Maximum Levels of Airport Charges

at Dublin Airport

Commission Paper CP3/2005

Determination on Maximum Levels of Airport Charges

29 September, 2005

Commission for Aviation Regulation
3rd Floor, Alexandra House
Earlsfort Terrace
Dublin 2
Ireland

Tel: +353 1 6611700
Fax: +353 1 6611269

E-mail info@aviationreg.ie

TABLE OF CONTENTS

1. FOREWORD

This is the second Determination on airport charges made by the Commission for Aviation Regulation and the first made following the enactment of the State Airports Act, 2004. This Determination applies to maximum levels of airport charges that may be levied by Dublin Airport Authority (the "DAA") at Dublin Airport.

A key driver of this Determination is the implementation by the DAA of the Government's Aviation Action Plan of May 2005 ("Aviation Action Plan") and the delivery of cost effective capacity at Dublin Airport in a timely manner. Following the adoption of the Aviation Action Plan, the DAA has been involved in a review of its capital investment programme. This has included some consultation with main stakeholders at the airport as to the particulars of the delivery of the necessary infrastructure. The Commission fully supports this review and consultation process, it being a necessary precursor to the implementation of the Aviation Action Plan. However, as a result of this review and consultation phase, the DAA has been delayed in the delivery of its finalised capital expenditure (capex) programme to the Commission. A brief high level summary of the finalised capex programme was first delivered to the Commission on 19 September 2005[1] – the fifty-first week of a process to which the Commission was allocated 52 weeks[2].

Unavoidably, the Commission has not had the time to analyse the revised DAA capex programme against the statutory objective of economic efficiency; nor has the Commission had the time to consider the effect of the finalised DAA capex programme on all revenue streams and costs

---

[1] A report from Pascall + Watson containing a summary of the recommendations on capacity assessment was delivered to the Commission on 26 September 2005.

[2] Section 32 of The State Airports Act, 2004, directs the Commission to make a Determination within twelve months of the Dublin appointed day (1st October 2004).

throughout the period of the Determination. Such analysis is central to determining the appropriate level of airport charges.

Furthermore, the Government has not yet initiated its independent verification of the second terminal proposal. This verification is a pillar of the Government's triple safeguard to ensure maximum efficiency and cost effectiveness as stated in the Aviation Action Plan.

It is within this context that this Determination has had to be produced in order to comply with the statutory timeframe. The Determination has included an allowance for the efficient development of infrastructure at Dublin airport based on an independent assessment of the DAA Capital Investment Programme delivered to the Commission in May 2005. This includes funding for a second terminal and additional pier capacity. However, the Commission may at its own initiative, if it considers there are substantial grounds for so doing, review the Determination, and if it sees fit, amend the Determination[3]. The Commission believes that it may be appropriate to review the Determination once it and other interested parties (including the Government's own aviation experts) have had time to fully consider the finalised capex programme proposed by the DAA. Furthermore, upon Cork or Shannon Airport Authority becoming vested with the management, development and operation of their respective airports, the Commission must have due regard to such restructuring and, if it considers it appropriate, amend the Determination[4]. Accordingly, this Determination may be subject to review in the short to medium term.

There has been significant public information exchange between the Commission, the DAA and various interested parties. In addition, the Commission retained a number of consultants who have analysed different parts of the airport operator's business and have greatly assisted the

---

[3] Section 32(14)(a)(i) of the Aviation Regulation Act, 2001, as amended by section 23(1)(c) of the State Airports Act, 2004.

[4] Section 33 of the Aviation Regulation Act, 2001, as substituted by section 22(4) of the State Airports Act, 2004.

Commission in reaching this Determination. In this Determination the Commission's position as to the acceptance or otherwise of representations has been set out under the relevant topic.. Its view on other matters raised in the consultation process is set out at Section 6 of this Report. I would like to thank all those who have made representations. The views received greatly assisted the Commission in discharging its statutory functions.

William Prasifka
Commissioner

29th September 2005.

2. PRICE CAP

2.1 Definitions

For the calculation of the Price Cap formula the following definitions apply:

"2004 Annual Compliance Statement" means the Commission's Annual Compliance Statement in respect of the maximum levels of Airport Charges, published as CP10/2004, in December 2004;

"**airport authority**" means the person owning, whether in whole or in part, or managing, either alone or jointly with another person the airports to which this Determination applies by virtue of the application of Section 31 of the Aviation Regulation Act, 2001;

"**airport charges**" has the meaning assigned to it by Section 2 of the Air Navigation and Transport (Amendment) Act, 1998;

"**average revenue per passenger**" means the annual revenue from airport charges divided by the total annual number of passengers;

"**budgeted costs and expenses**" means the Commission's forecasts of its costs and expenses that form one component of the Financial Model from which the Commission computed the price caps for this Determination;

"**Commission**" means the Commission for Aviation Regulation;

"**DAA**" means the Dublin Airport Authority;

"**passenger using**" means a passenger embarking or disembarking an aircraft;

“**passenger forecast**” means the centreline passenger traffic forecast contained in the DAA’s Dublin Airport Passenger & Aircraft Movements Demand Forecast Report of March 2005;

“**the Act**” means the Aviation Regulation Act, 2001;

“**services supplied in connection with the transportation by air of cargo**” excludes, for the avoidance of doubt, services supplied in respect of the landing, parking or taking off of cargo aircraft at an aerodrome;

Other defined words, phrases or formulae shall have the meaning assigned to them where indicated, which meaning shall apply to the part of the Determination in which such words, phrases or formulae are defined.

Regulatory Period 1 January to 31 December 2006

1. The airport authority shall ensure that, for the regulatory period 1 January to 31 December 2006, the average revenue per passenger yielded by way of airport charges levied at Dublin Airport shall not exceed:

$$Y_{06}^{Dub} = €6.00$$

where

Y_{06}^{Dub} is the maximum average revenue per passenger using Dublin Airport in the regulatory period 1 January to 31 December 2006.

2. In the regulatory period 1 January to 31 December 2006, the airport authority shall not levy an airport charge in respect of services supplied in connection with the transportation by air of cargo to or from Dublin Airport that exceeds:

$$C_{06}^{Dub} = C_{05}^{Dub}\left(1 + \frac{\Delta CPI_{05} - X_{06}^{Dub}}{100}\right)$$

where

C_{06}^{Dub} is the maximum charge per tonne that can be levied in respect of services supplied in connection with the transportation by air of cargo to or from Dublin Airport during the regulatory period 1 January to 31 December 2006.

$C_{05}^{Dub} = €13.42$ is the maximum charge per tonne that can be levied in respect of services supplied in connection with the transportation by air of cargo to or from Dublin Airport during the regulatory period 1 January to 31 December 2005, as set out in the Commission's 2004 Annual Compliance Statement, CP10/2004.

ΔCPI_{05} is the percentage change (whether of a positive or negative value) in the Consumer Price Index between that published in October 2004 and October 2005.

$X_{06}^{Dub} =$ 3.7, as set out in the Commission's Determination of March 2004, CP2/2004.

The setting of this maximum charge does not constitute approval of charges in respect of cargo handling under the European Communities (Access to the Groundhandling Market at Community Airports) Regulations, 1998 (S.I. No. 505 of 1998).

Regulatory Period 1 January to 31 December 2007

1. The airport authority shall ensure that, for the regulatory period 1 January to 31 December 2007, the average revenue per passenger yielded by way of airport charges levied at Dublin Airport shall not exceed:

$$Y_{07}^{Dub} = YU_{07}^{Dub} + W_{05}^{Dub} + K_{05}^{Dub}$$

where

Y_{07}^{Dub} is the maximum average revenue per passenger using Dublin Airport in the regulatory period 1 January to 31 December 2007;

$$YU_{07}^{Dub} = Y_{06}^{Dub}\left(1 + \frac{\Delta CPI_{06} - X_{07}^{Dub}}{100}\right)$$

ΔCPI_{06} is the percentage change (whether of a positive or negative value) in the Consumer Price Index between that published in October 2005 and October 2006.

$X_{07}^{Dub} = -4$

W_{05}^{Dub} is the difference, with interest, between the Commission's estimate for its 2004 Annual Compliance Statement of its actual 2004 costs and expenses, and its final audited 2004 costs and expenses, plus the difference, during the period 1 January 2005 to 31 December 2005, between the Commission's actual costs and expenses and budgeted costs and expenses that are recoverable through airport charges levied at Dublin Airport, which is derived from the following formula:

$$W_{05}^{Dub} = (E_{05}^{Dub*} - E_{05}^{Dub})\frac{1}{T_{07f}^{Dub}}(1 + \frac{I_{05}}{100})(1 + \frac{I_{06}}{100})$$

in which

> E_{05}^{Dub*} is the Commission's actual cost and expenses in the period 1 January to 31 December 2005, that are recoverable through airport charges levied at Dublin Airport;
>
> E_{05}^{Dub} is the Commission's budgeted costs and expenses, in the period 1 January to 31 December 2005, that are recoverable through airport charges levied at Dublin Airport;
>
> T_{07f}^{Dub} is the number of passengers forecast to use Dublin Airport during the period 1 January to 31 December 2007;
>
> I_{05} is the average of the rate (expressed as an annual percentage interest rate) on three-month commercial paper issued between

December 2004 and November 2005 by the National Treasury Management Agency (NTMA).

I_{06} is the average of the rate (expressed as an annual percentage interest rate) on three-month commercial paper issued between December 2005 and November 2006 by the National Treasury Management Agency (NTMA).

K_{05}^{Dub} is the correction per passenger to be made in the regulatory year 1 January to 31 December 2007, which is derived from the following formula:

$$K_{05}^{Dub} = \left(Y_{05}^{Dub} - Y_{05}^{*Dub}\right)\left(\frac{T_{05}^{Dub}}{T_{07f}^{Dub}}\right)(1+\frac{I_{05}}{100})(1+\frac{I_{06}}{100})$$

in which

$Y_{05}^{Dub} = €4.90$ is the maximum average revenue per passenger using Dublin Airport in the regulatory period 1 January to 31 December 2005, as set out in the Commission's 2004 Annual Compliance Statement;

Y_{05}^{*Dub} is the actual average revenue per passenger from airport charges levied at Dublin Airport in the regulatory period 1 January to 31 December 2005;

T_{05}^{Dub} is the number of passengers using Dublin Airport during the period 1 January to 31 December 2005.

2. In the regulatory period 1 January to 31 December 2007, the airport authority shall not levy an airport charge in respect of services supplied in connection with the transportation by air of cargo to or from Dublin Airport that exceeds:

$$C_{07}^{Dub} = C_{06}^{Dub}\left(1 + \frac{\Delta CPI_{06} - X_{07}^{Dub}}{100}\right)$$

where

C_{07}^{Dub} is the maximum charge per tonne that can be levied in respect of services supplied in connection with the transportation by air of cargo to or from Dublin Airport during the regulatory period 1 January to 31 December 2007.

The setting of this maximum charge does not constitute approval of charges in respect of cargo handling under the European Communities (Access to the Groundhandling Market at Community Airports) Regulations, 1998 (S.I. No. 505 of 1998).

Regulatory Period 1 January to 31 December 2008

1. The airport authority shall ensure that, for the regulatory period 1 January to 31 December 2008, the average revenue per passenger yielded by way of airport charges levied at Dublin Airport shall not exceed:

$$Y_{08}^{Dub} = YU_{08}^{Dub} + W_{06}^{Dub} + K_{06}^{Dub}$$

where

Y_{08}^{Dub} is the maximum average revenue per passenger using Dublin Airport in the regulatory period 1 January to 31 December 2008;

$$YU_{08}^{Dub} = YU_{07}^{Dub}\left(1 + \frac{\Delta CPI_{07} - X_{08}^{Dub}}{100}\right)$$

ΔCPI_{07} is the percentage change (whether of a positive or negative value) in the Consumer Price Index between that published in October 2006 and October 2007.

$X_{08}^{Dub} = -4$

W_{06}^{Dub} is the difference, during the period 1 January 2006 to 31 December 2006, between the Commission's actual costs and expenses and budgeted costs and expenses that are recoverable through airport charges levied at Dublin Airport, which is derived from the following formula:

$$W_{06}^{Dub} = (E_{06}^{Dub*} - E_{06}^{Dub})\frac{1}{T_{08f}^{Dub}}(1 + \frac{I_{06}}{100})(1 + \frac{I_{07}}{100})$$

in which

E_{06}^{Dub*} is the Commission's actual cost and expenses in the period 1 January to 31 December 2006, that are recoverable through airport charges levied at Dublin Airport;

E_{06}^{Dub} is the Commission's budgeted costs and expenses, in the period 1 January to 31 December 2006, that are recoverable through airport charges levied at Dublin Airport;

T_{08f}^{Dub} is the number of passengers forecast to use Dublin Airport during the period 1 January to 31 December 2008;

I_{06} is the average of the rate (expressed as an annual percentage interest rate) on three-month commercial paper issued between December 2005 and November 2006 by the National Treasury Management Agency (NTMA).

I_{07} is the average of the rate (expressed as an annual percentage interest rate) on three-month commercial paper issued between December 2006 and November 2007 by the National Treasury Management Agency (NTMA).

K_{06}^{Dub} is the correction per passenger to be made in the regulatory year 1 January to 31 December 2008, which is derived from the following formula:

$$K_{06}^{Dub} = \left(Y_{06}^{Dub} - Y_{06}^{*Dub}\right)\left(\frac{T_{06}^{Dub}}{T_{08f}^{Dub}}\right)\left(1+\frac{I_{06}}{100}\right)\left(1+\frac{I_{07}}{100}\right)$$

in which

> Y_{06}^{*Dub} is the actual average revenue per passenger from airport charges levied at Dublin Airport in the regulatory period 1 January to 31 December 2006;
>
> T_{06}^{Dub} is the number of passengers using Dublin Airport during the period 1 January to 31 December 2006.

2. In the regulatory period 1 January to 31 December 2008, the airport authority shall not levy an airport charge in respect of services supplied in connection with the transportation by air of cargo to or from Dublin Airport that exceeds:

$$C_{08}^{Dub} = C_{07}^{Dub}\left(1+\frac{\Delta CPI_{07} - X_{08}^{Dub}}{100}\right)$$

where

C_{08}^{Dub} is the maximum charge per tonne that can be levied in respect of services supplied in connection with the transportation by air of cargo to or from Dublin Airport during the regulatory period 1 January to 31 December 2008.

The setting of this maximum charge does not constitute approval of charges in respect of cargo handling under the European Communities (Access to the Groundhandling Market at Community Airports) Regulations, 1998 (S.I. No. 505 of 1998).

Regulatory Period 1 January to 31 December 2009

1. The airport authority shall ensure that, for the regulatory period 1 January to 31 December 2009, the average revenue per passenger yielded by way of airport charges levied at Dublin Airport shall not exceed:

$$Y_{09}^{Dub} = YU_{09}^{Dub} + W_{07}^{Dub} + K_{07}^{Dub}$$

where

Y_{09}^{Dub} is the maximum average revenue per passenger using Dublin Airport in the regulatory period 1 January to 31 December 2009;

$$YU_{09}^{Dub} = YU_{08}^{Dub}\left(1 + \frac{\Delta CPI_{08} - X_{09}^{Dub}}{100}\right)$$

ΔCPI_{08} is the percentage change (whether of a positive or negative value) in the Consumer Price Index between that published in October 2007 and October 2008.

$X_{09}^{Dub} = -4$

W_{07}^{Dub} is the difference, during the period 1 January 2007 to 31 December 2007, between the Commission's actual costs and expenses and budgeted costs and expenses that are recoverable through airport charges levied at Dublin Airport, which is derived from the following formula:

$$W_{07}^{Dub} = (E_{07}^{Dub*} - E_{07}^{Dub})\frac{1}{T_{09f}^{Dub}}(1 + \frac{I_{07}}{100})(1 + \frac{I_{08}}{100})$$

in which

> E_{07}^{Dub*} is the Commission's actual cost and expenses in the period 1 January to 31 December 2007, that are recoverable through airport charges levied at Dublin Airport;
>
> E_{07}^{Dub} is the Commission's budgeted costs and expenses, in the period 1 January to 31 December 2007, that are recoverable through airport charges levied at Dublin Airport;
>
> T_{09f}^{Dub} is the number of passengers forecast to use Dublin Airport during the period 1 January to 31 December 2009;
>
> I_{07} is the average of the rate (expressed as an annual percentage interest rate) on three-month commercial paper issued between December 2006 and November 2007 by the National Treasury Management Agency (NTMA).
>
> I_{08} is the average of the rate (expressed as an annual percentage interest rate) on three-month commercial paper issued between

December 2007 and November 2008 by the National Treasury Management Agency (NTMA).

