

**Maximum Levels of Airport Charges at Dublin Airport – Issues Paper  
CP2/2013**

**AER LINGUS RESPONSE**

**1. Introduction**

Aer Lingus is pleased to have the opportunity to make an early input into the process of setting charges at Dublin Airport.

In this note we set out our initial view on the issues raised by the Commission in the Issues Paper. This involves some very general points, to do with the structure of regulation and the incentives DAA should be exposed to, and some more specific points, such as our view on the level and trajectory of the WACC that should be applied in the determination.

For fear of losing sight of Aer Lingus' overall view on airport charges in the detail of individual issues, we feel it is appropriate to open with a brief summary of the general themes which we feel are most important for the next determination.

In the opening section of the Issues Paper, the Commission rightly notes that airport charges have risen significantly since 2005. Indeed they have almost doubled. The Commission also notes that levels of passenger satisfaction have improved. The Commission presents the choice that airport users face as being between higher prices and better service or lower prices for a more basic service. We do not accept the proposition that lower charges should be at the expense of quality of service.

During the last 5 years, Dublin Airport has significantly expanded terminal capacity with the opening of the new T2 and this has been the major driver of rising airport charges.

At the same time, the Irish economy has been badly hit by recession. Passenger numbers have declined significantly, perhaps even more strongly than the headline figures of economic growth figures might have predicted. Passenger numbers now stand below 20m, while terminal capacity is sufficient to cater for 35m passengers.

While survey measures of passenger satisfaction have improved over the last few years, this is hardly surprising given the way falling demand and expanded terminal capacity have alleviated the conditions of overcrowding that passengers had to tolerate at Dublin airport in the mid-2000s.

In this context we do not believe we are faced with a choice of higher prices for better service or lower prices for a more basic service.

There is no foreseeable need for significant capacity investment during the period covered by the forthcoming Determination. In addition there are many trends which point in favour of reduced costs, including the scope for cost reductions and the fact that the cost of capital is much lower than it was at the time of the last review. Moreover, as the Irish aviation market has been worse hit by recession than many, Dublin Airport needs to do everything it can to help increase passenger numbers during the next determination period.

Taking these factors into account we consider it both inevitable and essential that airport charges should fall over the next determination period.

As regards standards of service, DAA cannot be allowed to become complacent. Passengers are more satisfied because the terminals are less crowded, but as outlined further below there remains more to be done in many areas particularly facilitating transfer passengers, security and CBP facilities. We see other airports around Europe making significant efforts to improve the quality of the service they provide. Dublin Airport similarly needs to step up if it is to keep pace as a welcoming and attractive destination.

## **2. Approach to regulation**

The Commission outlines its current the building block approach to setting charges and addresses a number of questions including:

- the duration of the next Determination;
- the allocation of risk between the airport and its users; and
- incentives for DAA to outperform targets.

The Commission does not suggest that it is considering dramatically altering its building block approach but invites suggestions on the matter.

In Aer Lingus' view, the current system of price regulation has on balance served reasonably well. RAB-based regulation provides a degree of continuity and stability which is needed to finance long term airport investments and provides airport users with some protection against excessive pricing in the long run.

We see no compelling reason to alter the period of the price review from the current 5 years. There is clearly no absolute right answer on this matter. A period must be chosen which is sufficiently long to give airport users some degree of forward certainty as to the level of charges and one which presents the airport with sufficient risk / opportunity that it has good incentives to act efficiently. On the other hand, the period of the review cannot be too long, because there is a need to return at reasonable intervals to the question of what the airport needs to do in the face of changing circumstances. Most regulators

in other sectors seem still to be content with a review period of approximately five years.

### Risk sharing

Although we support five-yearly reviews with RAB-based pricing, in our view there is still scope for refinement of the Commissions approach to price regulation.

In answer to the question whether the risk allocation between airport and airlines should be altered, we reiterate the view expressed in previous submissions that the airport is much better placed to absorb risks surrounding traffic variation than individual airlines. Airlines function in very competitive markets with low operating margins and no ability to smooth the timing of revenues and costs over time. In contrast, the airport is a long run venture with higher operating margins, little competition and the ability to ride out fluctuations not just from year to year but over the whole of the economic cycle.

The system as it works at present protects airlines from capacity risk over the period of the price control, but passes that risk back to airlines at each review by resetting prices based on current traffic levels. This is inappropriate in two ways. First there is a built-in tendency for charges to move up or down with the cycle, with potentially counterintuitive price rises in times of recession as has been the case in the current determination period. Secondly, it exposes airlines to capacity risk based on the success or failure of their rivals and the success or failure of the airport in attracting new customers. If other airlines are unsuccessful and lose traffic or choose for strategic reasons to reduce capacity at Dublin airport, charges to Aer Lingus and other carriers inevitably rise regardless of their own performance.

The Commission has moved some of the way to deal with this issue by using the tilted annuity approach to depreciation on T2 in the 2009 in its previous determination. This reduces somewhat the saw tooth impact on prices we have previously noted is created by large capex projects. The Commission's treatment of T2 depreciation was a positive step but does not go far enough in our opinion. The average cost approach to other costs means that there is still significant risk of period-to-period price variation, as a result of fluctuating traffic forecasts as well as the timing of capex. We believe the Commission should adopt a long term annuity approach to pricing generally, covering all costs including return on capital, not just depreciation. This change would not imply any sudden alteration to the level of charges the airport can levy and would provide a greater level of predictability in airport charges from one regulatory period to the next.

We note that the Commission states that the DAA could assume more traffic risk because to some extent traffic is within its control. We agree with this statement. The drawback with the current arrangements is that if DAA successfully acts to promote growth it could suffer a material price fall at the next Determination. With a more smoothed long run approach, prices would not rise so much in the downturn nor fall so much in the upturn. In downturns, the DAA would have a stronger incentive to find ways to promote growth as it would benefit more from doing so.

