capital, the regulator might feel obliged to determine a cost of capital of at least the equilibrium concept level, whereas if policy had taken the concrete cost above the equilibrium cost, the regulator might feel obliged to determine a cost of capital at or above the concrete cost level.

This asymmetry problem has historically been further exacerbated by the sense of a need to provide "headroom" to ensure that financial viability was not only adequate but also sustainable throughout the price control, under all plausible circumstances. So, even if the Commission's best estimate was that the cost of capital (on whichever was the higher concept at the time) would stay low, if there was seen to be a risk it might go higher the Commission felt obliged to provide "headroom" in the determination so that financeability was "sustainable".

The "National Policy Statement on Airport Charges Regulation" states that "The Regulator shall no longer be mandated to have specific regard to the financial sustainability /viability of the regulated entity in making a Determination. The need for an efficient, commercially viable airport company is intrinsic in the primary objective of protecting the interests of current and future customers."[9] This change in the framework provides a natural reset opportunity, moving away from headroom and away from the need to favour setting a high WACC.

We suggest that the Commission should first determine what constitutes financial viability, and then use this to inform its decision about the cost of capital. The question should be "What is the lowest cost of capital that is consistent with realising a price cap that permits daa to operate the airport in a financially viable manner?" rather than "Does this price cap allow the daa to operate the airport in a financially viable manner?"

Although daa now has a bond rating of A-, it would be inappropriate to base financeability tests for daa on such a high rating. Being "comfortably within investment grade" has become the regulatory standard in this area and will be adequate for daa.

Given that the financeability test is to be comfortably within investment grade, the relevant bond yield ratings for cost of debt assessment should be investment-grade bonds (i.e. bonds of BBB- and above). This should include consideration of both Irish bonds and bonds across the relevant capital market, i.e. the Eurozone. Bond investors in daa would have available substitutes, without currency or conversion risk, across the Eurozone. There is no good justification for any Irish "country risk premium" at present.

[9] See p13 of http://www.dttas.ie/sites/default/files/publications/aviation/english/national-policy-statement-airport-charges-regulation/nps-airport-charges-regulations-amended-oct-6.pdf

9. Quality of Service

It has become clear over the course of this regulatory period that the current service quality measures are insufficiently weighted towards operational efficiency at the airport. While the Commission has previously stated that the inclusion of certain airfield measures should not be included in the service quality regime as they are not wholly under the control of Dublin Airport, it should also be considered that they are not wholly outside the control of Dublin Airport. We would ask that service quality and consultation on same is given increased focus in the forthcoming determination process.

Under the existing service quality regime, the penalty applied to Dublin Airport for breach of any standard bears little relationship to any costs incurred by other parties resulting from the breach. For example, whether security queue length is 31 minutes or 60 minutes the same penalty is applied to daa – yet a 60 minute delay at security will have a far greater impact on the ability of passengers to get to their flight and to the on-time performance of airlines with all the associated knock-on costs of off-schedule performance. However, the volume of passengers affected will be greatly different, as will the greater difficulty for airlines to ensure that baggage for transfer passengers are available for loading onto the next flight. Where baggage cannot be loaded to the following flight due to unavailability of the baggage system there are substantial downstream costs to the airline, to reunite the passenger with their baggage, and to the passenger in disruption and out of pocket expenses.

Furthermore, the penalty to daa is the same for failure of the inbound baggage availability target as say for example falling below a score of 3.5 for cleanliness of washrooms in any quarter, yet the actual downstream costs to other parties, airlines and passengers, will vary significantly. If the inbound baggage system is not functioning then there are significant costs to the airline to reunite passengers with their baggage at a later time and for to compensate passengers for out of pocket expenses where they need to immediately replace items in their delayed luggage. The difference in cost and disruption caused by these two service quality breaches is not reflected in the penalty which is applied to the daa.

10. Other Issues

10.1 Incentive schemes

The primary concern with the regulatory treatment of incentive schemes is that they need to accord with the principles set out by the Thessaloniki Forum: non-discrimination, transparency, no cross-subsidisation and time limitation. We would in particular highlight the importance of ensuring suitable transparency and the Commission should actively ensure that this principle is respected. Airport users need to know exactly how a given incentive scheme works and what actions they would need to take to avail of such an incentive and the period for which it will remain valid. Incentives schemes that depend on subjective decisions by the airport operators are not transparent, and it becomes difficult for anyone to assess whether the scheme satisfies the principles of non-discrimination and cross-subsidisation.

Provided the route incentive schemes satisfy the Thessaloniki Forum principles, we do not have a strong view on whether the airport charges price cap is set on the basis of gross revenues or revenues net of route incentives paid out. If the Commission decides to continue enforcing the cap on the basis of revenues net of route incentives, we suggest that it needs to take a pro-active role in determining which schemes the daa can include when netting the costs of incentives from gross revenues. Only schemes that the Commission has approved ex ante should be included.

10.2 Under and over collection of allowed Revenues

The Commission has identified a perverse incentive with the current k-factor that needs to be addressed. The simplest way would be to do away with any rolling forward of under collections.

Should the Commission conclude that there is a case for retaining a modified k-factor, we would suggest that it should keep the amounts that could be rolled forward as small as possible consistent with the rationale for permitting a roll forward. Further, the passenger out-turn in the last known full year should be used to determine the per passenger value of the roll-forward in year t+2 rather than the forecasted traffic for year t+2. This would remove a perverse incentive which exists to under-recover in periods where the traffic level is ahead of forecast, so as to collect the under-recovery per pax over a greater number of passengers two years later.

10.3 Persons with Reduced Mobility (PRM) charge

There are two basic propositions that should guide the Commission’s thinking when considering its treatment of PRM charges. First, they are an airport charge, and so should be included in the revenues governed by the cap on airport charges. Second, there needs to be an incentive for daa to manage this service efficiently. This includes having incentives to manage costs when contracting with third-party suppliers. Any “solution” that means that all cost overruns are passed onto airlines via higher airport charges would create entirely the wrong incentives.

10.4 Peak Pricing

Finally, the issue of peak pricing at the airport needs to be addressed. Given that Dublin Airport is currently full over most of the day in summer, it is difficult to see how peak pricing by time of day could have any impact on smoothing demand. Instead, by having lower pricing in winter when demand is lower Dublin Airport is already pricing higher at times of peak demand. The wave pattern of arrivals and departures needed to sustain a hub operation also needs to be considered. For example, we do not believe that peak pricing by time of day be consistent with the National Aviation Policy’s stated objective for the development of Dublin Airport as a hub.