K_{07}^{Dub} is the correction per passenger to be made in the regulatory year 1 January to 31 December 2009, which is derived from the following formula:

$$K_{07}^{Dub} = \left(Y_{07}^{Dub} - Y_{07}^{*Dub}\right)\left(\frac{T_{07}^{Dub}}{T_{09f}^{Dub}}\right)(1+\frac{I_{07}}{100})(1+\frac{I_{08}}{100})$$

in which

Y_{07}^{*Dub} is the actual average revenue per passenger from airport charges levied at Dublin Airport in the regulatory period 1 January to 31 December 2007;

T_{07}^{Dub} is the number of passengers using Dublin Airport during the period 1 January to 31 December 2007.

2. In the regulatory period 1 January to 31 December 2009, the airport authority shall not levy an airport charge in respect of services supplied in connection with the transportation by air of cargo to or from Dublin Airport that exceeds:

$$C_{09}^{Dub} = C_{08}^{Dub}\left(1 + \frac{\Delta CPI_{08} - X_{09}^{Dub}}{100}\right)$$

where

C_{09}^{Dub} is the maximum charge per tonne that can be levied in respect of services supplied in connection with the transportation by air of cargo to or from Dublin Airport during the regulatory period 1 January to 31 December 2009.

The setting of this maximum charge does not constitute approval of charges in respect of cargo handling under the European Communities (Access to the Groundhandling Market at Community Airports) Regulations, 1998 (S.I. No. 505 of 1998).

2.2 Yield table

Passenger forecasts	2006	2007	2008	2009
	mpax	*mpax*	*mpax*	*mpax*
Non-EU embarking	1.2	1.4	1.5	1.7
EU embarking	8.6	9.0	9.4	9.7
Total emb. & disemb.	19.6	20.7	21.8	22.9
Discount factors	1.036	1.112	1.195	1.283

Required revenue calculation		2006	2007	2008	2009	PV
CPIye2004 - 109.8		*€m*	*€m*	*€m*	*€m*	*€m*
RAB at the start of the year		601.2	670.3	780.5	827.6	(601.2)
Net investment		112.7	156.1	95.0	98.3	(405.3)
Depreciation		(43.6)	(45.9)	(47.9)	(48.6)	
RAB at the end of the year		670.3	780.5	827.6	877.3	659.3
Average RAB		635.7	725.4	804.0	852.4	
Discounting rate of return		7.40%	7.40%	7.40%	7.40%	
Rate of return on average RAB		7.14%	7.14%	7.14%	7.14%	
Allowed return		45.4	51.8	57.4	60.8	
Operating expenditure		149.6	156.3	161.6	165.5	(549.3)
Net commercial revenues		(120.4)	(126.1)	(132.9)	(141.3)	451.0
Regulatory levy		2.0	1.7	1.7	2.2	(6.6)
Depreciation		43.6	45.9	47.9	48.6	
Other adjustments						
Allowed revenues, before profiling		120.2	129.6	135.7	135.8	452.0
						0.0
Allowed revenues per passenger, before profiling		€6.13	€6.25	€6.23	€5.92	
Annual X in CPI-X (-ve = increase)		N/A	-4.00%	-4.00%	-4.00%	
Anticipated lagged October to October CPI			2.40%	2.50%	2.50%	
Anticipated average to average CPI			2.45%	2.50%	2.50%	
Revenues per passenger, profiled	€4.82	€5.80	€6.02	€6.25	€6.50	
(1 + CPI - X)						
Allowed revenues, after profiling		113.5	124.8	136.2	149.1	452.0
Allowed revenues, after forecast inflation		€6.00	€6.38	€6.80	€7.24	

* RAB = Regulatory Asset Base

2.3 Explanatory Memorandum to Accompany Determination in Respect of the Maximum Airport Charges

Period for which the Determination shall be in force

Section 32 (5) (b) of the Act[5] states that a determination shall be in force for such a period of not less than 4 years. It has been decided that for the purposes of this Determination, the regulatory year shall run from 1 January 2006 to 31 December 2006 and for each similar 12-month period thereafter, until 31 December 2009.

Maximum Airport Charges

The Determination is expressed in terms of the maximum average revenue per-passenger yielded by way of airport charges.

For comparability with the Commission's Draft Determination, the price base of all figures quoted in the report accompanying the Determination is in December 2004 terms. However, the price cap in the Determination for regulatory year 2006 has been restated in June 2006 prices on the basis of inflation forecasts derived from those in the summer 2005 ESRI Quarterly Economic Commentary.

The Commission's calculation of the maximum average revenue yield per passenger is shown in the Table at Section 2.2.

As may be seen, the yield is calculated as follows:

(i) The average (opening plus closing values divided by two) Regulatory Asset Base (RAB) of the airport

(ii) Multiplied by the accounting rate of return of the Pre-tax Weighted Average Cost of Capital (WACC) allowed to the airport operator;

(iii) Plus indexed depreciation;

(iv) Plus the operating costs (opex) of the airport;

[5] As substituted by section 22(i)(b) of the State Airports Act 2004

(v) Less the airport's commercial revenues.

(vi) The result is divided by a forecast of passenger numbers to produce the maximum average revenue yield.

For the purposes of the Explanatory Memorandum, the following definitions apply.

"**RAB**" means the regulatory asset base; this is the value on which Dublin Airport Authority is allowed to earn a return. The RAB is calculated as follows:

The Indexed Historical Net Book Value of the DAA's Fixed Asset Register as at 31 December 2000
Plus Actual Capex from 1 January 2001 to 31 December 2004
Plus an estimate of Capex for 2005
Less Disposals as per the regulatory accounts
Less regulatory depreciation for 2001 - 2005
Less the adjustment for the imprudent investment of Pier C
Less an adjustment recouping the return already received by the DAA for Pier D

All amounts are calculated with reference to December 2004 price terms. The Commission has described in greater detail its method for rolling forward the RAB in Section 5.3 of the Report.

"**WACC**" means the weighted average cost of capital; this is computed as the weighted average of Dublin Airport Authority's cost of equity and its cost of debt, with the weights given by the shares of equity and debt in Dublin Airport Authority's total financing;

"**allowed return**" means the accounting rate of return allowed by the Commission to the airport operator, computed as the weighted average cost of capital multiplied by the average value of the regulatory asset base;

“d**epreciation**” means indexed depreciation evaluated with reference to the actual assets of the regulatory asset base of Dublin Airport Authority, using the actual asset lives on an asset by asset basis;

“**operating expenditure**” means operating costs, both aeronautical and commercial; the latter would include payroll and non payroll costs in respect of aeronautical and commercial operations at Dublin Airport;

“n**et commercial revenues**” means all revenues from commercial activities (e.g. catering, retailing and car parking) at Dublin Airport minus the cost of goods sold.

“**allowed revenues**” means the total annual revenue which Dublin Airport Authority is allowed to collect in the form of airport charges;

“**passengers**” means the passenger forecast that the Commission has decided upon for the purposes of the Determination. A passenger is counted each time a person embarks or disembarks from an aircraft at Dublin Airport. The passenger forecast used is set out at Annex 1 of this report;

“**allowed revenues per passenger**” means maximum allowable revenue divided by the passenger forecast.

2.4 Analysis of Changes to Price Caps between Draft and Final Determinations

The following set of Tables shows the principal differences between the constituents of the Yield Tables that were reported in (Annex 10 of) the Draft Determination, and those contained in this Determination. As elsewhere in this report, all values are in 2004 prices for comparability with the figures of the Draft Determination.

RAB at 1 January 2006	
CPIye2004 - 109.8	*€m*
Opening RAB per draft determination	625.0
Pier C adjustment	(13.4)
Pier D adjustment	(6.6)
Revised depreciation assessment on 2001 capex	0.2
Reduced capex projected for 2005	(2.1)
Reversal of adjustment reconciling to registers	(2.0)
Unexplained differences	
Opening RAB	601.2

The January 2006 RAB used in this Determination is some €24 million lower than that of the Draft Determination, for three main reasons: the exclusion of the Pier C 2001 write-down; the removal of the income earned by the DAA on the Pier D that was not built; and the decision not to align the RAB with the DAA's indexed fixed asset register. Two other technical and very small adjustments are also shown in the Table above.

Net investment	2006	2007	2008	2009
CPIye2004 - 109.8	*€m*	*€m*	*€m*	*€m*
Net investment per draft determination	124.8	181.9	122.8	119.7
T2 Planning & Design	(3.4)	(3.4)	(1.5)	(0.8)
T2 Construction		(15.3)	(26.8)	(21.1)
Reservoir Expansion			(0.8)	(0.8)
Pier D	(9.2)	(4.7)		
Debottlenecking Extension North	(0.6)	(4.4)		
Indexation difference	1.1	2.0	1.4	1.3
Net investment	112.7	156.1	95.0	98.3

The Table above presents the differences between the Commission's Recoverable Capex Programme (which in the yield tables is labelled net investment) that has been used in n this Determination and the DAA's May 2005 Capital Investment Plan that was relied upon in the Draft Determination. The main changes relate to the capital expenditure assessment carried out by the Commission. There is also a small indexation difference arising from the Commission's decision – in order to maintain comparability between the Recoverable Capex Programme and the CIP – to treat the DAA's May 2005 CIP as being expressed in December 2004 prices (rather than 2005 prices, which reflected the DAA's interpretation).

Allowed depreciation	2006	2007	2008	2009
CPIye2004 - 109.8	*€m*	*€m*	*€m*	*€m*
Allowed depreciation per draft determination	43.8	46.7	49.5	50.8
Depreciation effect of capex differences	(0.2)	(0.8)	(1.6)	(2.2)
Allowed depreciation	43.6	45.9	47.9	48.6

There is only a very small difference between the depreciation values of the Draft and of this Determinations, arising from the Commission's rescaling of the Draft Determination's depreciation charge to reflect the difference in size between the Recoverable Capex Programme and the DAA's May 2005 Capital Investment Plan.

Operating expenditure	2006	2007	2008	2009
CPIye2004 - 109.8	*€m*	*€m*	*€m*	*€m*
Operating expenditure per draft determination	144.8	149.3	152.4	155.1
Additional security personnel	4.2	4.4	4.6	4.9
Scaled back efficiency assumptions	0.6	2.6	4.5	5.6
Operating expenditure	149.6	156.3	161.6	165.5

The opex allowance in this Determination is somewhat higher than that used in the Draft Determination, by the amounts shown in the Table above. This is because, first, the latest DAA opex projections envisage higher staffing levels with their associated costs in order to meet the airport security standards that will be required at Dublin Airport. Second, on the basis of the representations received by the Commission following the draft Determination, and the ensuing discussions between the DAA, the Commission and its consultants, BAH, the Commission has revised downwards by a small amount the efficiency improvements it considers may be achieved by the DAA at Dublin Airport over the period of this Determination.

Commercial revenues	2006	2007	2008	2009
CPIye2004 - 109.8	*€m*	*€m*	*€m*	*€m*
Commercial revenues per draft determination	121.5	128.3	134.5	143.6
Scaled back growth assumptions	(1.0)	(2.1)	(1.6)	(2.3)
Commercial revenues	120.4	126.1	132.9	141.3

The projections of commercial revenues used to calculate the price caps for this Determination are a little lower than those of the Draft Determination, by the amounts shown in the Table above. On the basis of the representations received by the Commission following the draft Determination, and the ensuing discussions between the DAA, the

Commission and its consultants, ASA have revised downwards by a small amount the commercial revenues that they consider may be achieved by the DAA at Dublin Airport over the period of this Determination.

Regulatory levy *CPIye2004 - 109.8*	2006 *€m*	2007 *€m*	2008 *€m*	2009 *€m*
Regulatory levy per draft determination	2.0	1.5	1.5	1.5
Additional cost estimation		0.2	0.2	0.7
Commercial revenues	2.0	1.7	1.7	2.2

In view of the changed periodicity of this Determination (to end-2009 rather than end-2010 for the Draft Determination), the Commission has made modest changes to the size and timing of its projections of its own costs in respect of airport regulation.

The following Table reports the contributions (in cents per passenger) to the differences between the Commission's Price Caps of the Draft and Final Determinations, and between the Commission's Final Determination and the Price Cap sought by the DAA.

Analysis of differences in average price assessments

	Draft to Determination		Determination to DAA	
	cents	€/pax	cents	€/pax
Starting Price		€5.94		€6.14
Impact of differences				
5yr to 4yr	(0.6)			
Commercial revenues	8.3		28.1	
Opex	37.6		23.8	
Capex assessment	(18.2)		18.2	
Revised capex plan			17.7	
Pier D adjustment	(2.8)		2.8	
Pier C adjustment	(4.5)		4.5	
Cost of capital			39.9	
Total	19.6	€0.20	135.1	€1.35
Closing price		€6.14		€7.49

Changes to the formula

The Commission has rescaled the K and W terms on the basis of the passenger traffic forecast, in order to better align the absolute size of these terms from the base year in which they are measured to the year in which they are applied.

To allow for availability of final audited accounting data, the Commission has decided to allow a lag of two years (previously one year) in computing the K & W factors. This means that actual figures as opposed to estimates will be available each year, thus eliminating the need for reconciling estimates to actuals in following years. Interest will be charged/allowed as necessary for the lagged period.

Cargo sub-cap

In 2001, the Commission set a cargo sub-cap at IEP£10/€12.70 per tonne of cargo. This amount has been rolled forward with inflation and the X factor and was computed to be €13.42 for the regulatory period 1 January to 31 December 2005, as set out in CP2/2004. This sub-cap will be rolled forward with inflation and the relevant value of X each year.

2.5 Sub cap on off-peak landing and take off charges

The Commission indicated in CP2/2005 that it would review patterns of runway utilisation at Dublin Airport and that, if circumstances had changed, it would review its position in respect of the sub cap on off peak landing and take off charges. Having undertaken this review, the Commission is of the view that there are no longer periods of under-utilisation of the runways that peak/off peak charging differentials could encourage airlines to use, and that, by the time a new increment of runway capacity is due to become operational, existing capacity will be efficiently utilised. The Commission has, therefore, decided to remove the sub cap on off peak landing and take off charges.

Notwithstanding the above, the Commission advocates marginal cost-pricing as a means of encouraging efficient capacity utilisation. Therefore, if the DAA were to maintain a peak/off peak pricing system for runway use or, indeed, for use of any other component of airport capacity, such a system would be compatible with the Determination. For a fuller treatment of this issue please see the paper on the Sub-Cap on off-peak landing and take off charges set out at Annex 2.

3. STATUTORY OBJECTIVES

Section 33(1) of the 2001 Act, as substituted by Section 22(4) of the 2004 Act, states that:

"in making a determination, the objectives of the Commission are as follows:

(a) to facilitate the efficient and economic development and operation of Dublin Airport which meet the requirements of current and prospective users of Dublin Airport;

(b) to protect the reasonable interests of current and prospective users of Dublin Airport in relation to Dublin Airport;

(c) to enable Dublin Airport Authority to operate and develop Dublin Airport in a sustainable and financially viable manner."

The Commission set out its interpretation of its statutory objectives in CP2/2005. The Commission remains of the view that the new statutory objectives permit the continuation, by the Commission, of the regulation of airport charges imposed at Dublin Airport by the DAA by reference to the economic concepts of productive, dynamic and allocative efficiency. Accordingly, economic efficiency continues to be the driving principle of this Determination as it has been for the first Determination in 2001 and the subsequent review in 2004.

All the statutory objectives must be read together and in light of each other. Undoubtedly, with reference to subsections (a) and (b), the objective to promote efficiency has been strengthened. Subsection 33(1)(c) relating to sustainability and financial viability ("SFV") is an entirely new provision that seeks to promote a viable airport.

Having regard to the provisions contained in the 2004 Act and in light of the nature and purpose of economic regulation, the Commission is of the view that the new statutory objectives require it to continue to regulate airport charges with reference to the economic concepts of productive, dynamic and allocative efficiency. As set out below, these concepts continue to promote the statutory objectives of the Commission, as amended. By directly stating the Commission's objective as being to facilitate the efficient and economic development and operation of Dublin Airport, this amendment has in the Commission's view, strengthened the emphasis on economic efficiency as a principle of airport charges regulation. In addition to the statutory objective, the Commission is required to have due regard to a number of factors, which have also been amended by the 2004 Act.

In interpreting the new objectives, the Commission has equated:

1. productive efficiency with the reference in (a) to the efficient and economic operation of Dublin Airport;

2. dynamic efficiency with the reference in (a) to the efficient and economic development of Dublin Airport to meet the requirements of prospective users, the reference in (b) to protecting the reasonable interests of prospective users, and the reference in (c) to enabling an efficient operator of Dublin Airport to be able to operate and develop the airport in a sustainable and financially viable manner;

3. allocative efficiency with the reference in (a) to meeting the requirements of current users, and the reference in (b) to protecting the reasonable interests of current users.