### Other regulatory adjustments

In addition to this change, the Commission should also consider the applicability of recent innovations in the field of economic regulation: totex and menu regulation.

**Totex (total expenditure) regulation** as applied in the UK by Ofgem and Ofwat, has the potential advantage that it provides the regulated company with a single cost allowance and allows the company to choose the proportion of this allowance to be charged directly and the proportion to be capitalised (in the RAB) via a chosen Pay As You Go ratio. The potential advantage of this for an airport is that in times of traffic downturns it could choose to capitalise a proportion of running costs in the short run. This would avoid unnecessary upturns in prices if demand falls and allows the airport to recover efficiently incurred costs (i.e. costs within the Totex allowance) over the long run.

Menu regulation is an approach to sharing cost (or revenue) risk between the regulated company and its customers in a way which incentivises the regulated company to accurately reveal its own projection of costs and revenues. By doing this the advantages of regulatory gaming and asymmetric information between the regulator and the regulated company are reduced. **Figure 1** below reproduces the efficiency incentive matrix from Ofgem's 2007 Distribution price review by way of illustration of an incentive mechanism which yields the maximum benefit to the regulated company if it aligns its declared expenditure with the level it considers most likely to occur in practice.

**Figure 1.** Illustration of menu regulation from Ofgem

**Table 6.1 - The IQI matrix**

GDN:Ofgem ratio	100	105	110	115	120	125	130	135	140
Efficiency incentive	40.0%	37.5%	35.0%	32.5%	30.0%	27.5%	25.0%	22.5%	20.0%
Additional income	2.50	1.97	1.38	0.72	0.00	-0.78	-1.63	-2.53	-3.50
Allowed expenditure	100	101.25	102.5	103.75	105	106.25	107.5	108.75	110
Actual expenditure									
70	14.50	13.69	12.75	11.69	10.50	9.19	7.75	6.19	4.50
80	10.50	9.94	9.25	8.44	7.50	6.44	5.25	3.94	2.50
90	6.50	6.19	5.75	5.19	4.50	3.69	2.75	1.69	0.50
100	2.50	2.44	2.25	1.94	1.50	0.94	0.25	-0.56	-1.50
105	0.50	0.56	0.50	0.31	0.00	-0.44	-1.00	-1.69	-2.50
110	-1.50	-1.31	-1.25	-1.31	-1.50	-1.81	-2.25	-2.81	-3.50
115	-3.50	-3.19	-3.00	-2.94	-3.00	-3.19	-3.50	-3.94	-4.50
120	-5.50	-5.06	-4.75	-4.56	-4.50	-4.56	-4.75	-5.06	-5.50
125	-7.50	-6.94	-6.50	-6.19	-6.00	-5.94	-6.00	-6.19	-6.50
130	-9.50	-8.81	-8.25	-7.81	-7.50	-7.31	-7.25	-7.31	-7.50
135	-11.50	-10.69	-10.00	-9.44	-9.00	-8.69	-8.50	-8.44	-8.50
140	-13.50	-12.56	-11.75	-11.06	-10.50	-10.06	-9.75	-9.56	-9.50

Source: Ofgem: Gas Distribution Price Control Review Final Proposals, December 2007

As discussed below in our response on opex and capex, we think that the outturn for the current regulatory period suggests quite a significant gap between the projections made by DAA before the last review and what has actually happened. Menu regulation might serve to reduce this discrepancy and make regulation work more smoothly.

### Passenger forecasts

We note the fact that traffic forecasts have proved notoriously unreliable and understand why the Commission is seeking advice about how to improve them.

We are not in a position to provide advice on detailed forecasting methodology. However, for the following reasons we believe the Commission should take responsibility itself for producing long term forecasts against which it should sense check any plans produced by DAA.

The first reason for this is that experience shows that DAA, left to its own devices, has mixed incentives as regards its traffic forecast. In the forthcoming period, with no need for capacity expansion it is likely that it will try to push for the lowest credible traffic forecast to inflate the level of regulated charges.<sup>1</sup>

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<sup>1</sup> The incentives on the airport with regard to demand forecasts fluctuate depending on whether there is seen to be a more or less pressing need for new capacity. When expansion is high on the agenda,

Moreover, airlines cannot be expected to fill the gap by producing more accurate forecasts. Collectively airlines have an interest in projecting high growth to minimise airport charges. But in reality airlines are primarily concerned with their own traffic figures and will not have a strong view on growth in general. In addition, airlines' traffic projections are directly impacted by the level of airport charges and high level assumptions must therefore be made in this regard. Moreover, their own figures will be dictated by their private strategy as much as by overarching economic trends. A lot of this information is confidential, which makes it difficult for the Commission to use this information even if it is revealed to them.

In terms of the detail of how, or rather what, the Commission should forecast, we would recommend that the Commission focus on long-term trends, and less on short term fluctuations, i.e. trends that ride out the fluctuations of the economic cycle. Generally the experience of the aviation industry is that traffic growth is subject to fairly stable long run income elasticities relating passenger numbers to GDP growth. If the Commission combines a long run (say 25 year) approach to forecasting with a long run approach to pricing, avoiding excessive price fluctuations, then the significance of short term economic cycles on the outcome of the Determination should be relatively limited.

### **3. Operating Expenditure**

Aer Lingus notes the summary of operating costs with interest. We recognise that benchmarking airport costs is relatively difficult, due to differences between each individual airport. In the end any analysis will require intelligence and judgement on the part of the regulator.

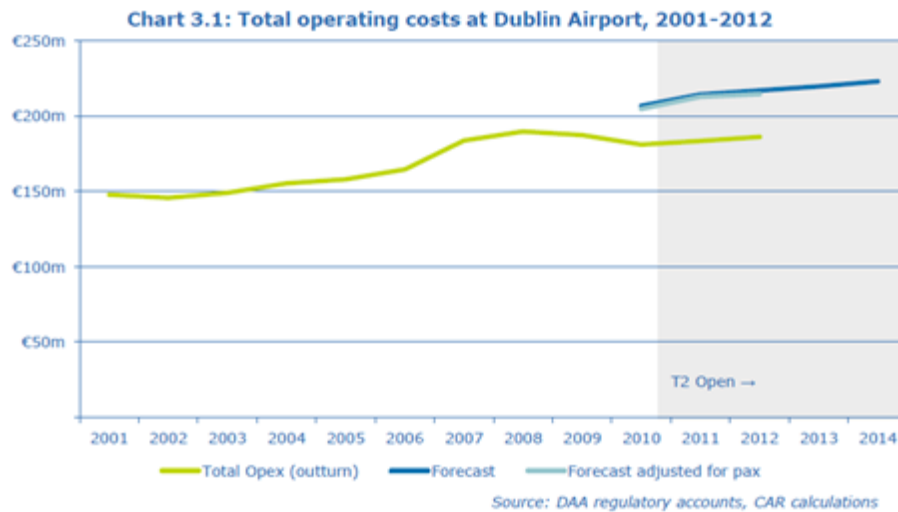
Nevertheless, we think the data presented serves to illustrate the need for the Commission to use its best efforts to benchmark DAA and Dublin Airport.

The key evidence is Chart 3.1 on p. 26, reproduced in **Figure 2** below.

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as it was before T2 opened, the incentive may be to forecast high growth to justify the levels of investment proposed.

**Figure 2.** Discrepancy between actual and forecast opex at Dublin Airport



Source: CP2/2013

This demonstrates with complete clarity the unreliability of the DAA's opex projections at the last Determination. The Commission accepted the DAA's unsubstantiated assertion that the opening of T2 would lead to a dramatic increase in total and per passenger operating costs. Chart 3.1 shows that no such increase actually happened.

The inference which we have to draw from the above is that DAA was able to absorb the whole of any additional T2 costs into efficiency savings. The fact that costs did not even rise on the opening of the terminal suggests these savings elsewhere were not hard to find.

Consequently, we have to conclude that the Commission's bottom up approach to benchmarking last time was unsuccessful. While we support the concept of benchmarking we would not support the Commission repeating the same flawed approach.

In this context the Commission's discussion of incentives and rolling efficiency adjustments seems misplaced. In a regulatory system where allowed costs initially conform pretty closely to actual costs, it is reasonable to consider how "efficiencies" should be shared between the regulated entity and its customers. In this case however, it that appears DAA has enjoyed a substantial 5 year windfall as a result of providing inaccurate predictions as to the level of its operating costs. We would expect allowed costs for the next determination period to be reset at most to their current level (subject to any further light thrown on this by top down benchmarking). We would strongly oppose the suggestion that any difference between allowed and actual costs

represents an efficiency that the DAA should be able to retain for any time at all.

#### **4. Commercial revenues**

The Issues Paper indicates that the Commission's approach to projecting commercial revenues has proved reasonably accurate in total, even if there is some variation across individual elements. We do not have any suggestions as to how the Commission could improve its forecasts.

We agree, however, with the suggestion that DAA could do more to develop commercial revenues which should ultimately be passed back to airlines in lower airport charges according to the single till approach.

We would be sympathetic therefore to the idea of increasing the incentive on DAA to develop commercial revenues by some form of rolling sharing mechanism akin to the operating cost sharing approach. This would also be consistent with our suggestion of adopting a menu approach to regulation, providing DAA with incentives to grow commercial activities and to reveal their best forecast as part of the Determination process.

However, we would like to take this opportunity to raise again with the Commission the impact that costs associated with retail space in T2 had on aeronautical charges during the current Determination period. This matter was referred back to the Commission for further consideration in 2010, specifically with regard to the timing of overheads, but the Commission did not make any variation to its Determination in this regard<sup>2</sup>.

We believe this issue is now partially addressed by our observations above regarding opex. We were concerned at the time of the last review that T2 lead to inflated opex projections and this appears to be confirmed by the figures. Our suggested approach should largely deal with this provided DAA is not allowed to retain any of the "saving" compared to the last regulatory forecast as an efficiency gain.

But the issue of overheads referred back to the Commission by the Appeals Panel was only part of our concern. We continue to believe that T2 contains more retail space than is necessary or expected for a terminal with its capacity. The capital cost of this space is included in the RAB with the T2 Box 1 Trigger. The consequence is that aeronautical charges continue to contain a built in subsidy to DAA for over-specified retail space.

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<sup>2</sup> The Commission was not convinced that overheads relating to the T2 retail area should be treated differently to other operating costs in T2 when considering the possibility that T2 was oversized (CP2/2010, para. 4.18).



We therefore continue to believe the Commission should reconsider the costs and revenues associated with T2 for the coming regulatory period and ensure that there is no effective subsidy of excess commercial space from aeronautical charges.

This can be achieved in one of two ways. The Commission should either:

- disallow a portion of T2's capital costs representing the excess space intended for until such time as it is used, or
- credit DAA with a notional level revenue per m<sup>2</sup> from this space equivalent to an estimated market rental based on revenues from T1 or other comparable airports.

## **5. Capital costs**

We have already indicated that we view the forthcoming period as being one of low capex. Looking at Table 5.1, we expect the next five years to be similar to the pre-2006 period. We are not in a position to comment in more detail at this time.

As regards the recovery of capex costs we have already indicated our support for the tilted annuity approach, but stated that the annuity approach should be extended widely to all cost elements to create a smoothed long term pricing path.

### **RAB**

The Commission considers what costs should be included in the opening RAB. We believe regulatory incentives are best promoted by only admitting into the RAB those expenditures that were permitted at the previous determination and which contribute to outputs agreed as being necessary.