Where the three economic efficiencies (productive, dynamic and allocative) are observed, economic welfare (the excess of the value of producing a good or service over its production cost) is maximised.

In addition to strengthening the basis for its approach of promoting economic efficiency, objective (a) can also be seen as a replacement of the previous Section 33(b) of the 2001 Act, which required the Commission to have due regard to the regulated company earning a reasonable rate of return on capital employed. Providing for a reasonable rate of return encourages the entity providing the regulated services to make efficient decisions, regarding the amount of capital to invest in the regulated activities. Moreover, providing for the regulated firm to earn a reasonable rate of return on capital employed in investment, should enable the sustainable and financially viable operation and development of the airport and is thus in the interest of users.

The Commission is of the view that providing for the regulated firm to earn a reasonable rate of return on capital employed in the business, thereby allowing its sustainable and financially viable operation, is in the interest of users and, as outlined in the previous paragraph, facilitates dynamic efficiency. In this regard statutory objectives (a) and (b) are closely linked.

The Commission has noted that "users" is now defined under the Act and explicitly applies to a broad group of persons that have a nexus to the airport.

The Commission believes that safety, security and levels of service and quality are encapsulated by the reference to meeting user requirements in the pursuit of objective (a) but also by the reference to protecting the reasonable interests of current and prospective users in objective (b).

With regard to statutory objective (b),

"*to protect the reasonable interests of current and prospective users of Dublin Airport in relation to Dublin Airport",*

the Commission previously interpreted "meeting the requirements of users", with regard to allocative efficiency, where all users willing to pay the efficient cost of a service have access to it (or can be expected to have in the future). In this manner, one may also interpret "reasonable interests of users".

3.1 The statutory objective of sustainability and financial viability

In the context of analysing the finances of the DAA, and with reference to the criteria surrounding a 'single A' credit rating, the Commission in CP2/2005, set out its initial approach to sustainability and financial viability (SFV). This involved careful monitoring of a range of financial ratios used by the credit rating agencies and the financial community. **Table 1** lists these ratios and the corresponding threshold values considered by the Commission. In its response to CP2/2005, DAA expressed the view that the EBIDTA cover ratio should be either 3 or 4 and not 2. The Commission is satisfied that the cover ratio used is sufficient to enable the development of the airport in a sustainable and financially viable manner.

Table 1: Financial ratios & threshold values

Ratio	Threshold Value
FFO : Debt[6]	20%
FFO : Interest	2.5x
EBITDA : Interest[7]	2x
EBIT : Interest[8]	1.5x
AICR[9]	1.5x

Standard & Poor's (the agency that provides a rating for DAA's Eurobond) indicated that it was particularly interested in two of these ratios - FFO:Interest and FFO:Debt. Accordingly, the Commission has considered these two ratios closely. The Commission notes, but does not agree with,

[6] FFO stands for Funds From Operations and is a measure of a company's cash flow.

[7] Earnings Before Interest, Tax, Depreciation and Amortisation

[8] Earning Before Interest and Tax

[9] Adjusted Interest Cover Ratio

the Aer Lingus view that provided the company can demonstrate adequate cash flow ratios, the FFO:Debt ratio has no relevance to a regulated company. In the financial modelling scenarios in CP2/2005, the DAA's projected interest cover ratios largely exceeded the threshold values in **Table 1** above, even during the period of highest investment activity, as shown in **Table 2** below.

Table 2: Financial Ratios for Scenario S3[10]

Group financial indicator	Indicative threshold	2006	2007	2008	2009	2010	Average
Debt: RAB at year end (%)	70 (max)	49.0	52.4	54.3	54.1	53.0	52.6
FFO: average debt (%)	20	17.5	16.2	14.3	14.2	14.8	15.4
EBITDA cover	2	3.9	3.9	3.1	3.3	3.5	3.5
FFO cover	2.5	3.9	3.9	3.2	3.4	3.6	3.6
AICR cover	1.5	2.5	2.4	2.0	2.1	2.2	2.2
EBIT cover	1.5	2.4	2.3	1.9	2.0	2.1	2.2

The FFO:Debt ratio, however, fell short of the threshold value and it was, therefore, concluded that this ratio might be problematic for the DAA in the future, particularly in the context of an ambitious capex programme[11]. Standard and Poor's (S&P) indicated that a sustained performance at these levels could threaten the company's current rating of single A with a negative credit watch (A/Negative/A-1).[12]

---

[10] Sections 4.2 and 5.3 of Commission document CP2/2005, 31st May 2005, set out seven indicative price scenarios for DAA S1-S7.

[11] See the discussion of the Commission's methodology for rolling forward the RAB from the previous Determination in section 8.4 of CP2/2005.

[12] The scenario mentioned in the table above (S3) utilised the opening Regulatory Asset Base (RAB) value of Dublin Airport for 2006 and the RAB was rolled forward on the basis of the full capex programme of the DAA in the years 2006 to 2010. The real pre-tax return was set equal to 7.4%. The operational expenditure (opex) was the Commission's preferred opex baseline, composed of elements of the DAA Business Plan opex together with elements of the Booz Allen Hamilton's (BAH) projected opex. Commercial revenues were as projected by Alan Stratford & Associates (ASA), using the DAA's allocation of EU and non-EU passengers. The

Figure 1: Evolution of Financial Ratios up to 2020 (Without Price Profiling)

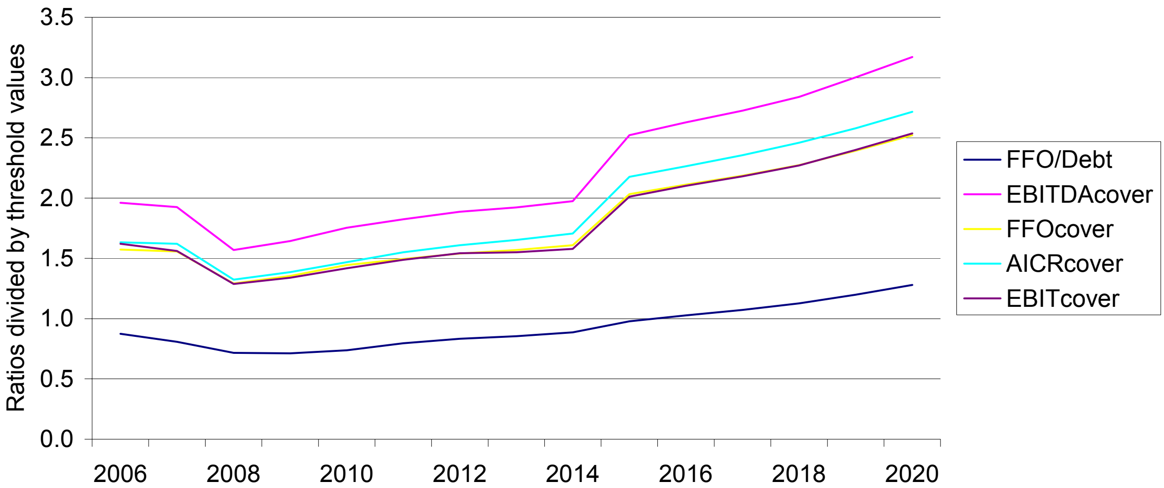


Figure 1 above plots the projected financial ratios for this scenario and extends them to 2020, but with each ratio divided by its threshold level. Hence, a value of less than 1 on the chart indicates that the financial ratio falls below its indicative threshold. The chart shows that the only financial ratio, which might give cause for concern, is the FFO:Debt ratio, which is below its threshold level (of 20 per cent) in all years up to 2015. The chart also shows that all financial ratios are projected to rise through time, suggesting that in the longer term SFV may be less of an issue.

---

resulting revenues were divided by the DAA's centerline passenger traffic forecast.

Figure 2: Sensitivity of SFV Problem to Size of CAPEX Programme

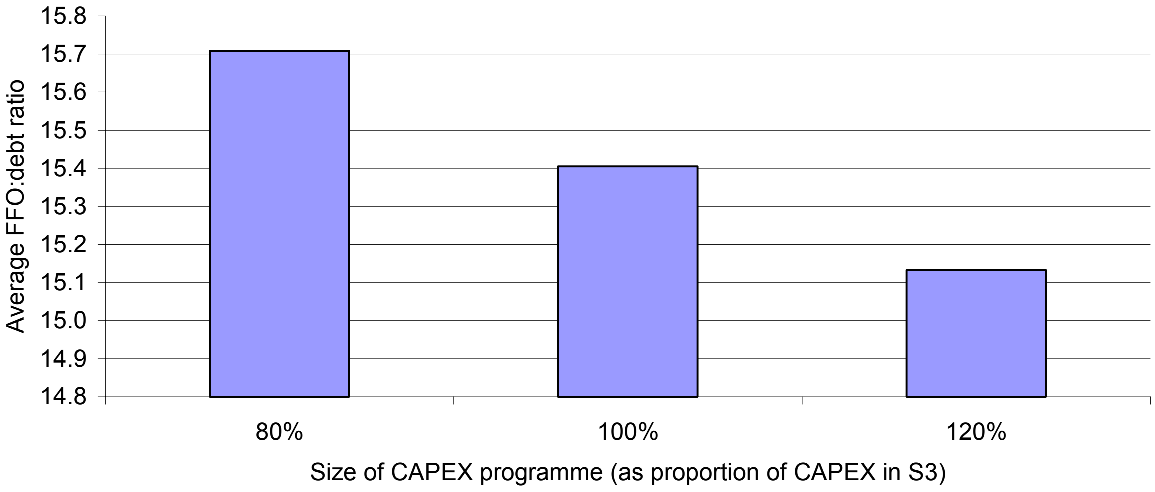


Figure 2 shows the sensitivity of the SFV problem to the size of the CAPEX programme (note that the scale used on the vertical axis does not start at zero). The results show that if DAA's CAPEX allowance is reduced by 20 per cent compared to the figure assumed by the Commission in scenario S3, then the FFO:Debt ratio improves marginally from 15.4 per cent to 15.7 per cent.

CP2/2005 set out in two scenarios[13], the effect of a price adjustment implemented by way of accelerated depreciation of the RAB that would enable the DAA to maintain an FFO/Debt ratio of 18% (S5) or 20% (S6). The effect of such SFV adjustments on the price cap was significant and amounted to a substantial increase in the average price cap of €0.64 and €1.12 respectively. The Commission identified the making of such an SFV adjustment as a "key question, and perhaps the defining question for this consultation . . . "[14] In its response to CP2/2005, the DAA argued that the Determination should enable it to maintain a single A credit rating, but rejected an explicit adjustment by way of accelerated depreciation of the RAB, instead arguing that the appropriate adjustment should be by way of

[13] Scenarios S.5 and S.6 described in sections 4.2 and 5.3 of Commission document CP2/2005, 31 May 2005.

[14] See CP2/2005, page 38

an increase in the company's cost of capital (from 7.4% to 8.5%)[15]. The Commission notes that, regardless of how the adjustment is made, the effect on the price cap would be the same[16]. Aer Lingus argued that no price adjustment at all should be made for financial viability reasons, once the company is able to demonstrate adequate cash flow ratios.

The Commission has not been convinced by arguments made during the consultation process, that enabling the DAA to maintain a single A credit rating is essential to achieve the objective of enabling Dublin Airport authority to operate and develop Dublin Airport in a sustainable and financially viable manner (expressed in statutory objective (c) above).

The Commission analysed the international credit markets to assess the DAA's arguments on how the Commission can best achieve this objective. The review was undertaken in the context of the Commission's commitment to enable the DAA to adequately fund its capex programme in a cost effective manner.

In its response to CP2/2005, the DAA stated that it, "must maintain funding confidence and preserve an appropriate credit rating if it is to finance new investment efficiently. In the DAA's view, this should be an "A" rating, as a rating below this level would have the impact of restricting DAA's borrowing capacity, potentially limiting or delaying ability to invest in infrastructure."[17]

It went on to state that, "the Commission has proposed the use of accelerated depreciation as an approach to achieving a target financial ratio for the company over the next regulatory period. However, DAA believes that the scale of the adjustments computed by the Commission,

---

[15] The Cost of Capital for the DAA, a final report for the DAA, NERA Economic Consulting April 2005.

[16] Of course, the Net Present Value (NPV) of the two adjustments would not be the same.

[17] Dublin Airport Authority Response to Commission Paper CP2/2005, 1 July 2005, page 17.

demonstrates that it is not appropriate to address financial viability by adjusting the time profile of regulatory depreciation in these circumstances. A methodology that results in financial returns that are well below financial viability standards for a given cost of capital indicates that the cost of capital applied is incorrect."[18]

The DAA put forward two arguments in support of the need for the company to maintain an "A" rating during the period of the next Determination:

- a rating below A would have the "impact of restricting the DAA's borrowing capacity, potentially limiting or delaying ability to invest"[19]

- a rating downgrade of the DAA to "BBB+" would mean an increase in the real cost of debt to DAA of 20-35 bps[20] over "A" rated debt[21]

---

[18] Op. cit., page 21.

[19] Dublin Airport Authority Response to CP2/2005, 1st July 2005, page 18

[20] Basis points (bps) are equal to hundredths of one percent.

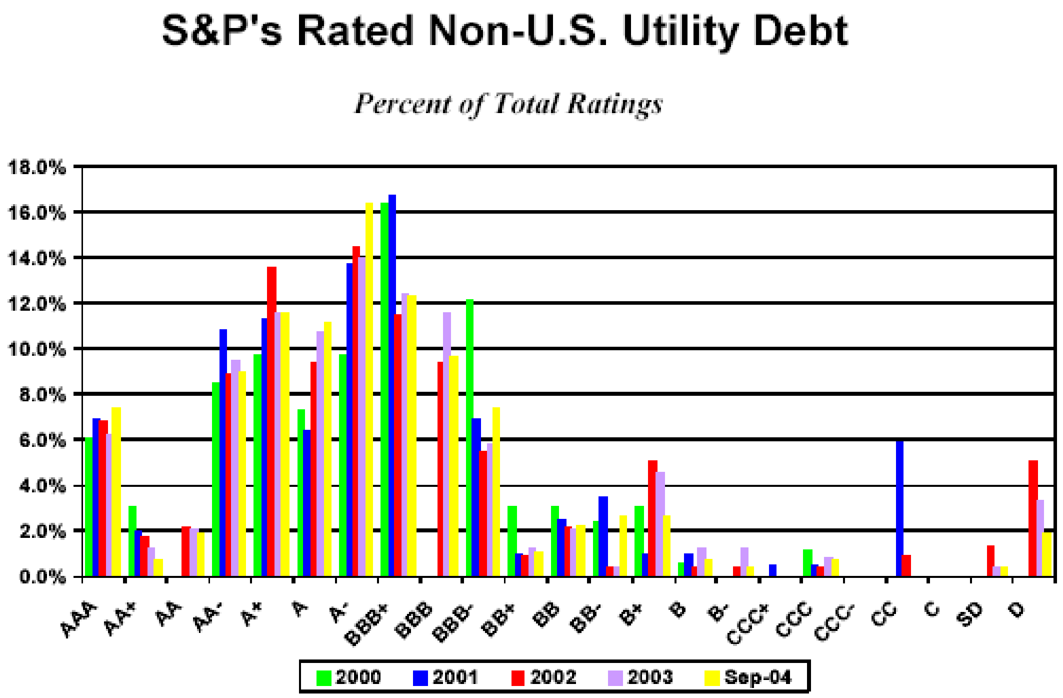
[21] The Costs of Capital for the DAA, a final report for the DAA NERA Economic Consulting, April 2005, section 9.2, page 70.

3.1.1 <u>The question of the importance of maintaining an "A" credit rating for the availability of financing to the DAA</u>

The Commission at all times has recognised that its Determination must allow the DAA to finance an efficient capital expenditure programme. However, it does not accept the DAA submission that such an objective requires the company to maintain an "A" rating. Rather, the Commission has concluded that a determination that allows the DAA to maintain an investment grade rating, which includes A as well as BBB, is sufficient for the Commission to achieve its statutory objective in regard to the operation and development of Dublin Airport in a sustainable and financially viable manner[22]. The Commission has come to this conclusion for the following reasons:

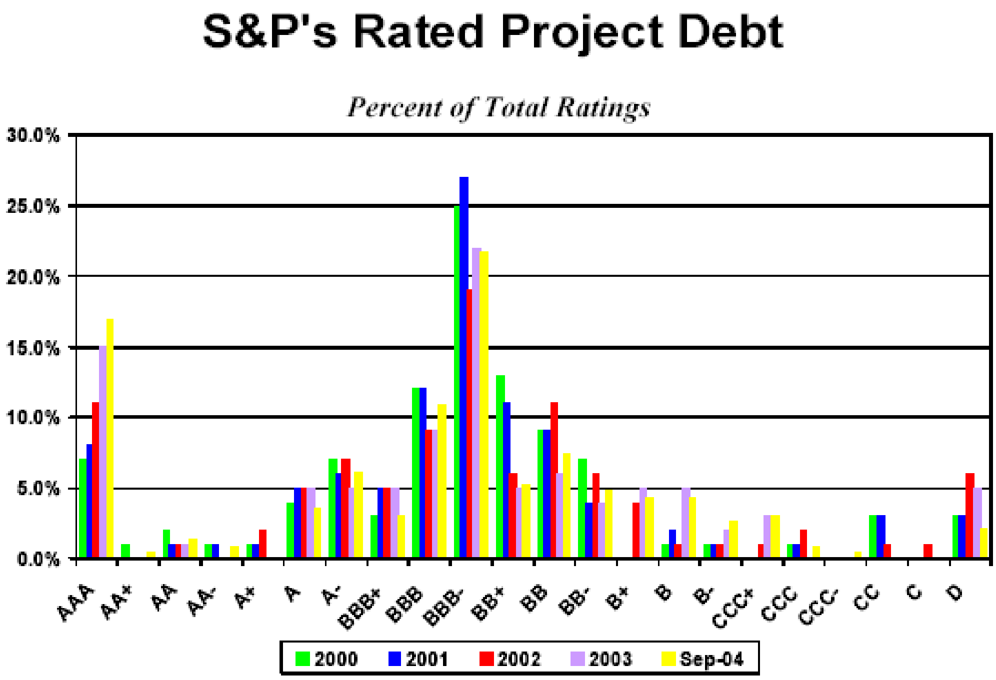
1. The DAA position underestimates the liquidity and depth of international bond markets for financing investment grade debt below A. See figures 3 and 4 below. While it is a fact that the community of potential investors decreases as the grade approaches BBB- (the lowest investment grade), the issuance of investment grade debt below A is not insignificant in volume.

Figure 3



[22] The Commission notes the Aer Lingus submission in support of this view.

Figure 4



In addition, the DAA position does not acknowledge that several airports are financially viable having credit ratings below A grade. Globally, there are several airports with debt ratings below A, several being of the same approximate size, or larger, than Dublin Airport in terms of passenger volume. **Table 3** lists those airports and shows that, even within the last twelve months, some of these larger airports, having a credit rating below A, have successfully accessed debt markets through bond issues.

Table 3: Credit Ratings and Recent Debt Issuance of Selected Airports

Airport	***Issuer / Parent company Rating***	***Airport size (000s annual total pax)***	***Debt Issuances within last 12 months***
Adelaide Airport Ltd	*BBB-/stable*	*4,361*	
Australia Pacific Airports Corp Ltd	*A-/stable*	*18,993*	
Brisbane Airport Corp Ltd	*BBB/stable*	*13,644*	
Macquarie Airports	*BBB-/stable*	*n.a.*	
Southern Cross Airports Corporation Holdings Ltd	*BBB-/stable*	*26,428*	*A$200 million capital indexed bonds due Nov 2020 (credit wrapped through MBIA (Expected to be issued July 2005))*
Wellington International Airports Ltd	*A/stable*	*4,602*	
Westralia Airports Corp Pty Ltd	*BBB-/stable*	*6,038*	
Greater Toronto Airports Authority	*A-/stable*	*28,615*	*C$250 million. 6.47% maturing 2034(2nd Sept, 2004)* *C$350 million fixed rate notes (4th Feb 2005)* *C$600 million floating notes (16th May, 2005)*
Aeroporti di Roma	*BBB+/stable*	*30,676*	
Birmingham Airport Holdings Ltd.	*A-/stable*	*9,222*	
Brussels International Airport Co	*BBB+/stable*	*15,200*	*€1.1 billion bank loan (6th Jan, 2005)*
City Aviation Finance Ltd	*BBB/stable*	*1,685*	
Newcastle International Airport Ltd	*BBB+/stable*	*4,749*	
Unique Flughafen Zurich AG	*BBB/stable*	*17,252*	

(source; S&P Industry Report Card, 29th June 2005 and Airports Council International for pax. data)

2. Two leading regulators in the United Kingdom (Ofwat and Ofgem) have assessed SFV on the basis that companies should be able to maintain "solid investment grade credit ratings" or ratings "comfortably within investment grade." Given that the lowest investment grade is BBB-, the phrase of "comfortably within" could be interpreted as being BBB or BBB+ or could, in some cases, be interpreted as single A, which incorporates A-, A and A+. Therefore, the Commission considers that its SFV objective is reasonably achieved if the company's financial projections are robustly consistent with investment grade ratings, i.e. even in realistic downside scenarios, and especially if those financial projections indicate consistency with single-A ratings in the longer term.

It was noted above that S&P indicated that a sustained pattern of the DAA's FFO/Debt ratio below the 18-20% range could threaten the company's current single A rating. However, given the Commission's decision to assess SFV on the basis of the DAA maintaining an investment grade credit rating, the appropriate threshold for the FFO/Debt ratio would be below that range. Indeed, the same UK regulators, mentioned above, have adhered to FFO/Debt thresholds in the range 12-13%. The FFO/Debt ratio projected for the DAA from scenario S3 in CP2/2005 (which includes the company's entire capex) was 15.4%, comfortably above the minimum levels used by the UK regulators. In addition, interest rates are lower in the Euro zone area than in the UK, resulting in companies requiring lower levels of FFO to service a given level of debt.

On the other hand, one may argue that the DAA is more risky than UK water and network electricity companies, such that there is greater uncertainty around FFO projections. In other words, demand for air travel may be more uncertain than demand for water or electricity. However, in the event of a material, sustained downturn in economic activity and traffic, the timing profile of future capital investment should respond appropriately to limit the DAA's funding requirements. Under extraordinary economic conditions or when the financing environment for airports is difficult, it may be that a pause in capital activity is both necessary and prudent, as DAA awaits clarity on the impact on aviation activity.

Standard & Poor's (S&P) has told the Commission that in setting a credit rating for a firm, it does not merely apply financial metrics in a mechanical fashion but also considers the background business, economic and policy environment. In this regard, it views the underlying business environment of Dublin Airport as very strong: being an essential facility for a major population centre in a strong economy with a government shareholder.

2 The DAA position does not acknowledge the potential for alternatives to public bond markets, such alternatives do not tend to require an explicit debt rating. First, is bank debt, which a number of airports use as their primary financing source, for example, Luton and Bristol airports. Borrowers do not need to be rated because banks perform their own detailed due diligence. Second, is credit wrapped bonds[23], such as Sydney Airport's recent debt issuance. This method would provide an alternative debt source in the event of a decline in DAA's rating and reduced liquidity from direct bond investors. In Sydney's case, the parent company is BBB stable rated but was able, through an associated company, to issue long-dated (15 year maturity) AAA debt based on a guarantee from MBIA, a "monoline" insurance company[24]. The insurance company undertakes the detailed credit analysis and, for lower rated issues, is usually willing to take more long-term risk, at a lower spread than direct bond investors. This approach of interacting with a counterparty can offer greater transactional efficiency, certainty and flexibility on repayment profile for lower rated issues. Liquidity and

---

[23] A credit wrapped bond is a bond issued by one company guaranteed by another company typically has "AAA" rating. The bond then assumes the credit rating of the latter company rather than the underlying issuer. Guaranteeing such bonds is the core business of "monoline" insurance companies.

[24] Selling credit risk protection is not new in the insurance industry. The practice, known as "monoline" credit assurance, has existed since the 1970s. Companies who provide this service are described as monoline insurance companies.

demand for lower wrapped bonds is typically high since they normally receive the same rating as the monoline insurance company (typically AAA). The Commission notes that a significant portion of UK Private Finance Initiative (PFI) and Public Private Partnership (PPP) financing has been achieved in this way.

Table 4 – Examples of UK PFI/PPP Financing

Issuer	Bond Issue	Insurer	Underlying Rating	"Wrapped" Bond Rating
Autolink Concessionaires (M6)	£125M due 2022	Financial Security Assurance	BBB+	AAA
Metronet Rail BCV Finance	£515M due 2032	Ambac Assurance & Financial Security Assurance	BBB+	AAA
Infraco JNP	£0.6 bn due 2027	Ambac Assurance	BBB+	AAA
Road Management Consolidated (A1 (M) /A417/A419)	£165 m	Ambac Assurance	BBB	AAA

Source: S&P Credit Survey of the UK Private Finance Initiative and Public-Private Partnerships (April 2003)

4. The FFO:Debt ratio referred to so far, is that applicable to the DAA as a whole (the company as opposed to Dublin Airport), which takes into account cash flows and debt from activities other than the regulated business of operating Dublin Airport. In this regard, the Commission notes the wording of the statutory objective, which is "to enable Dublin Airport Authority to operate and develop Dublin Airport is a sustainable and financially viable manner." It also notes that the FFO:Debt ratios used by UK regulators are based on their regulated businesses. Having regard to the estimated relative strength of the FFO:Debt ratio of the Dublin Airport business itself (which meets even the 20% threshold sought by the DAA; see S7 in CP2/2005.), the Commission is not persuaded by the arguments presented in submissions to make a SFV

adjustment that is driven by activities outside the regulatory till as this would run contrary to principles of economic efficiency and would be inconsistent with the exclusion of such activities from the regulatory till in calculating the price cap. Furthermore, the Commission believes there is no regulatory precedent for such an approach.

Accordingly, the Commission concludes that the availability of adequate finance to DAA is not dependent on the DAA maintaining an "A" rating. The DAA will have adequate access to funds as long as it maintains a rating within investment grade, which includes BBB.

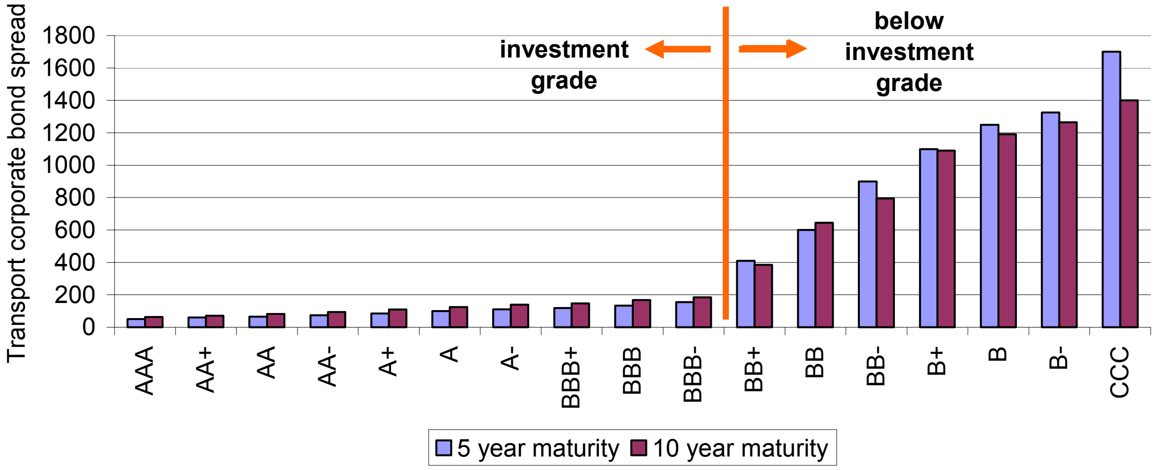
3.2 The question of the importance of the DAA maintaining a S&P "A" rating for its real cost of debt

As the Commission has assessed SFV on the basis of the DAA maintaining an investment grade (as opposed to A) credit rating, this being sufficient to enable the company to secure funding for its capex programme, then what remains, is an analysis of the potential cost to the company and consequent cost to the users of the airport of a credit rating below "A". NERA, on behalf of the DAA, estimated the premium on BBB rated debt over A rated debt to be of the order of 20-35 basis points[25]. The Commission requested an independent analysis of this issue by Europe Economics, who broadly concurred with NERA's conclusions.

---

[25] See footnote 17 above.

Figure 5: Impact of credit rating on transport corporate bond spreads



Source: www.bondsonline.com

Figure 5 above shows the relationship between credit ratings and bond yields, which makes use of data quoted by NERA showing Reuters corporate transport bond spreads for different credit ratings and maturities. Within investment grade, lower ratings lead to a relatively small increase in the cost of debt. Once the credit rating falls below investment grade, bond yields increase much more substantially.

Figure 6: Impact of credit rating on transport corporate bond spreads, within range A to BBB–

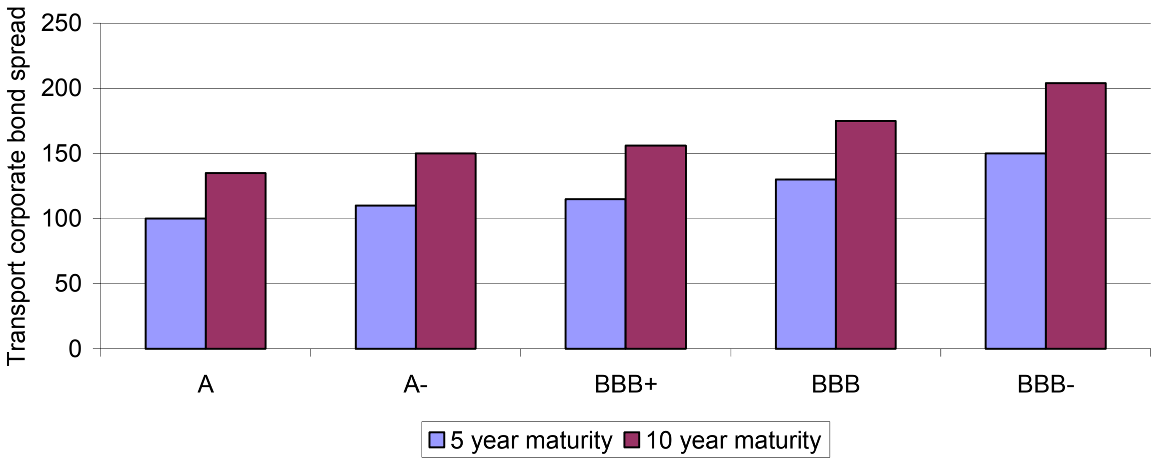


Figure 6, above, is drawn from the same dataset as figure 5 referred to earlier, but focuses on the corporate bond spreads for ratings A to BBB–.

The figure clearly shows that some increase in DAA's cost of debt would be likely if the company were to be down-rated.

Therefore, if the DAA's debt were to be rated BBB rather than A, leading to an increase of 20-35 basis points in the real cost of debt, this event would have a very modest effect on the company's weighted average cost of capital (WACC). For example, using Kearney & Hutson's assumptions, with 46% gearing, the impact on the pre-tax WACC might reach about 14 basis points. The Commission has been advised and has adopted the position that this is well within the margin of error for the 7.4% cost of capital value recommended by Kearney & Hutson. Accordingly, the Commission has decided that its objective to enable DAA operate and develop Dublin Airport in a sustainable and financially viable manner does not require an adjustment in the cost of capital from that put forward in CP2/2005. Furthermore, the Commission holds the view that the modest impact of a BBB rather than an A rating on the WACC lends further support to the proposition that the Commission should interpret its SFV objective as enabling DAA to maintain an investment grade credit rating, as opposed to an "A" credit rating.

3.3 Risk

The calculations involved in making a determination of airport charges necessarily use forecasts and projections and the Commission recognises that these forecasts and projections are not certain. The only certainty is that outturns will be different. The Commission has sought to take full account of this uncertainty in developing its approach and making its calculations.

A regulator is uncertain about the efficient level of costs in a regulated business and the future potential to become more efficient. At the same time, both the regulator and regulated company have a shared uncertainty about future external events that will impact on the costs and outputs of the business.

The Commission has considered the two relevant aspects of these uncertainties. The first is asymmetry, or bias, meaning a tendency for forecasts to be inaccurate in one particular direction. The second is the scale of uncertainty.

It is widely recognised by regulators that a regulated company has superior information about efficient levels of cost, a problem known as information asymmetry and which would mean that forecasts prepared by the company could tend to overstate costs. This may be a specific example of a more general phenomenon of forecasting bias.[26] There appears to be strong evidence of bias in all kinds of forecasts. While there may be information asymmetry and strong incentives to overstate costs, the Commission recognises that there may be competing tendencies of prudence and optimism in the mind of the forecaster in a regulated company and that the company will have poor information on exogenous risk which may be predominantly downside.