With this in mind we note that Table 5.2 indicates a significant overspend on T2. Our understanding is that any such overspend will not be included in DAA's RAB for the next determination period. We consider it essential that incentive regulation be maintained, which includes not allowing DAA to recover any overspends incurred on delivering agreed and costed outputs.

We also note with concern Table 5.3 which indicates that DAA may be significantly behind in meeting other outputs required and costed under the 2009 Determination. The information provided makes it impossible to reach this conclusion definitively, as the DAA spending data only relates to 3 of the 5 years of the determination. It would be helpful to understand where the Commission expects DAA to be by the end of the current period. However, on the evidence presented, only 42% of allowed capex has been spent and most of the outputs are not yet achieved. On this basis it looks likely that DAA will

fail to deliver against a number of outputs it was funded to achieve during the current period. If this is indeed the case, we would expect to see DAA's opening RAB for the next period adjusted down. First, any sums allowed for outputs that have not been delivered should be removed from the opening RAB. Secondly DAA should lose the benefit of any sums it has already received against these activities, and on which it will of course have earned a return in the meantime. This can be achieved by reducing the next opening RAB by the present value of any sums received during the current period for outputs not delivered.

We would ask the Commission to pay close attention to DAA's progress towards achieving these outputs by the end of the current period. If outputs are not delivered we believe the Commission should make an appropriate downward adjustment in DAA's closing RAB for 2014.

### WACC

As regards the appropriate WACC for DAA we have two main observations to make:

- Firstly, since the 2009 determination, a number of the parameters within DAA's cost of capital have followed a downward trend. This implies DAA faces a lower cost of capital heading into 2014 than it did in 2009.
- Secondly, as a comparison, the UK CAA's Q6 proposals for Heathrow and Gatwick also suggest a decrease in the cost of capital facing airports over time.

The CAA's current proposals for Q6 suggest a pre-tax WACC range of 4.21% – 5.63% and 4.48% - 6.05% respectively for Heathrow and Gatwick. This range is lower than the Q5 point estimates of 6.2% and 6.5%.

**Table 1** below shows the allowed cost of capital for DAA in past price control determinations. The final column shows how we think each parameter could be expected to change in the next determination. Overall, we believe that the general movement of these parameters imply DAA's cost of capital will be lower in the next determination compared to the 2009 determination.

**Table 1. Past CAR WACC calculations for DAA**

Cost of capital component	2001	2005	2009	Expected revision?
Risk-free rate	2.6%	2.6%	2.5%	Lower
Equity-risk premium	6.0%	6.0%	5.0%	Constant
Asset beta	0.50	0.61	0.61	Lower
Equity beta	0.93	1.10	1.22	Lower
Corporate tax	13.5%	12.5%	12.5%	Constant
<b>Cost of equity (pre-tax)</b>	<b>9.5%</b>	<b>10.5%</b>	<b>9.9%</b>	<b>Lower</b>
Debt premium	1.1%	1.1%	3.6%	Lower
<b>Cost of debt (pre-tax)</b>	<b>3.7%</b>	<b>3.7%</b>	<b>4.1%</b>	<b>Lower</b>
<b>Gearing</b>	50%	46%	50%	Constant
<b>Real WACC (pre-tax)</b>	<b>7.0%</b>	<b>7.4%</b>	<b>7.0%</b>	

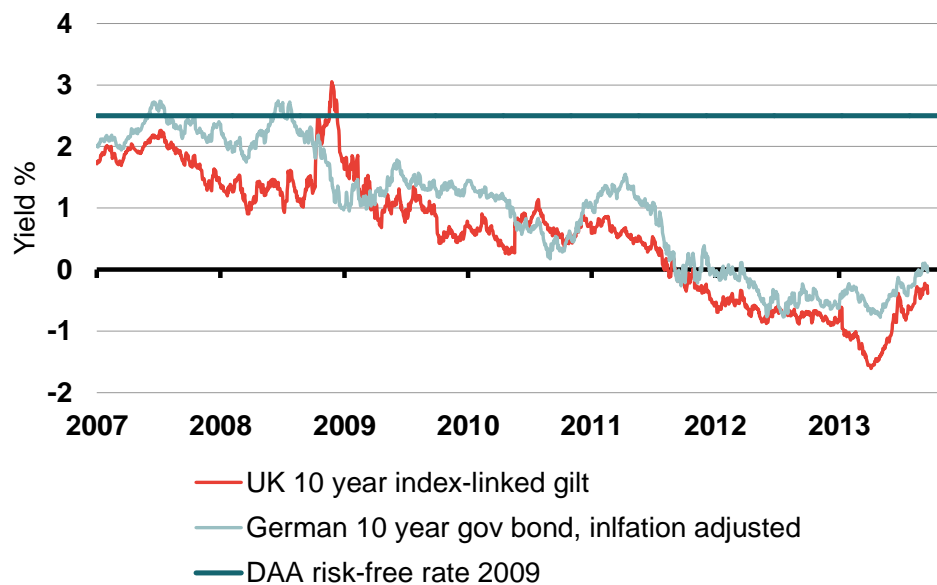
Source: CAR Issues Paper

### Risk-free rate

As the CAR outlined in their Issues Paper, returns on AAA-rated government bonds, a proxy for the risk free rate, have fallen since 2009. **Figure 3** below shows the real yields for ten-year UK and German government bonds.

As yields have fallen since 2009, we believe the risk-free rate used in the DAA's cost of capital calculations for the next determination should also be lowered.

**Figure 3.** UK and German ten-year government bond yields, real %



Source: Bloomberg, Ernst & Young

By way of comparison, we note that the CAA are proposing to use a lower risk-free for Gatwick and Heathrow in the 2014 Q6 price control review than they did in the 2008 Q5 review<sup>3</sup>. In 2008 they used a risk-free rate of 2.5%, whereas they are now currently proposing a risk-free rate of less than 1%.