Regulators seek to overcome the problem of information asymmetry by considering efficiency benchmarks. Benchmarking is notoriously difficult in any sector and there are particular issues relating to airports[27]. The UK CAA undertook a significant econometric benchmarking exercise in its last airports reviews but concluded that the overall results "were not robust enough to produce an assessment of relative efficiency that could be used to estimate the scope for the regulated airports to make efficiency

---

[26] This was noted in the UK's 'Green Book, Appraisal and Evaluation in Central Government': "There is a demonstrated, systematic, tendency for project appraisers to be overly optimistic. This is a worldwide phenomenon that affects both the private and public sectors. Many project parameters are affected by optimism – appraisers tend to overstate benefits, and understate timings and costs, both capital and operational. HM Treasury, 'Green Book, Appraisal and Evaluation in Central Government', Chapter 5

[27] See discussion in paragraph 3.12, 'The Use of Benchmarking in the Airport Reviews', CAA, December 2000.

gains"[28]. The Commission has not used such econometric techniques but has instead relied on bottom-up analysis of operating costs and commercial revenues by its consultants Booz Allen Hamilton and Alan Stratford & Associates. The Commission's ability to carry out equivalent analysis of DAA's capital expenditure forecasts has been rather constrained, so the Commission has adopted a provisional capital expenditure forecast as the basis for its calculations and set out the circumstances in which it would carry out a further review of capital expenditure requirements.

The Commission recognises that its approach is unlikely to be comprehensive enough to completely mitigate the problem of information asymmetry, but recognises the need to remain cautious in its approach to avoid over-compensating. The Commission considers that the results of its consultants' analyses provide a firm basis for arriving at different centre-line forecasts of costs and revenues from those prepared by DAA. By interpreting the analyses cautiously, the Commission considers that it has reached a balanced conclusion that provides some protection to the interests of users from the problem of information asymmetry while avoiding introducing further asymmetry to the detriment of the DAA.

The second aspect of uncertainty that the Commission considers is its scale. For each assumption that the Commission makes in preparing its forecasts (or adjusting forecasts prepared by the DAA), there is some uncertainty. Outturns will be different. The Commission's objectives regarding SFV [discussed above] require the Commission to consider not just its centre-line forecasts but also the range of outturns that the DAA might realistically face.

The Commission's forecasting model of Dublin airport reflects a high-level understanding of the key drivers of costs and revenues: how future growth in passenger flows, other output requirements and improvements

[28] Paragraph 1.31, 'Benchmarking and partial comparison of charges and costs at Manchester airport', CAA, February 2002 (see also paragraph 1.35)

in management will affect activities within the airport to drive operating and capital costs and commercial revenues and ultimately the DAA group's financial performance and position. It incorporates the integrated capacity and capital expenditure modelling referred to in Annex 8. The model incorporates assumptions about relationships between drivers and their impacts on activities, costs and revenues, each of which is uncertain. In assessing the centre-line values of these assumptions, the Commission has been informed by evidence from DAA and the Commission's own and its consultants' analyses.

The Commission's forecasting model has also been designed to model the impact of risk, using simulation techniques[29]. The Commission has considered levels of uncertainty in key assumptions, but recognises that it has not been able to carry out a comprehensive survey of risk in the absence of a developed capital expenditure plan. Although its modelling of uncertainty can thus only be indicative, the Commission considers that the results nevertheless provide useful guidance for its overall judgements relating to risk for its SFV objectives.

The Commission has carried out a simulation with the version of the forecasting model used for the determination calculations. The simulation involved the calculation of 500 iterations, each iteration representing a possible scenario within indicative uncertainty parameters.

These ranges of values in key assumptions include:

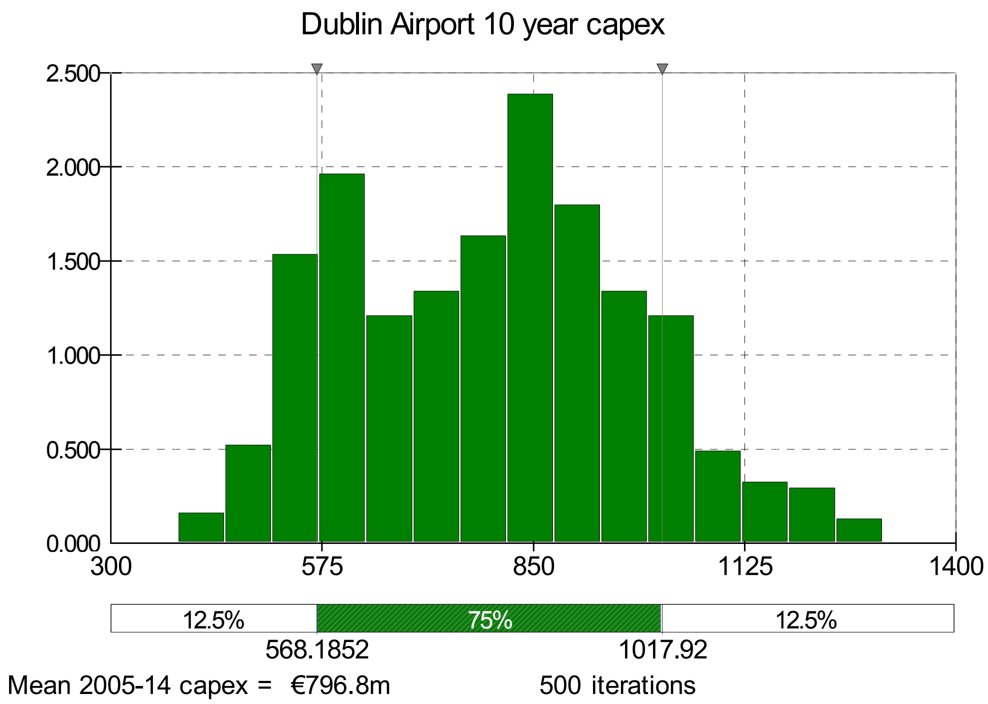
- annual growth in passenger numbers: -6% to +3% incremental each year
- operating cost elasticity: -0.15 to +0.15 applying to all years equally
- operating cost efficiency: -2% to +2% incremental each year
- commercial revenue growth: +2% to -2% incremental each year
- capital expenditure: a capital programme is modelled based on the passenger growth assumptions for each iteration and the

[29] Monte Carlo simulation.

consequent capacity requirements with uncertainty in unit costs and the level of capacity supplied by each project, thus modelling a range of different project specifications, unit costs and timings designed to meet the capacity requirements calculated in the iteration.

The following shows a histogram[30] of the calculated capital programmes from 2005 to 2014 for the 500 iterations:

Figure 7 - Dublin Airport 10 year capex



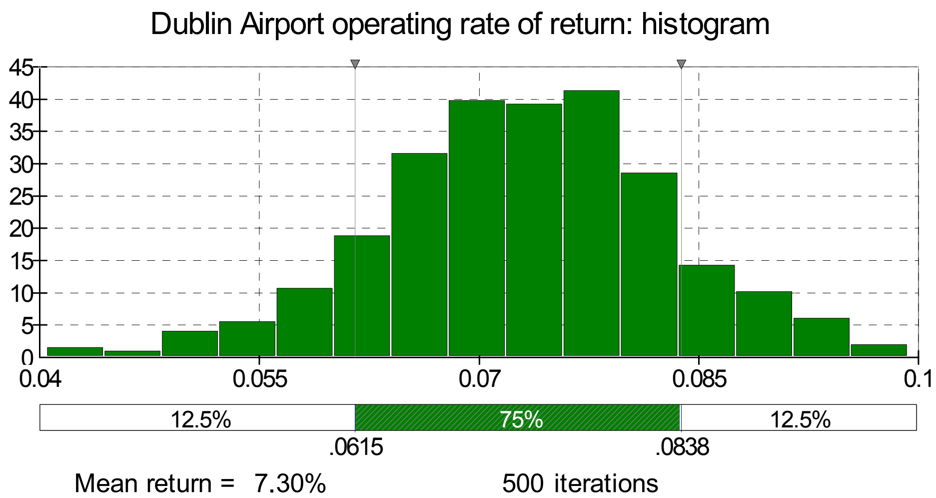
---

[30] Each histogram bar represents the proportion of scenarios where the scale of the capital programme falls within a range of total costs, indicated along the bottom axis in € millions. The tallest bar indicates that the capital programme was calculated to be about €850 million in a relatively large number of the scenarios. A relatively small proportion of scenarios showed capital programmes more than €1,000 million or less than €500 million. For comparison, capital expenditure over the period 2001 to 2004 averaged about €44 million each year (in December 2004 prices) which, if extrapolated over 10 years, would be about €440 million.

Bars towards the left of the histogram would include scenarios where substantially lower rates of passenger growth, anticipated early enough, would permit major capacity projects to be deferred while those towards the right would include scenarios with higher rates of passenger growth or projects with larger capacity increments than currently projected by DAA (the optimum size of a project is dependent on a multitude of factors).

A fixed regulatory price cap combined with uncertainty in passenger numbers, operating costs, commercial revenues and capital expenditure means that DAA's financial results will be uncertain. This is illustrated in the following histogram[31] for the annualised internal rate of return over the four years 2006 to 2009.

Figure 8 – Dublin Airport operating rate of return: histogram



The Commission's calculations are based on a required annual real rate of return of 7.4%[32] assuming the company achieves the Commission's

---

[31] Each histogram bar represents the proportion of scenarios where the internal rate of return (using a conventional discounted cash flow methodology) falls within a range indicated along the bottom axis – the axis extends from 4% per annum (0.04) on the left to 10% on the right.

[32] The mean (average) of the returns in the simulation is less than 7.4%, which reflects the skewed distribution assumed for passenger numbers in this indicative analysis. This highlights the possibility that risk asymmetries could make

centre-line estimates. The company will make a higher return if it outperforms and a lower return if it underperforms. The Commission notes that even the most extreme scenarios in this simulation, the company still earns a rate of return in excess of its likely real cost of debt.

The Commission has also considered the range of outcomes for the key financial indicators. To reflect the effect on risk of the regulatory cycle, the Commission has calculated forecasts beyond 2009. The calculations reflect the default policy that the RAB will be rolled forward with outturn capex. Beyond the next regulatory period, uncertainty in the return is modelled as a 1% standard deviation in the rates of return that the company earns after 2009 (consistent with the results calculated for the period to 2009). The calculations make no provision for the proposed review the Commission expects to carry out once the company can provide it with more information on the capital programme or for any other interim review. The Commission considers that these reviews should have the effect of reducing risk for the company.

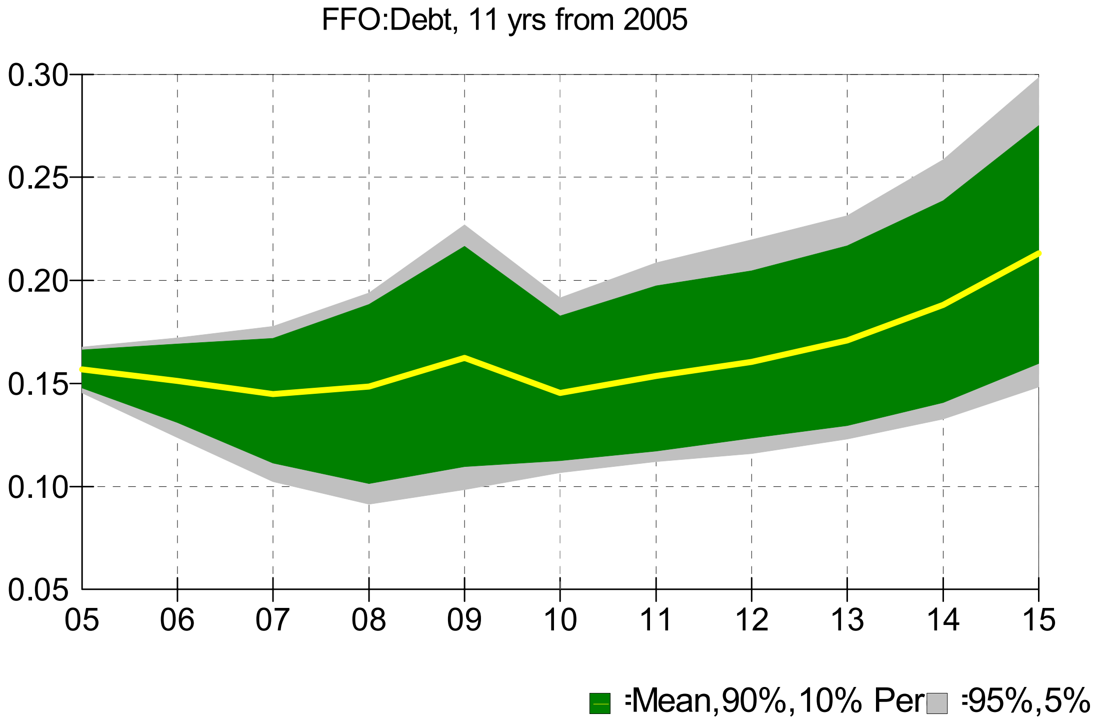
The indicator considered by Standard & Poor's to be the most critical for DAA is FFO:debt and the following graph shows the envelope[33] of calculated outcomes.

---

expected returns systematically different from centre-line calculations. In principle, the Commission would seek to ensure that expected returns are consistent with the cost of capital assessment.

[33] The graph shows, for each year along the bottom axis, the 5th, 10th, 90th and 95th percentile FFO:debt figures. So, for 2007, the graph shows that the FFO:debt statistic was above a little over 10% (0.10 on the left axis) for 95% of all scenarios calculated.

Figure 9: FFO:Debt, 11 years from 2005



The graph highlights two important features. The first is that, for the most detrimental scenarios, the FFO:debt statistic is projected to fall below 10%. This compares with the lowest actual figure for FFO:debt, calculated on a basis confirmed with Standard & Poor's, for Aer Rianta of 10.0% in 2003 while it maintained a credit rating well within investment grade. The second is that resetting charges in a price review for 2010 can be seen to have a correcting effect and the longer-term prospects are for a strong positive trend in the FFO:debt statistic once the peak in capital investment need has been passed. This longer term dynamic is a function of the fact that the allowed rate of return is materially higher than the real cost of debt[34], the asset base to which it is applied is materially larger than the level of debt and the company distributes only a proportion of any surplus in the form of dividends.

---

[34] The allowed rate of return is designed to cover financing costs and an expected return to the shareholder consistent with the level of risk exposure.

The main cash flow cover ratios, on an EBITDA or FFO basis, are calculated to be firmly above 2.5 for all scenarios and with a positive trend to more than 4.0 in due course.

The scenarios all assume a continuation of the current policy relating to dividends[35], management of cash balances[36] within the levels projected in DAA's financial model and no major change in prevailing interest rates. The Commission's calculations do, however, assume interest rates over 1% higher than assumed in DAA's financial forecasts. The scenarios also take into account no change in profitability in the group's unregulated businesses or any business disposals. In the absence of a financial 'ring-fence' around the regulated business (which some sectoral regulators impose through licence requirements), the Commission considers it reasonable to assume that any performance deterioration in unregulated businesses, or any disposal at under value, would be accommodated in a prudent adjustment to the group's dividend policy to provide due protection for the interest of airport users.

This analysis suggests that the level of uncertainty in the airport business is consistent with its financial sustainability. However, the Commission recognises that the analysis is limited on account of the fact that it has not been able to carry out a comprehensive review of certain risk issues, particularly in relation to the capital programme. The Commission will have the opportunity to consider the risk issues as part of the further review signalled above. In the light of this further review opportunity, the Commission considers that its risk analysis is robust enough to conclude that its SFV objectives have been met.

---

[35] Without dividends, the FFO:debt envelope moves up by about 5% by about 2014 (i.e. substantially clearing 20%).

[36] If cash balances can be minimised, surplus cash can be used to reduce debt.

4. MINISTERIAL DIRECTION

The Commission received a Direction from the Minister under Section 10 of the Act on 18 August 2005. The full text of the Direction is set out in Annex 6.

In the High Court case between Aer Rianta cpt and the Commission for Aviation Regulation concerning the Determination on airport charges made in August 2001[37], O' Sullivan J. in his Judgment of the 3rd April 2003 considered the nature of a Ministerial direction addressed to the Commission. The actual direction in question related to the Commission's then duty under the Aviation Regulation Act, 2001 to have regard to the contribution of the airport to the region in which it is located. The Commission was directed to ensure that the Determination reflected the important emphasis the Government placed on balanced regional development. Having heard submissions, the Judge came to the following conclusion:

"Turning to the generality of the submission it does seem to me that there is a clear distinction between the character of the obligation cast upon the [Commissioner][38] in s. 33(d) whereunder he is obliged to have *due regard* to the contribution of the airport to the region in which it is located, on the one hand, and on the other the obligation cast upon him under s.10 which requires him to *comply* with the direction. In this context, I do not agree with the submission of the [Commission], that the cases in relation to "*due regard"* obligations are of relevance to my consideration of the [Commissioner's]'s obligation under Section 10. On the contrary, I think a clear distinction should be made between them. I agree with [Aer Rianta's] submission that under Section 10 the [Commission] must comply with the direction and whilst there may be a choice and a variety of ways in which he can achieve this, I do not think that the true test as

---

[37] JR No 707 of 2001. Judgment of O'Sullivan J. of the 3rd April 2003.

[38] the names of Aer Rianta and the Commissioner and have been substituted for the terms 'Applicant' and 'Respondent' respectively

to whether he did so (assuming it is established, as it has been, that he considered the direction and the relevant documents referred to) is whether his decision can be faulted on the grounds of irrationality alone. I think the test is simply whether he has complied with the direction which is a ministerial direction, that he makes every reasonable effort to ensure that his final Determination reflects the important emphasis, which the government has placed on balanced regional development. If I conclude that he has made every reasonable effort to achieve this then he has complied. If I conclude that he has not, then he has not, no matter how rational his own thought process and procedures may have been.

Having said this, it is also clear that the Ministerial direction itself is cast in the language of generality. The obligation cast upon [the Commission] is to make every reasonable effort: it is not an obligation to achieve a particular result or to aim for a policy objective in a particular way. Indeed given the wide language of Section 10 itself, which refers to making a general policy direction, a specific direction might well be open to question.

I also think it is true to say that a Court, when considering whether or not there has been compliance with such a generally worded direction in respect of which both sides agree there is no black and white answer, must accord to the [Commission] a measure of deference or a margin of appreciation if only for the fact that the [Commissioner] has available to him a level of economic and other relevant advice which is not available to the Court. By this I mean that if I, myself, were to conclude, having read the relevant documents, that if I were regulator I would comply with it in a way other than the regulator has done I must not proceed to say that therefore the regulator has not complied. Both parties agree there may be different ways in which compliance can be achieved and it is not for me, I think, to gainsay this or conclude that a particular way chosen by the [Commissioner] does not amount to compliance unless I am clearly satisfied on this point. This does not mean, however, that I cannot be satisfied unless I am also satisfied that the Determination itself is rational."

In the current Direction, the Minister, in addition to addressing the issue of sustainable development also refers the Commission to the Statement of Strategy of the Department of Transport (separately notified to the Commission under Section 33(2)(f) of the Act. This is addressed further below.

The Direction itself is in two parts. The Commission is directed to "make every reasonable effort to ensure that its final Determination reflects the importance Government has attached to implementation of its policies on (i) infrastructure development at Dublin airport and (ii) the position of Dublin Airport pending the restructuring of the State airports as contemplated by the Act. "

These elements of the Direction are dealt with in turn below.

Infrastructure Development at Dublin Airport

On 18 May 2005 the Government approved an Aviation Action Plan, which included a decision on the delivery of additional pier and terminal capacity at Dublin Airport. The Commission was informed of this decision by way of a letter from the Minister dated 20 May 2005, accompanied by a statement by the Minister and press release, which is set out in Annex 7.

As the Direction relates to Government policy on infrastructure development at Dublin Airport, the Government decision requires careful analysis. The decision itself underlines the independent role of the Commission[39] and the overall goal of economic efficiency[40]. The Minister's letter states simply "You will note that the action plan refers, inter alia, to the independent statutory role of the Commission in setting airport

[39] Section 6 of the Aviation Regulation Act, 2001, states that subject to that Act, the Commission shall be independent in the exercise of its functions.

[40] Economic efficiency is enshrined in the statutory objectives set out at section 33(1) of the Act.

charges to ensure that they reflect costs appropriate to an efficient terminal."

The Minister's statement clearly echoes this position. "In setting airport charges, the Commission for Aviation Regulation in its independent statutory role will ensure that charges reflect costs appropriate to the building of an efficient Terminal."

In its unqualified emphasis on the independent role of the Commission to pursue the statutory objective of economic efficiency, the Government's Aviation Action Plan supported the Commission in continuing to pursue the mandate that it has followed since its establishment in February 2001.

The Direction given on 18 August 2005 does not reverse or modify the Government decision as notified by the Minister to the Commission on 20 May 2005. However, the Direction does have a different emphasis from that conveyed in the Government decision. In the Direction, the Minister points out the importance he attaches to the financial sustainability of Dublin Airport in the context of the Government Decision – so that the airport will be in a position to add capacity in a timely manner.

"I consider that I should at this point draw your attention to the importance that I, as the Minister with overall responsibility for ensuring the provision of State airport infrastructure, attach to the implementation of this decision and the financial sustainability of the Dublin Airport Authority in that context. I consider the implications of increasing congestion at Dublin airport are such that priority has to be given to ensuring that the Government's policy decision is implemented on schedule."

Accordingly, the Commission's clear direction is to make a Determination that enables Dublin Airport to add additional capacity in an efficient and timely manner. The Commission has complied with this Direction in the following manner:

It has made a Determination, which fully funds an efficient capex programme designed to meet the capacity needs of Dublin Airport during the period of the Determination. See Section 5.2. Unavoidably, as stated previously, the Commission has not had adequate time to analyse, in the desired manner, the Pascall & Watson recommendations on the DAA capex programme presented to it by DAA on 26 September 2005 (just days before finalisation of the Determination). The Commission therefore is not in a position to quickly translate the revised DAA capex programme into airport charges for the period of the Determination without a proper examination and still meet its statutory objective of economic efficiency. Therefore, for the present, the Commission has made an allowance in the Determination, in line with its consultants' assessment, for infrastructure expansion at Dublin Airport. The only mechanism which is open to the Commission to revisit its decisions, subject to compliance with the relevant legislative requirements- is a statutory review.

The Commission has also thoroughly considered the sustainability and financial viability implications of the capex programme on Dublin Airport. The Commission is fully satisfied that DAA will be able to fund its capex programme. In this context, it is useful to cite the Minister's predecessor in the Oireachtas debate on the Act – as quoted in the Direction:

"the policy intention in amending the remit was to require the Commission to balance economic efficiency, the reasonable interests of existing and future users and to ensure the Airport Authority's financial sustainability in a way that would promote the long term development of Dublin Airport having regard to its contribution to the Irish economy."

In Section 3 above, the Commission has set out how it has achieved the correct balance amongst its three statutory objectives. Accordingly, the Commission considers that it has complied with this Direction.

Restructuring of the State Airports[41]

The Minister directs the Commission as follows:

"The State Airports Act, 2004 sets out the statutory framework for the restructuring of the three State Airports at Dublin, Cork and Shannon. This framework provides the basis for a phased distribution of assets subject to conditions relating to the operational and financial readiness of the three airports. Pending implementation of the restructuring, the Dublin Airport Authority has specific obligations under the Act and retains overall responsibility for the finances of Cork and Shannon airports, including costs and liabilities associated with those airports."

Accordingly, the Minister directs the Commission to make every reasonable effort to ensure that its final Determination reflects the importance Government attaches to the restructuring of the State airports.

The Commission believes it has complied with this Direction. Section 3, above, thoroughly examines, not only the obligations of DAA regarding Cork and Shannon airports but the entire DAA Group. Accordingly, the Commission is satisfied that the DAA's obligations relating to Cork and Shannon airports will not undermine an efficient DAA from fully implementing Government policy as to restructuring.

Furthermore, the Minister indicates that the framework for the restructuring "provides the basis for a phased distribution of assets subject to conditions relating to the operational and financial readiness of the three airports." As Scenario 7, as set out in CP2/2005, indicates, an

---

[41] Section 2(1) of the Air Navigation and Transport (Amendment) Act, 1988 as amended by the Schedule to the State Airports Act, 2004 defines "State Airport" as, "an airport in the State, managed and controlled by Aer Rianta, or from the relevant appointed day a company." "Company" means, from their respective appointed days, Dublin Airport Authority, Cork Airport Authority and Shannon Airport Authority.

efficient allocation of group assets among the three airports will improve the SFV of Dublin Airport.

Consequently, the statutory framework for the restructuring of the State airports in phases, subject to the conditions of operational and financial readiness of the three airports, is implemented to the extent that DAA's current responsibilities in relation to all three State Airports is taken into account.

5. STATUTORY FACTORS

1. "the restructuring including the modified functions of Dublin Airport Authority."

As stated in CP2/2005, this statutory factor does not have to be taken into account until Cork and Shannon Airport Authorities are vested with ownership and management of their respective airports. However, the Ministerial Direction does refer to the responsibilities of Dublin Airport Authority pending the restructuring and in this context the restructuring is considered in Sections 3 and 4 above.

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

The Commission's view remains that as airports are capital-intensive businesses, it is necessary that their economic regulation be consistent with a level of investment in facilities that allows the needs of users to be met. The Government Aviation Action Plan, with its emphasis on the Commission's independent role in reviewing the cost of investment at Dublin Airport, lends the Commission, in its view, support in pursuing a high-powered incentive strategy towards the DAA's investment programme.

The approach to regulation as described by O'Sullivan J in his judgement mentioned above is consistent with and compliments the vision set out in the Government approved Aviation Action Plan, announced by the Minister for Transport Mr. Martin Cullen, T.D. on the 18 May 2005. That plan announced a policy approach, specifically in relation to Terminal Two at the airport. It stated that in sanctioning Terminal Two, the Government has approved a triple safeguard to ensure maximum efficiency and cost effectiveness of Terminal Two. The three safeguards are:

1. **Consultation:** Terminal Two will be designed to meet the requirements of airlines servicing Dublin Airport. To this end, the DAA will consult in detail with the relevant airline operators

2. **Verification**: Final specifications and costings of Terminal Two will be independently verified by aviation experts

3. **Regulation**: In setting airport charges, the Commission for Aviation Regulation in its independent statutory role will ensure that charges reflect costs appropriate to the building of an efficient terminal.

This approach is designed to ensure that the Government gets the best result for customers and the taxpayer. Equally it is designed to derive the benefit of ensuring extra capacity is delivered when it is needed, thereby avoiding costs that would come with providing too much capacity too soon.

In a high-powered incentive strategy, the regulated firm bears a greater proportion of the costs or benefits of its performance as measured against targets set on the basis of efficient outurns. This contrasts with a medium-powered incentive strategy, which provides for a greater sharing of such costs or benefits between the regulated firm and users.

An assessment of the DAA's capex programme and its efficiency is, therefore, a central element of the economic regulation of Dublin Airport. Consequently, it is necessary that the DAA's investment plans be carefully scrutinised as to their timing and efficiency. The DAA presented a capital investment programme ("CIP") to the Commission in May 2005 and this CIP was the basis for the statutory consultation process initiated by the Commission in CP2/2005. In June 2005, the DAA informed the Commission that it was undertaking a substantial review of the CIP. The Commission was first presented with the outputs of that review in summary form on 19 September 2005. Unavoidably, the Commission has not had an opportunity to undertake an analysis of the finalised capex programme in the time remaining. Accordingly, the Commission has made an independent assessment of the company's May 2005 CIP and provided an allowance in the price cap for an indicative capex programme based on the analysis by its consultants. See Annex 8. Once the Commission has had time to review and analyse the finalised DAA capex programme it may amend the Determination if required.

In the context of assessing the capital investment programme of DAA, Ryanair believes that the length of CP2/2005, the number of consultant reports contained therein and the constancy of the nominal price cap during the regulatory period to date is evidence of "regulatory capture".

In the political economy literature (see, for example, Posner (1974)) it is suggested that regulatory agencies are prone to becoming dominated by the industries they regulate. When this happens, the regulator will be more likely to serve the interests of industry rather than the public interest, thus being captured. The Commission fails to see how the length of its consultation paper or the number of consultants it has retained is itself evidence of regulatory capture. On the contrary, consultants are hired to provide the Commission with independent expert views on the components of the price cap, such that it does not have to rely exclusively on the views and information provided by the regulated firm. This surely acts against the tendency towards regulatory capture rather than in support of it.

Ryanair is correct in its assertion that the nominal price cap during the regulatory period to date has remained approximately constant. However, it does not acknowledge that, in real terms, the price cap has fallen by about nine per cent over a period of three and a quarter years, which is challenging to the regulated firm. The conventional wisdom would suggest that making the regulated firm cost-conscious and providing incentives to pursue savings is one of the more explicit goals of regulation. Against this, must be balanced the needs of the airport in satisfying the needs of users and the needs of users themselves, which, at present, is for additional capacity.

In that context, Ryanair's request to have the DAA's capex programme excluded from the current Determination, including funding for a second terminal, until the airport achieves agreement from the majority of users that the projects are necessary and the costs are not excessive, is rejected because of the real and growing capacity deficits at Dublin Airport. Such a policy would not, in the Commission's view, balance with the needs of the Airport to be able to invest to develop and grow. Nor would it balance with the needs of users, whose growing dissatisfaction as the expected delivery date for new capacity approaches would not be optimally met by imposing funding problems on the airport. Indeed, if the Commission were to pursue Ryanair's request, it could well be accused of capture, not by the regulated firm, but by a significant user of the airport.

Ryanair has further stated that the Commission should not include funding for the second runway. Dublin Airport has indicated that a second runway might be required by 2012/13. As this is outside the scope of the current Determination, the Commission will not respond to Ryanair's comments here, but will re-visit the issue in detail at the time of the next Determination.

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

The Commission determines airport charges based on the principles of the single till[42]. The single till approach to setting airport charges is a sharing rule that acknowledges that commercial revenues would not exist without the airlines that bring passengers to the airport. In the regulatory context, it operates by subtracting a projection of commercial revenues from the projected total cost base, with the residual being the projected revenue requirement from airport charges. The sum of commercial revenues and revenues from airport charges constitute operational income.

The Commission remains of the view that, in its application of the single till principle, it should only take account of costs associated with activities that have a sufficient nexus to the operating activities of Dublin Airport. The Commission notes that it did not receive any representations to the contrary.

The Commission's calculations for the price cap in 2006-2009 include the Commission's projections of the DAA's commercial revenue at Dublin Airport, which comprises retail income from its own shops and from retail concessionaires, property income, car parking revenue and income from other concessionaire and rentals. DAA states that commercial revenue, and revenue from property is incorrectly projected by the Commission to grow in line with passenger traffic. It further argues that the Commission has used unrealistic assumptions in relation to car parking, retail and

[42] As the Commission indicated in CP2/2005 (and previous consultation papers) it may consider the use of a dual till in the future. A dual till could provide for a separation of commercial and non commercial revenue streams and costs, as well as a separation of airport charges and other statutory based charges – along with their associated costs.

catering revenue. By contrast, Aer Lingus has submitted that the Commission may be underestimating the scope for DAA to increase commercial revenue by stating that it could be expected to rise in line with passenger traffic. Aer Lingus goes on to state that the Commission should benchmark revenues with those achieved at comparable airports. This latter point is taken into account in the TRL/IITL benchmarking methodology referred to below. Set out at Annex 12 are the conclusions of the Alan Stratford & Associates Limited report undertaken on behalf of the Commission that provides an assessment of commercial revenue earnings potential at Dublin Airport over the period 2005-2014. This Report, which the Commission has relied upon in making this Determination, responds to the comments and observations set out above.

In this manner, the Commission has had due regard to the commercial revenue potential of Dublin Airport and fully incorporated this future revenue stream into the Determination, in a manner designed to protect the interests of users of Dublin Airport.

In a new addition to the legislation, the Commission must have due regard to any income arising from the restructuring. This has not arisen at this time as there has been no such income declared by the DAA. Additionally, in line with previous policy, income having an insufficient nexus to the airport, e.g. Great Southern Hotels and Aer Rianta International, has been disregarded. The Commission notes this approach has not been the subject of any comment.

4. **"Costs or liabilities for which Dublin Airport Authority is responsible."**

The relevant cost base consists of the costs associated with the components of the regulatory till. This consists of:

- the entirety of operating costs (opex) associated with the operation of Dublin Airport;
- the cost of existing and new investment, which, for the purposes of the price cap, involves providing the company with a return of (depreciation) and a return on capital (equal to the company's WACC).

Therefore, in order to take account of this statutory factor, the Commission is required to consider separately the appropriate opex allowance, together with its policy on valuation and rolling forward the RAB for new investment and writedowns for imprudent investment, and Dublin Airport Authority's WACC. Each of these issues is considered in separate sections below.

The Commission has also been required to consider various liabilities for which the Dublin Airport Authority is responsible, in particular, pension liabilities. These are also considered in a separate section below. In the context of the re-structuring, Ryanair submitted that liabilities from Cork and Shannon should not be "foisted" onto Dublin airport users and the DAA should be forced to cover these liabilities through the sale of its non-core overseas interests. In making the Determination, the Commission has not included in the regulatory till for Dublin Airport costs or liabilities from Cork or Shannon. The sale of non-core assets by the DAA is a matter for the DAA and its shareholder.