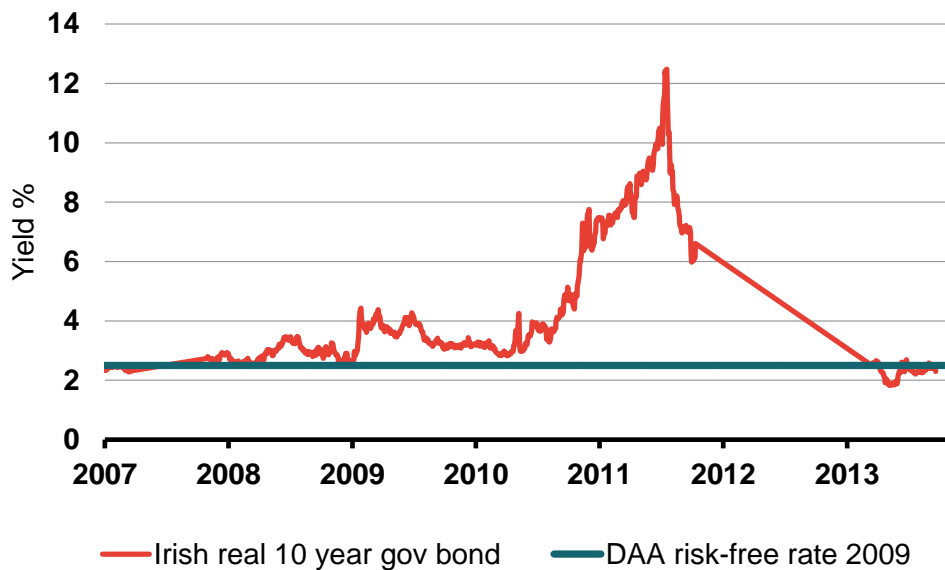
In past determinations the CAR also considered Irish government nominal 10-year bonds. **Figure 4** below shows the real yields for ten-year Irish government bonds. Unlike the UK and Germany, yields increased after 2009 until peaking in mid-2011 before falling sharply again. Since 2013 yields have fallen sharply to levels last seen around the end of 2008. This could be viewed as evidence to suggest that DAA's risk-free rate should be increased from its 2009 levels. However, the fluctuations post-2009 represents an extraordinary period within Ireland and the Eurozone more generally, and most signs suggest this period is over. Therefore, we do not think it is relevant to consider this in a forward-looking price determination from 2014 onwards.

Therefore, we would encourage the CAR to focus on the yields of other Eurozone government bonds when considering the appropriate risk-free rate for the next determination.

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<http://www.caa.co.uk/docs/33/CAP%201029%20Economic%20regulation%20at%20Gatwick%20from%20April%202014%20initial%20proposals.pdf>

**Figure 4.** Irish government 10-year government bond yields, real %



Source: Bloomberg; Ernst & Young

### Equity risk premium

We support the CAR's long-term approach to estimating the equity risk premium by looking at historical data on equity returns. Whilst the contemporaneous equity risk premium varies within the economic cycle, we believe the last few years are unlikely to have significantly altered the long-term equity risk premium. As such we anticipate that the equity risk premium in the next determination would be similar to past determinations.

### Beta

In 2009 the asset beta used was in the range 0.5-0.7 and the CAR decided to retain the point estimate of **0.61** used in 2005. The CAR has asked if there is a compelling reason for revising the asset beta from the level used in 2009.

Frontier Economics has provided Aer Lingus with estimated asset betas for a number of comparable publicly-listed airports in 2013 – see **Table 3** below. This provides an average adjusted 10-year average asset beta of **0.57**, and a range of 0.27-0.85. Whilst the point estimate used in 2009 of 0.61 is within this range, the CAR may wish to reconsider this value based on the airports that provide the most suitable comparison.

In addition, in British Airways' response to the CAA's proposals for Q6 at Heathrow and Gatwick, they point to evidence that equity betas have fallen

over the last price control period, so using the same ranges would not be appropriate<sup>4</sup>.

**Table 3.** Asset beta of comparator airports

Airport	10-year average of asset beta (with Vasicek adjusted equity beta)	10-year average of asset beta (without Vasicek adjustment)	Most recent asset beta (as of May 2013, with Vasicek adjusted equity beta)
Aeroports de Paris	0.65	0.63	0.53
Fraport	0.57	0.56	0.50
Flughafen Wien	0.47	0.46	0.33
Flughafen Zuerich	0.34	0.32	0.73
Rome Fiumicino Airport	0.39	0.38	0.52
Beijing Capital International	0.81	0.81	0.52
Malaysia Airports	0.60	0.56	0.63
Airports of Thailand	0.57	0.56	0.80
Sydney Airport	0.56	0.55	0.38
Auckland airport	0.85	0.85	0.83
Haneda airport	0.75	0.75	0.79
Kobenhavens lufthavne	0.27	0.23	0.17
<b>Average</b>	0.57	0.56	0.56
<b>Median</b>	0.57	0.56	0.53

Source: Bloomberg data, Frontier analysis

A detailed explanation of how the betas were estimated is provided as an annex to this document.

<sup>4</sup> CEPA on behalf of British Airways, (2013), “An updated estimate of Heathrow and Gatwick’s WACC”

## Cost of debt

In 2009 a pre-tax cost of debt of 4.1% was used, implying a DAA debt premium of 1.6%. This was based on current interest rates being paid on European corporate bonds with a BBB rating.

We note the CAR would consider the alternative approach of looking at DAA's embedded cost of debt, as opposed to the more forward-looking approach. We remain open-minded to how the cost of debt is calculated. However, we would suggest that a consistent approach across determinations would be most beneficial, whatever the approach may be.