5.1 Operating Costs

The Commission has analysed DAA's opex performance since the introduction of the price cap. In aggregate, the DAA has met the Commission's targets. In examining the constituents, the Commission observed substantial out-performance on non-payroll opex. However, this was precisely matched by under-performance on payroll. The area of significant growth in payroll opex was Airport Police and the Fire Service. This is attributable to exogenous factors, which the Commission has had independently verified. However, net of Airport Police and Fire Service staff, the number of employees at Dublin Airport has steadily and quite substantially declined. These reductions occurred on foot of the company's voluntary redundancy programme. Overall, the total number of FTE's has remained approximately static.

The initial findings of Booz Allen Hamilton's (BAH) bottom-up efficiency assessment were based on the DAA's 2004 opex projections. These findings were subjected to consultation and required re-assessment based on revised DAA opex projections, which were submitted in April 2005, just prior to the draft Determination. The DAA claims that the 2005 projections provide a more thorough and meaningful assessment of its operating expenditure requirements and that they are based on its own internal bottom-up assessment. The main differences between the projections, which BAH has endorsed as efficiency savings identified by the DAA, can be summarised as follows:

1. Revision of the need to hire additional airfield staff;
2. Revision of additional cleaning staff needs (equivalent to potential efficiencies identified by BAH in its initial findings);
3. Realisation that the airport can be managed with a smaller team than originally expected;
4. Revision of non-operational staffing needs, i.e., for car-parking, retail and support services;
5. Substantial reductions in non-payroll categories, in particular, repairs and maintenance, rents and rates, fees and professional

services, car park overheads, and more modest savings in other non-payroll categories, in particular, cleaning contracts and materials, CUTE operating lease costs, telecommunications, employee-related overheads and travel and subsistence.

These are, however, balanced against the withdrawal of previously projected staff reductions in Group and Shared Services (Head Office), which, the DAA claims, is due to uncertainties surrounding the DAA's role in respect of Cork and Shannon Airports on foot of the State Airports Act, 2004. In other words, the DAA is of the view that it will need to maintain head office capability for the other airports. They are also balanced against modest increases in certain non-payroll categories, in particular, energy costs, technology operating costs, insurance, and a fairly substantial increase in other overheads.

Booz Allen Hamilton has identified the scope for further efficiency improvements. The DAA has forecasted a need to take on large numbers of additional staff for security and terminal services. Most of the additional terminal staff is intended to manage passenger congestion, resulting from the growing terminal capacity deficit. However, BAH formed the view that this additional recruitment forecast may be generous and that, therefore, the incremental staff increase could be reduced by yearly factors ranging from 18-25 per cent. BAH also identified the scope for modest efficiencies in the Dublin Airport trolley operation. The large requirement for additional security staff is on foot of new requirements to carry out more rigorous scrutiny of passengers due to new EU regulations as well as the EU security audit that identified shortfalls in the processes at Dublin Airport. However, BAH's assessment of additional security staff requirements fell short of the DAA's. BAH also identified the scope for modest efficiencies in Group and Shared Services (Head Office).

The Commission is of the view, therefore, that it has a reasonable basis for relying on the targets that BAH has deemed appropriate for the company over the period of the new Determination. It thereby rejects representations by Aer Lingus that efficiency targets determined on this basis are insufficiently challenging for the DAA.

5.2 Pensions

The DAA permanent employees over the age of twenty are members of the Irish Airlines (General Employees) Superannuation Scheme (IAS). This scheme is operated in conjunction with Aer Lingus and SR Technics (formerly Team Aer Lingus). Employer contributions cannot be varied without the consent of all of the participating employers, and employee contributions also cannot be changed without employee consent. The Trustees may, on the advice of the Actuary, pay discretionary increases to pensions due to inflation out of disposable surpluses. Historically, increases have been granted by the Trustees in line with changes in the Consumer Price Index, with increases capped in periods of high inflation.

The DAA, in its response to CP2/2005, stated that it has previously been advised that pension costs are expected to rise significantly into the future. It believes that if the current scheme continues to pay an index-linked sum to members, as has been its voluntary practice where possible to date, it will be in deficit in the future.

The employees of Aer Lingus are the majority members of the scheme. As such, as Aer Lingus state, it is not open to DAA in practice to enhance benefits to its pensioners without agreeing this increase with the other participants. Aer Lingus do not agree to such an increase. Furthermore, they believe there is no case for their customers to bear the cost of the enhancement. Consequently, they believe that there is no justification for allowing increased pension contributions in DAA's price limits.

DAA point out and the Commission accepts, as a matter of principle, that users should bear the efficient costs of remunerating the DAA's employees at Dublin Airport, including pension costs.

The Commission sought the views of interested parties as to how, if it were so minded, it might take into account the costs associated with such increased pension provision when making a determination. All responses agreed that the Commission should address the issue of pension costs within the heading of operating expenditure and not as part of the Regulatory Asset Base. As Aer Lingus point out, there are two reasons for this: first, pension costs are a personnel cost not an investment item, hence more appropriately dealt with via opex. More importantly, while pension liabilities relate directly to DAA under the present scheme, assets are pooled and cannot be allocated in this way. Hence, it is not possible to allocate the specific net value of assets of the DAA as distinct from the other members of the scheme in the absence of a transfer to a new scheme. Therefore, pension provision should be expressed as the annual funding requirement of the company to its employees' pension scheme. The Commission agrees that this is the correct basis upon which to make provision for funding the deficit identified by DAA in the pension scheme it desires.

The Commission is of the view that it cannot ignore the future potential deficit of such a DAA pension scheme, having index-linked payments as one of its benefits. This is the clear intention of the company as represented to the Commission. It agrees with the Aer Lingus stance that, as matters stand, it is not open to DAA to insist upon continued indexation of benefits.

It is useful, in this context, to recall the statement of the Minister for Transport in written replies to the Dáil on the 22 March 2005,

"I should also explain that legislation has been put in place to enable both Aer Lingus and the DAA to establish new pension schemes for their own employees and pensioners. This was provided for in the Aer Lingus Act

2004 and the Air Navigation and Transport (Amendment) Act 1998 as amended by the State Airports Act 2004. [43]

However, it is a matter for the companies concerned to decide if and when a new pension scheme or schemes are to be established and the terms of any such schemes would be a matter for consultation with Unions. The normal arrangement where pension schemes of State Bodies must be approved by the Minister for Transport, following consultation with the Minister for Finance, will continue to apply."

The timing of the introduction of any allowance for a pension deficit is contentious. Aer Lingus believe it should not occur at all or at least not until a new scheme has been created with the assets of the current scheme distributed between its constituent members. It argues that if the DAA were permitted to recover any initial deficit which may arise in its new scheme resulting from the actuary's division of existing assets, it would have no incentive to press the actuary for the best possible allocation of assets, which would not be appropriate. Hence, it concludes that any deficit experienced by DAA in its pension as a result of choosing to enhance benefits should be funded by DAA alone, and not by airport users, regardless of whether DAA establishes a new pension scheme.

The Commission agrees only in part with this view. To allow the DAA to recover in full the amount it estimates as a deficit, not having the benefit of the actuarial division of the present scheme, would not protect the interests of current and prospective users of the airport, nor would it facilitate the efficient operation of Dublin Airport. However, to deny the company the possibility of recovering any of the potential deficit would be to ignore any such deficit in the light of the company's future intentions.

[43] These provisions provide, inter alia, that superannuation benefits granted under a new scheme, to persons who immediately before the commencement of such scheme were members of the old scheme, and the terms and conditions relating to those benefits shall not be less favourable to those persons than those to which they were entitled under the old scheme.

This equally would not facilitate the efficient operation of Dublin Airport and would ignore the costs and liabilities for which the DAA is responsible.

Due to the uncertainty surrounding the magnitude of the deficit, the Commission believes it is prudent at this juncture, to allow some of the costs that DAA has estimated as required to fund the deficit of the pension fund it intends to create for its employees. The Commission has set this amount for the Determination at the same level as set out in CP2/2005, as it is the amount interested parties have had time to consider.

Therefore, the price cap includes (in the opex projections) some of the higher pension contributions foreseen by the DAA. However, this treatment of the pension deficit is subject to adjustment. The Commission will have to reconsider in due course:

- the actual magnitude of the deficit using different measures and having regard to the intention of the DAA to create a new scheme;

- the proportion that it is appropriate to fund through airport charges levied at Dublin Airport;

The Commission is unwilling, absent more definitive and verifiable numbers and action, to allow for a greater allowance of cost at this time.

Given the strong likelihood of a delay between the Commission's Determination of the DAA's price caps and the date of establishment of any new pension scheme for current and former DAA employees, the question arises as to what would happen to any funds that the Commission might provide the DAA, through the price cap, for the purpose of reducing the estimated pension deficit. The Commission will agree an accounting procedure with the DAA to keep track of any funds provided in this respect to the DAA. The DAA envisages holding the cash as a pension reserve, and imputing to this a rate of return, on an agreed basis, with a view to paying this into the new fund when established. If the accumulated reserve is not invested in this way the Commission may adjust the RAB.

5.3 Regulatory Asset Base (RAB)

In line with regulatory practice, and as stated in the Draft Determination of May 2005, the Commission intends to roll forward the value of the RAB.

The Commission is conscious that its RAB policy has important implications for the capital expenditure incentives faced by the DAA and that these will be especially important over the next price control period, when the DAA faces a sizeable investment programme. The effective design and implementation of that programme would benefit users for many years to come and the adverse impact on users of poor management of this programme could be considerable. In addition, for the reasons articulated previously in relation to the Government's Aviation Action Plan, the Commission is of the view that a high-powered incentive scheme is appropriate to the DAA's capex programme.

The RAB is a regulatory valuation of the regulated business, on an enterprise value basis, i.e. debt plus equity. It is the asset base for the purpose of calculating an appropriate level of return for investors, the parties who have an interest in the debt and equity of the business. The Commission can then determine maximum levels of airport charges that would provide investors, with a return equal to the weighted average of the cost of debt and cost of equity (WACC).

In its first Determination (CP8/2001), the Commission established an initial valuation of Dublin Airport's RAB, which it based on a valuation of the Indexed Historical Cost of the Net Fixed Assets as at 31 December 2000 prepared by the former Aer Rianta, adjusted downwards for the investment at Pier C considered to have been imprudently incurred, and certain 2001 capex and aircraft parking stands that were considered to be surplus to the current capacity requirements. The RAB also includes an allocation of a similar valuation of assets used by Aer Rianta's Head Office to provide shared services to all three of its airports. In the Revised Determination (CP2/2004), a further adjustment was made to the projections of the RAB to take into account 75% of the capital expenditure connected with security requirements. On this basis, the value of the RAB for Dublin Airport, used by the Commission for its calculations in CP2/2004, was identified as €614,129,457 at 1 January 2004.

In rolling forward the initial valuation of the RAB, at the time of the Draft Determination, the Commission considered it appropriate to increase the RAB to reflect in a fair manner the value of net investment (expenditure on assets less the value of asset disposals) appropriately made by the company in enhancing and maintaining airport assets for the purpose of delivering airport services. The Commission also considered it appropriate to reduce the RAB to reflect the contribution made by users towards those assets in the depreciation allowance calculated at each price review. In addition, the Commission drew the attention of interested parties to the consideration being given to two other adjustments to the RAB, to maintain appropriate incentives for efficient performance by the company. These were:

- whether adjustments made in the initial valuation of the RAB for imprudent investment should be reversed or fixed as a permanent adjustment to the RAB;

- whether adjustments should be made for savings in capital expenditure that were not a result of efficiency but instead as a result of change in the scope or output of the capital programme.

At the time of the Draft Determination, the Commission suggested that the possible restoration to the RAB of the value of the investments deemed imprudent in 2001 might be justified on the ground that imprudent investments should be treated symmetrically to opex efficiencies, which a company retains for up to 5 years. Thus, if the company only has a few years' worth of reward for efficiency, it should also only have a few years' worth of penalty for inefficiency.

The Commission suggested that the adjustment for capital expenditure savings might be desirable in order to prevent a company from being rewarded for savings made by not building the assets that users reasonably required and had been asked to contribute towards (e.g. the income calculated in earlier Determinations that users have paid towards the construction of a Pier D that has not, in fact, been built).

Without prejudice to its final decision, the Commission for its Draft Determination, rolled forward the initial valuation of Dublin Airport's RAB, which was based on a valuation of the Indexed Historical Cost of the Net Fixed Assets as at 31 December 2000 prepared by the former Aer Rianta. It reversed the adjustments made in earlier Determinations in respect of imprudent expenditure on the basis that the appropriate incentive period for the company to be penalised for that additional expenditure is shortly to expire. It added to that initial valuation the actual[44] expenditure less the value of disposals, disclosed in audited regulatory accounts, on Dublin Airport (and on the company's Head Office in respect of services shared between its three airports) for the years to 31 December 2004 and the current forecast for 2005. It also deducted the aggregate depreciation allowances that were included in the price cap calculations in previous reviews for the period up to 31 December 2005. Subject to consultation, no adjustment was made in respect of income that can be attributed to the Pier D investment that has not taken place.

The resulting calculation of the rolled forward RAB coincided very closely with a valuation of the Indexed Historical Cost Fixed Assets at 31 December 2004 provided to the Commission by the DAA, after rolling forward for transactions and depreciation in 2005. The closeness of these results led the Commission to conclude that it could safely adopt the more recent detailed fixed asset analysis prepared by DAA as the basis for the revised RAB value for the Draft Determination.

---

[44] As actual capex was less than the capex projected in 2001, this involved a substantial downward adjustment to the RAB.

The Commission's approach to the computation of the RAB was the subject of a number of statutory representations received in response to CP2/2005[45]; these focused in particular on (i) whether the 2001 RAB adjustments for imprudency should be reversed or made permanent and on (ii) whether revenues earned on assets funded through the RAB but not delivered should be 'clawed back'.

The DAA's representations supported the restoration to the RAB of the value of the assets excluded for imprudency in 2001 because, in its view, the original adjustments (which it saw as asset 'stranding') would cause prices to be inefficiently low, would raise the DAA's cost of capital and would discourage airport investment. Airlines such as Aer Lingus and Ryanair opposed any reversal of the 2001 adjustments, as, on their arguments, to do so would encourage the airport operator to make excessively costly, or 'gold-plated', investments. Ryanair further complains of lack of consultation by DAA in arriving at its capital investment programme. The Commission has been critical of the level of consultation between the airport and its users in the past, and encourages interaction between the DAA and the main stakeholders at Dublin Airport. The Commission has taken into consideration Ryanair's comment in evaluating the company's Capital Investment Programme and arriving at its own independent assessment of the capex needs of Dublin Airport.

The Commission's decision is that where investments, which in 2001 it deemed to have been delivered imprudently early, are now being used and are generating an economic benefit to users, it is appropriate that the DAA earn a return on these assets by having the relevant values restored to the 2006 RAB. The Commission is satisfied that this conclusion applies to the aircraft parking stands, and to the excluded 2001 capex. Therefore, as a matter of principle where one finds development that originally represented inefficient, excessively early over-capacity, this same capacity addition may later be deemed to be providing useful capacity at the

[45] Review of Determination on Maximum Levels of Airport Charges and Report, Commission Paper CP2/2004, 26th March, 2004

airport as passenger numbers grow and, therefore, it is appropriate to restore it to the regulatory asset base. Accordingly, these values have been restored to the RAB. Such an approach has been criticised by Ryanair. However, their submission ignores the substantial downward adjustment made by the Commission to the 2006 RAB to take account of investments not made by the DAA during the previous regulatory period. Instead, Ryanair advocates that no upward adjustments be made under any circumstances; this leaves the regulated firm subject to a regulatory regime with an asymmetrical approach to business risk. This is inconsistent with sound regulatory practice.

On the other hand, where investments were excluded from the RAB on the grounds of imprudence (i.e. Pier C) and the Commission continues to hold the view at the time of the making of a new Determination, the Commission (unlike for the Draft Determination) will fix these RAB adjustments permanently.[46]

This approach of a permanent write down of inefficient assets is consistent with a high-powered incentive scheme mandated by the Government's Aviation Action Plan. It is appropriate for the Commission to consider all existing infrastructure at the airport afresh when it makes a Determination as well as considering the future development plans. As the High Court stated:[47]

"In my view there is a specific duty on the respondent to review a subject airport's CAPEX. This applies even if the subject airport fails to provide information in relation to such capex or insufficient detail for the purpose of the Commission's analysis. The duty still remains on the applicant to aim to facilitate the development and operation of a cost effective airport and to have due regard to the level of investment in such airport in line with the statutory requirement."

---

[46] The value of this adjustment, in 2004 prices, is €13.4 million.

[47] O'Sullivan J, op cit, page 79.