Ofgem's recent changes to setting the cost of debt may be of interest, however. In its recent RIIO price controls, Ofgem has adopted a new approach for setting the cost of debt. Its new approach involves setting the cost of debt assumption based on a simple ten year trailing average using an average of the iBoxx GBP Non-Financials indices of 10+ years maturity, with credit ratings of broad A and broad BBB<sup>5</sup>.

Ofgem's approach seems to be somewhere between the CAR's current approach and an alternative embedded debt approach. Ofgem's approach still provides incentives to regulated companies to borrow funds efficiently, but it also partially reflects changes to the cost of debt over time through the trailing average component. Whilst we are not suggesting the CAR adopt this approach immediately – Ofgem consulted extensively on it – it may be a development worth following.

## Gearing

In 2009 a notional 50% gearing assumption was used, as opposed to the actual gearing used in 2005. The CAR suggests there are arguments for and against both. We are open-minded to hearing such arguments. However, we recognise that a notional gearing assumption is consistent with the principle that capital structure is a matter for the DAA, and it is them rather than airport users who should bear the financial risk.

For comparison, both the CAA and Ofgem use notional gearing in the UK. For example, in the most recent price control reviews for gas and electricity Ofgem used a notional gearing assumption of between 55% and 65%. The CAA is currently proposing a notional gearing of 60% and 55% for Heathrow and Gatwick respectively for Q6<sup>6</sup>.

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<sup>5</sup> <https://www.ofgem.gov.uk/ofgem-publications/47071/riioed1decfinancialissues.pdf>, p.10

<sup>6</sup> <http://www.caa.co.uk/docs/33/CAP%201027%20Economic%20regulation%20at%20Heathrow%20from%20April%202014%20initial%20proposals.pdf>, p.138

For reference, our estimates suggest that the DAA's actual gearing is higher than the notional gearing, at between 63% and 78% depending on the use of total or net debt<sup>7</sup>.

### Using Heathrow and Gatwick as a comparator

PwC were independently commissioned by the CAA to estimate the WACC for both Heathrow and Gatwick for the next price control determination, Q6. The table below shows their estimated pre-tax WACC, and its constituent parts, as well as the values used in the previous price control, Q5. Using Heathrow and Gatwick as a comparator can be insightful, but there will be a number of parameters that are unique to each airport. The final column provides an indication of whether the parameter is DAA-specific or representative of an airport in general.

Overall, the pre-tax WACC estimate for the Q6 review is lower than for the Q5. The CAA's current proposals for Q6 suggest a pre-tax WACC range of 4.21% – 5.63% and 4.48% - 6.05% respectively for Heathrow and Gatwick. This range is lower than the Q5 point estimates of 6.2% and 6.5%.

This decrease is driven by:

- A lower cost of debt;
- A lower risk-free rate; and
- A lower equity beta for Gatwick.

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<sup>7</sup> As of end of 2011 using Bloomberg and DAA accounts.  
([http://www.aviationreg.ie/\\_fileupload/2011\\_DAA\\_Regulated\\_Entity\\_Accounts\\_ABRIDGED\\_Signed.pdf](http://www.aviationreg.ie/_fileupload/2011_DAA_Regulated_Entity_Accounts_ABRIDGED_Signed.pdf))



**Table 2. Q5 and Q6 WACC estimates for Heathrow and Gatwick**

	Heathrow		Gatwick		Change	DAA specific?
	CAA/CC Q5	PwC Q6	CAA/CC Q5	PwC Q6		
<b>Gearing</b>	60%	60%	60%	55%	Lower for Gatwick	Yes
<b>Pre-tax cost of debt</b>	3.55%	2.3 – 3.0%	3.55%	2.35 – 3.05%	Lower	-
<b>Risk-free rate</b>	2.5%	0.25 – 0.75%	2.5%	0.25 – 0.75%	Lower	Yes
<b>Equity risk premium</b>	2.5 – 4.5%	6.0%	2.5 – 4.5%	6.0%	Higher	-
<b>Asset beta</b>	0.42 – 0.52	0.42 – 0.52	0.48 – 0.58	0.48 – 0.58	Constant	-
<b>Equity beta</b>	0.90 – 1.15	0.90 – 1.15	1 – 1.3	0.9 – 1.17	Lower for Gatwick	-
<b>Post-tax cost of equity</b>	4.75 - 7.68%	5.65 – 7.65%	5.00 – 8.35%	5.65 – 7.75%	Smaller range	-
<b>Tax rate</b>	28%	20.2%	28%	20.2%	Lower	Yes
<b>Pre-tax cost of equity</b>	6.60 – 10.66%	7.08 – 9.59%	6.94 – 11.6%	7.08 - 9.71%	Smaller range	-
<b>Pre-tax WACC range</b>	<b>4.77 – 6.39%</b>	<b>4.21 – 5.63%</b>	<b>4.91 – 6.77%</b>	<b>4.48 – 6.05%</b>	<b>Lower</b>	-
<b>Pre-tax point estimate</b>	<b>6.2%</b>	-	<b>6.5%</b>	-	-	-

Source: CAA<sup>8</sup>

8

<http://www.caa.co.uk/docs/33/CAP%201027%20Economic%20regulation%20at%20Heathrow%20from%20April%202014%20initial%20proposals.pdf>

<http://www.caa.co.uk/docs/33/CAP%201029%20Economic%20regulation%20at%20Gatwick%20from%20April%202014%20initial%20proposals.pdf>

## **6. Financial Viability**

We have no specific comments on the financial viability of DAA or Dublin Airport

## **7. Quality of Service**

In addition and as noted above, it is essential that the DAA continue to improve quality of service for all customers using the airport. Aer Lingus welcomes the fact that the Commission introduced a quality term to the price cap formula in the previous Determination which created for the first time a direct link between the price cap on airport charges at Dublin Airport and the quality of service delivered by the DAA. However, we believe that (i) the current maximum level of penalty at 4.5% is too low and (ii) the quality measures are insufficiently demanding in certain respects particularly in relation to the measure for the security passenger search time.

A maximum penalty of 4.5% is insufficient to create an adequate incentive for the DAA to comply with the required standards. In contrast, the service quality regimes at London Heathrow and Gatwick airports provide that up to 7% of airport charges are at risk. We believe that such a level of incentive is required to ensure that the DAA is sufficiently motivated to meet the quality measures.

In general we concur that the DAA has met and exceeded the current service quality targets and, indeed, have significantly exceeded many of the targets. However, while we are content for passengers to receive quality services, we do question whether DAA are actually over-investing in order to ensure that these targets are achieved. As a simple example, there is a cost associated with cleaning toilets, and there is also a reasonable standard that must be met. The targets should be set at an appropriate level and then achieved by the DAA. Over-achievement is ultimately a detrimental situation as it means that costs (and therefore airport charges) are inflated unnecessarily. In simple terms, if toilets were cleaned to a specified standard in accordance with passenger expectations (but to a lesser standard than is currently the case), savings could be invested in other areas which are perhaps more important to customers (e.g. opening an additional security lane).

We therefore believe that the Commission should seek evidence as to the costs currently being incurred by the DAA where they are significantly over-achieving in relation to the specified targets. In the context of the forthcoming consultation, all the service standards should be reviewed with a view to either re-baselining where appropriate or ensuring that the DAA do not overachieve excessively. In this way, the DAA will be incentivised to improve services

which are most important to passengers while at the same time reducing total cost (and in turn airport charges).

With regard to the service quality targets that should be used for the next determination, we are generally satisfied with the specific measures that the Commission used for the previous determination. We are conscious that the DAA, the airlines and the handling agents performed well against the targets set out on page 76 of the Issues Paper which were not included in the 2009 determination. It is important that these additional standards are not neglected just because they are not subject to specific service standards. To address the possibility for issues relating to services not expressly covered in the determination developing in the course of the determination period, Aer Lingus proposes that consideration be given to providing for a flexible element within the service quality rebate which can be varied on an annual basis. For example, the Commission could require that a specified percentage of the rebate (e.g. 0.25%) be designated as flexible and be allocated to a particular service (measured against an objective airport industry standard) as agreed between the DAA and users on an annual basis.

While we are generally satisfied with the service quality targets from the 2009 determination, we do see a need for two additional targets. The first should cover the efficiency of the transfer product. In order to progress the DAA's objective of advancing Dublin Airport as a relevant hub of choice for transcontinental passengers, it is vital that the transfer product be best in class. This includes security screening, convenience, transfer corridor, way-finding, baggage transfer, technology, commercial outlets, etc). Transfer passengers make a unique contribution to the economies of scale that can be leveraged both by the airport and Aer Lingus. Extra transfer passengers and the additional airport revenue that accompany those passengers make a direct and significant contribution to the single till and therefore lower the overall level of charges for all users.

In addition, a unique attraction of Dublin Airport for connecting passengers from travelling to the United States is the presence of CBP pre-clearance facilities. It is essential that the DAA continue to work with all relevant parties to ensure the availability of this service for all services to the United States.

Secondly, there should be a service quality target relating to stand allocation to ensure that the maximum number of passengers can avail of a boarding product which is in line with the overall standards of each airline's product offering. This stand allocation target should also help to ensure the efficient working of the airport.

While it would be premature to go further at this stage, the Commission should propose the above as targets for DAA and invite DAA to propose appropriate measures in line with the requirements of the airline community.

With regard to the existing targets, we would make the following comments regarding Security Screening; Flight Information Screens; Phone, Internet & IT facilities; courtesy and helpfulness of [security] Staff:

- The service quality measure relating to security passenger search times is inadequate. Aer Lingus endorses the sentiments expressed by the Commission in its analysis of security queue times contained in the Issues Paper; we agree that the target which focuses on a maximum queue time can mask underlying problems. We therefore support the dual aspect targets contained, for example, in the Heathrow service standards and those previously applied in Dublin. Specifically, we would propose a dual target of (i) no passenger queuing (from time of joining the queue and including time for search) for more than 20 minutes, and (ii) the queues should be less than 5 minutes for 95% of the time. In addition to the fundamental concern for passenger convenience, excessive queue times will have a detrimental effect on overall performance of the airport. In our view, no longer than 20 minutes should be allowed for queues at security as most airlines allow check-in up to 45 minutes prior to departure. Taking account of the walking distance to the gate, a 30-minute queuing time may not leave sufficient time for passengers to reach the departure gate having cleared security.

We believe that the quality of the security screening experience is and will continue to be one of the defining measures of overall airport quality. Security screening is a unique opportunity to significantly improve customer satisfaction given the personal interaction involved. It is an opportunity to develop the underlying confidence passengers have in the security of the air transport system and to usher passengers through the airport expeditiously so that they can reach the commercial revenue outlets and their departure gates without delay.

- With regard to Flight Information Screens, Aer Lingus submits that the DAA can improve on current performance which is not trending as much above target as other services. In particular, we believe that changes should be made to how flight information (particularly information relating to departure gates) is presented.
- With respect to phone, internet and IT facilities, Aer Lingus notes that a key element of this service is currently the free internet access offered by the DAA. While Aer Lingus recognises the enhancement this makes to the overall customer experience at the airport, the

applicable service target should not impede the DAA from moving to a charging structure provided that this is in line with the norms that are developing at other international airports.

- With regard to the standard relating to courtesy and helpfulness of security staff, we see no reason why this standard should be separated from that applicable to other staff. As it is vital for the airport's reputation that passengers receive a consistently high level of service from all airport staff whatever their function or position, we believe that the applicable standard should be increased.

We do not agree that there should be any bonus for exceeding the stipulated targets. The targets should be set at an appropriate level for the required service and anything less should be subject to a rebate. For the reasons outlined above, over-achievement should not be incentivised.

Finally, Aer Lingus generally agrees that DAA's data gathering for service quality information produces reliable results that reflect the opinions of passengers.

## **8. Other Issues**

The Commission raises a number of topics under this heading. The Commission mentions specifically the issue of differential pricing and, in particular, raises the issue off-peak charging and cargo. We welcome the fact that the Commission is not reopening the issue of mandatory differential pricing between terminals at Dublin. This is a matter that has been considered at some length in the previous determination and was rejected by the Commission. There has been no change of circumstances since the previous determination which would warrant a change in the Commission's view. We do not therefore propose to address this issue other than to state for the avoidance of doubt that Aer Lingus remains strongly opposed to differential charging between T1 and T2 and would be forced to reconsider its use of T2 if differential charges were introduced.

However, we agree that the DAA's charging regime should continue to be based on different pricing for different services that allows airline operators with different business models to choose from a menu of services in a way that best fits their business model. As a consequence, it should remain possible for carriers with different business models and requirements to pay different levels of charges. For instance, depending on a particular carrier's business model, its requirements for services such as check-in desks, automated check-in kiosks, CBP, air-bridges, remote stands and parking may vary widely.

We believe that the existing scheme of charges at Dublin Airport provides ample scope for the DAA to offer a tailored service to users based on their individual requirements. However, given the complexity of the operation at Dublin airport and the need for the DAA to ensure the efficient operation of facilities at Dublin airport, we believe that it would not be appropriate for the Commission to mandate how the DAA should charge for individual aeronautical services. Indeed, we believe that this may be outside the legal remit of the Commission whose statutory role is limited to establishing the maximum level of airport charges. Instead, such charges should be established in consultation with airport users in accordance with applicable legal requirements that they are objective, transparent and non-discriminatory.

### Off peak charges

The Commission raises the possibility of peak / off-peak charges being introduced, in response to the fact that the runway at Dublin airport is congested at peak periods.

While Aer Lingus understands the logic behind considering peak prices in the current circumstances, we are strongly opposed to such peak pricing as it would discriminate against base carriers and would not have a material effect on the peak pattern of demand. The schedules of base carriers such as Aer Lingus are determined by the need to meet passengers' schedule requirements and to ensure the efficient utilisation of aircraft. This means that base carriers inevitably have to make maximum use of the early morning period, in particular for departures to key business destinations in the UK and mainland Europe. As a result Aer Lingus and other base carriers have very little scope to move the timing of flight away from the peak in response to increased landing charges. Consequently, peak landing charges are unlikely to have much effect on smoothing the time-of-day pattern of airport use.

## Annex - Calculating asset betas

### Estimation

In line with our preferred approach, we use two-year daily trading data as the estimation window, and the local all-share index of each airport to obtain raw equity betas for the comparators. We utilise the Bloomberg beta calculator to estimate rolling daily betas. More specifically, our earliest beta is estimated for 13/05/2003, using daily trading data ranging from 13/05/2001 to 12/05/2003. This is then followed by another beta for 14/05/2003 using data from 14/05/2001 to 13/05/2003. This process is repeated for each successive trading day. Our last beta estimate is for 13/05/2013.

Our preference is to estimate betas based on daily data rather than weekly data, providing that that trading in the equity is sufficiently liquid. Daily betas provide more precise estimates and mitigate the problem of reference day risk which can be found in weekly data<sup>9</sup>.

### Vasicek adjustment

Due to the imprecise nature of beta estimation, we promote the use of some form of adjustment to the raw estimates. There are two popular adjustment methods, namely, Blume adjustment and Vasicek adjustment. We prefer the Vasicek adjustment because it is a Bayesian probabilistic adjustment that takes account of the standard errors of the raw beta estimations in the sample. The formula for the Vasicek adjustment is as follows:

$$\beta_{adj} = \beta_{raw} \times \left(1 - \frac{se^2}{se^2 + var}\right) + \bar{\beta} \times \frac{se^2}{se^2 + var},$$

where

- $\beta_{adj}$  is the Vasicek adjusted beta;
- $\beta_{raw}$  is the raw equity beta estimate;
- $\bar{\beta}$  is the prior belief of beta, which we set to 1;
- $se$  is the standard error is the beta estimation; and
- $var$  is the variance of sample of betas.

This adjustment essentially gives more weight to those betas which are more precisely estimated relative to the sample variance and less weight to the less

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<sup>9</sup> Reference day risk occurs when the beta estimates are sensitive to the day of week that the returns are estimated from, i.e. Monday to Monday or Tuesday to Tuesday.

precise estimates. We carry out Vasicek adjustment to our raw beta estimates according to this formula.

### De-levering

In order to make betas comparable across peer comparators, they need to be de-levered into asset betas. We use the Modigliani-Miller formula to de-lever the equity betas, as set out below:

$$\beta_A = \frac{\beta_E}{\left[1 + (1 - T) \times \frac{D}{E}\right]}$$

where

- $\beta_A$  is the de-levered asset beta;
- $\beta_E$  is the equity beta;
- $T$  is the average effective tax rate within the two-year beta estimation window; and
- $\frac{D}{E}$  is the net debt divided by market capitalisation, averaged for the two-year beta estimation window.

By nature, the estimated betas tend to fluctuate from one day to the next, and we do not advocate taking beta estimates from one particular day.<sup>10</sup> We have considered a ten year average of our estimated betas to minimise estimation imprecision. Furthermore, a ten-year average is also consistent with a long-term approach towards the estimation of the WACC.

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<sup>10</sup> For example, the average betas of the sample in the latest three days of the estimation 9<sup>th</sup>, 10<sup>th</sup> and 13<sup>th</sup> May 2013 are 0.61, 0.59 and 0.56 respectively. It would very imprudent to just pick one of the three betas and trust that it would be an accurate estimate.