This list of matters to which the Commission is obliged to have regard, in my view, clearly, authorises him to conduct the detailed review of the applicant's capex which he has done in this case: I do not say that he is obliged to adopt this item by item method in order to discharge his statutory obligation but I do say that in carrying out this item by item review he is clearly doing what the Oireachtas intended him to do under the characterisation of determining maximum levels of airport charges and not under the characterisation of managing and developing an airport."[48]

In the Draft Determination, the Commission aligned the December 2005 RAB with the DAA's indexed fixed asset register for Dublin Airport, on the grounds that the difference between the two values was small. The DAA supported such an approach. However, the Commission's decision for the final Determination is to reject this representation. Such an alignment, even when the difference between the two values is small, could give rise to the expectation that the Commission would, as a matter of policy, always restate the RAB for each new regulatory period to include all of the previous period's actual capital expenditure. Such a policy would be inconsistent with the Commission's mandate to set maximum airport prices with due regard to the level of investment in airport facilities in line with the needs of airport users and would also be inconsistent with the Government's Aviation Action Plan.

Regarding changes in the scope of the capex plan, the principal example of such a project is the Pier D proposed for Dublin Airport, which was included in the former Aer Rianta's Capex Plan of 2001, and also in the 2001 Commission's Recoverable Capex Programme but was not built. In part this was because of legal challenges in 2002 and 2003 and because of a instruction in 2004 from the DAA's shareholder, the Minister for Transport, to refrain from contractual commitments related to the project.

---

[48] ibid. page 81

In its representations to the Commission, the DAA opposed any 'claw-back' of 2001-05 revenues in respect of projects not delivered, arguing that the 2001 Recoverable Capex programme had been expressed only as budget rather than a list of specific investments and, furthermore, that the DAA had expended significant sums on planning and other preparations for the building of Pier D. Aer Lingus, in its submission, argued that airport users should not pay a second time for facilities already capitalised into the RAB.

The Commission notes that the delay in constructing Pier D arises at least in part from factors outside the DAA's control. A substantially revised Pier D project now forms part of the DAA's 2005 capital investment plan. Therefore, to set 2006-09 airport charges sufficient to fund Pier D without regard to the contribution already made would involve an element of double-payment.

Accordingly, the Commission's decision is that it should subtract from the RAB its estimate of the income earned by the company, in 2002- 2005, from the inclusion of Pier D in the RAB. This adjustment is equal to some €6.6m, equivalent to a reduction in airport charges of about 2.5 cents per passenger in 2006. The Commission notes that DAA expended some of the funds allowed to it for this project in the last Determination. To the extent that it can be shown that this expenditure has value for users regarding the planned Pier D in the next period of the Determination then this expenditure will be taken into account. Otherwise it will be treated as an irretrievable sunk cost. This is on the basis that such expenditure cannot be shown to have been efficient development of the airport and is of no benefit to users.

After reviewing the arguments in the statutory representations, the Commission has decided to adopt most of the elements of the RAB calculation set out in the Draft Determination. These are: to roll forward the RAB from December 2001 to December 2005, inclusive of a share of Head Office assets and adjusted for the additional Security Capex, on the basis of the DAA's actual capital expenditure less disposals in 2001-2005, and after deducting the aggregate regulatory depreciation up to end-December 2005 provided for in previous Determinations. However, while the adjustments made to the 2001 RAB in respect of the aircraft parking stands and the 2001 capex have been reversed from 2006, as for the Draft Determination, the adjustment for Pier C has been fixed permanently. The resulting RAB value is not aligned with the indexed historical cost of the DAA's fixed asset register for Dublin Airport.

On this basis, the value of the RAB for Dublin Airport, used by the Commission for its calculations in this Determination has been identified as €601.2 million as at 31 December 2005 (in 2004 price terms).

A number of interested parties recommended the use of a 'rolling scheme' to reward efficiency savings by the DAA in investment spending but it was generally accepted that the development of the details of a robust scheme was not practical for announcement before 1 October 2005. The Commission hopes to develop such a robust rolling scheme in a future Determination. See Annex 15

5.4 Cost Of Capital

The Commission continues to hold the view that providing a reasonable rate of return to the airport operator on capital employed appropriately rewards the regulated firm for its investments, thereby supporting the company's ability to meet the future requirements of users. Having regard to this factor facilitates the efficient and economic development and operation of Dublin Airport to meet the requirements of current and prospective users and assists in the achievement of the other statutory objectives. In doing so, the Commission has decided to set the return on capital equal to and not in excess of, the cost of capital.

The Commission has sought and obtained expert advice[49] on the assessment of the rate of return allowable to Dublin Airport Authority. This advice is set out at Annex 3. Based on that report the Commission has set Dublin Airport Authority's rate of return (on a real, pre-tax basis) at 7.4%.

This figure takes into account the representations received during the consultation period from interested parties as to the appropriate rate of return. In particular, DAA and Aer Lingus both made lengthy submissions on this topic and supplied their own reasoned estimates on the cost of capital. The response of the Commission's consultants to these submissions is set out in Annex 4. Ryanair commented that the Commission's cost of capital of 7.4% is an incentive for gold plating and inefficiency. The Commission does not share this view. The calculation of the cost of capital is fully explained in Annex 3 and is based on a robust application of a capital asset pricing model to the DAA. As such, the Commission's cost of capital is set to remunerate efficient investment.

As Hutson and Kearney point out[50], all estimates of the cost of capital are subject to error and it is necessary to make subjective judgements. This arises because many of the concepts and variables that are defined precisely in theory are not readily measurable in practice, and have to be estimated in some way. Examples of these include the real risk-free rate of interest and the equity risk premium, both of which are integral to calculating the cost of capital.

---

[49] Dublin Airport Authority's Cost of Capital, Report to the Commission for Aviation Regulation, May 2005. Elaine Hutson and Colm Kearney.

[50] Response to comments on the Kearney and Hutson (2005) estimate of Dublin Airport Authority's cost of capital - Report to the Commission for Aviation Regulation, August 2005, Elaine Hutson, Lecturer in Finance, School of Banking and Finance, Smurfit Graduate School of Business, University College Dublin, Colm Kearney, Professor of International Business, School of Business Studies, Trinity College Dublin.

The Commission believes that is preferable that the regulator sets a rate that is more likely to err on the high side rather than the low side. This is particularly relevant to the DAA to the extent that existing capacity constraints will require substantial infrastructure investment.

5. "the level and quality of services offered at Dublin Airport by Dublin Airport Authority and the reasonable interests of the current and prospective users of these services."

In its Draft Determination, the Commission stated that to the extent that service quality is measured by operational performance, it would seek to set the appropriate indices and monitor performance against them. This is still the intention of the Commission, it not having been possible in the consultation process prior to making this determination. An indicated in CP2/2005, the Commission would monitor service quality levels against indices such as those mentioned below (in a non-exhaustive list) which should take into account the broad scope of users as set out in the Act which include airlines, passengers, cargo operators, concessionaires, ground handlers, suppliers and other users of airport services:

- availability of contact stands
- availability of trolleys
- cleanliness of terminal, washrooms, gate areas
- availability of way-finding and flight information
- time passengers spend in security queues
- availability of equipment (air bridges, outgoing baggage systems, incoming baggage systems, escalators, ground power, lifts and travelators)
- providing for the needs of passengers with reduced mobility

To the extent that service quality is measured by physical capacity, the recoverable capex programme as assessed by the Commission seeks to allow the airport authority to add the required physical capacity. This is designed to relieve congestion and aid passenger flow.

As noted by DAA,[51] the Commission's consultants BAH state:

"in a complex environment such as an airport, the interplay between the actors is extremely important and it is necessary that all actors involved in a particular process fulfil their obligations to ensure the overall quality of the process is maintained"[52]

BAH also noted that:

"a pragmatic approach is likely to be needed balancing the needs of all to define quality factors for the common good – this will need considerable consensus building"[53]

and

"at airports the need for direct regulation of quality is less than in other regulated industries".[54]

The Commission notes the fact that none of the submissions received indicated a service quality level preference. For example, IATA, monitors airports against various service quality levels and ranks them accordingly. Dublin Airport no longer takes part in this survey, previously known as the Global Airport Monitor now rebranded as AETRA. However, the DAA have expressed their intention = to "facilitate a level of service between IATA levels B and C"[55] through their capital investment programme.

---

[51] Dublin Airport Authority Response to Commission Paper CP2/2005, 1 July 2005, page 36.

[52] BAH, Dublin Airport Bottom Up Efficiency Study, May 2005, pg 72.

[53] Ibid.

[54] Ibid, pg 73.

[55] Submission of DAA to the Draft Determination on Maximum Levels of Airport Charges in respect of Dublin Airport (Cp2/2005), 1 July 2005, pg 35.

As noted by the DAA, the issue of the overall appropriate service level standard continues to be a subject of significant debate and there is a lack of consensus with users, with clear conflicts between the expectation of the passenger as the ultimate user and that of some major airline users. This reflects the levels of quality differentiation among types of airlines and suggests that demands for specific levels of quality at the airport vary considerably; for example, desired comfort levels and seating provision vary. This implies that imposing a standardised level of service quality at the airport would not be optimal. While regulators, airport operators and airport users differ in their expectations and experiences of levels of service, the airport operator should be able to develop a framework for the complete airport system that guarantees its chosen standard levels, given passenger flows and existing facilities without leading to a breakdown in service standards for its users.

An area of contention in relation to service level agreements is whether the airport company should be penalised when performance falls below agreed standards, as suggested by Aer Lingus[56]. In general airlines, believe that penalties should be payable by the airport alone; they argue that it is the airport that is the monopoly supplier, while airlines operate in a competitive market and poor performance by an individual airline leads to passengers transferring to other airlines. On the other hand, as adverted to by BAH and noted elsewhere[57], the processes covered by "service level agreements" are shared between the airport and the airlines and one may argue that penalties should apply potentially to both parties.

At airports the need for direct regulation of quality is less than other regulated industries. This is due to the relative strength of bargaining power of both the airport operator and the airlines with which it deals.

---

[56] Submission of Aer Lingus to the Draft Determination on Maximum Levels of Airport Charges in respect of Dublin Airport (CP2/2005), 1st July 2005, pg 13.

[57] A new deal for Airports? - David Starkie, chapter in Regulating Utilities, New Issues, New Solutions, edited by Colin Robinson, Institute of Economic Affairs, Edward Elgar Publishing Limited, Cheltenham, 2001.

That being the case the arguments for the Commission to act as a referee penalising one side or the other are not compelling.

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

On the 2 August 2005 the Minister for Transport notified to the Commission the Department of Transport's Statement of Strategy, 2005 – 2007, drawing attention, in particular, to the air transport objectives set out in chapter ten of that document. It is noted that this section incorporates all the aviation objectives, not just those relating to airports accordingly, the Commission has addressed the range of objectives set out in that section.

Before outlining the Commission's response to the notification from the Department, it is the Commission's view that are other statements in the Statement of Strategy which are worthy of note.

In Chapter 6, the guiding principles of the Department of Transport are discussed. The final paragraph states:

"It is important that we make the best possible use of existing assets before we invest in new ones and that we focus on total life cycle costs rather than just upfront capital costs."

The Commission's policy that airport charges should be regulated having regard to the principles of productive, dynamic and allocative efficiency, is an example of this principle in practice.

The Statement of Strategy also mentions corporate governance in its integration objectives at Chapter Seven. It states that the objective is that State agencies achieve the highest standards of corporate governance and that a strategy for ensuring this is the full implementation of State Agencies of the "Code of Practice for the Governance of State Bodies".[58]

Part 11 of this Code of Practice is entitled "Strategic and Corporate Planning". It states:

"The need for sound corporate planning by State Bodies is very important. Each body should, within the first six months of each year; produce annual rolling five year business and financial plans encompassing strategy (taking account of general sectoral policy), planned investment and appropriate financial targets. Such corporate plans should be approved by the Board and should reflect the shareholder's objectives and strategic mandate in terms, inter alia, of dividend policy, capital value and where relevant economic and social objectives. The plans should set appropriate objectives and goals and relevant indicators and targets against which performance can be clearly measured. This is important in the context of assessing effectiveness and objectively evaluating achievement of targets. A copy of the corporate plans should be sent to the relevant Minister and the Minister for Finance".

Given the unprecedented restructuring plans involving the State airports considerable uncertainty has surrounded the detail of the development plans for Dublin Airport as operated by Dublin Airport Authority. Consequently, the Commission has not been in receipt of the type of business plans as envisaged by the Code of Practice as set out above. Having regard to this fact the Commission has attempted to take into account in its Determination the air transport objectives as set out in chapter ten of the Statement of Strategy.

The air transport objectives relate to airports, air services, safety and security and air traffic management. They are as follows:

---

[58] This Code was endorsed by the Government on 2 October 2001. For ease of reference it has been published as an Official publication of the Department of Finance and may be accessed at www.finance.ie

Objective – airports

To ensure that the State airports respond in a sustainable way to the needs of their full range of customers and to facilitate the contribution of the regional airports to balanced regional development.

Objective – Air Services

To facilitate and encourage as wide a range as possible of reliable, regular and competitive commercial air services for Irish Tourism, trade and industry.

Objective – safety and security

To ensure that Irish aviation safety and security policies and practices comply with or exceed best international standards.

Objective – air traffic management

Ensure an on-going strategic and operational role for the IAA in the provision of Air Traffic Management (ATM) services.

The Commission believes that it has taken into account the first objective above in so far as it relates to State Airports[59] in the manner in which it has sought to comply with its own statutory objectives as set out at Section 33(1) (a) – (c) of the State Airports Act, 2004, referred to earlier in this Determination in Section 3. The Commission has no role in relation to regional airports.

---

[59] "State Airport" is defined at section 4 of the State Airports Act, 2004 as "an airport in the state, managed and controlled by Aer Rianta or from the relevant appointed day a company". Since the Dublin appointed day of 1st October 2004 this means an airport owned or controlled by Dublin Airport Authority, i.e. Dublin, Cork or Shannon Airport.

In relation to the second objective, the Commission believes that it has taken this into consideration by the manner in which it has considered various other statutory factors, in particular, the level of investment in airport facilities at Dublin Airport[60], the quality of services at Dublin Airport[61] and the cost competitiveness at Dublin Airport[62]. Taking these factors into account when setting maximum levels of airport charges is designed to facilitate growth in the number of passengers using Dublin Airport and encourage a wider range of air services to drive this growth.

With regard to the third objective of the Statement of Strategy 2005 – 2007, to ensure that Irish aviation safety and security policies and practices comply with or exceed best international standards, it must be pointed out that the Commission has no role whatsoever in setting those policies or practices. However, to the extent that it can influence best practice by the setting of maximum levels of airport charges, it takes into account the costs associated with security and safety practices of Dublin Airport Authority when considering the Commission's objective of facilitating the efficient and economic development and operation of Dublin Airport.

The final objective in relation to air traffic issues is entirely outside the scope of a determination of the maximum levels of airport charges that may be levied by Dublin Airport Authority at Dublin Airport.

7. **"the cost competitiveness of airport services at Dublin Airport."**

The Commission believes that the measure of 'due regard' in relation to this factor - must be taken in the light of statutory objective (a), which seeks the efficient operation of Dublin Airport. The efficient operation of

[60] Section 33(2)(b)

[61] section 33(2)(e)

[62] section 33(2)(g)

Dublin Airport is thus re-stated with greater, as opposed to less, emphasis by its inclusion in statutory objective (a). Accordingly, the Commission engaged Booz Allen Hamilton to produce a bottom up efficiency study of Dublin Airport to provide a basis for its consideration of operational efficiency and thus cost competitiveness in the provision of airport services.

Addressing matters of cost competitiveness enables the airport to achieve greater operational efficiency. As an airports performance does not take place in a vacuum, comparators have been used in the past. Accordingly, the Commission sought – in the context of the concept of "competitiveness" international comparative information on the performance of Dublin Airport. Two bodies were asked to supply reports to the Commission, namely, the UK Transport Research Laboratory (TRL) and the International Institute of Transport and Logistics (IITL)[63] of Vancouver, Canada.

The main findings of the TRL and ATRS reports on the relative performance of Dublin Airport are set out in Annex 9. Also included at Annex 10 are the responses by these consultants to points raised by interested parties to their initial reports.

The Commission believes that benchmarking must be approached with caution, particularly in relation to comparator airports, the need to use objective metrics and in the interpretation of results. For example, airlines may "cherry pick " a particular figure and then attempt to use this out of context in support of their point of view. Ryanair have done so where it states that the Commission has not addressed its initial finding that Aer Rianta was 50% less efficient than the best of its peers in 2001 in the price cap to date. They further argue that CP2/2005 is evidence of continuing failure as DAA has "underperformed the most efficient

---

[63] The IITL analysed the airport performance database of the Air Transport Research Society (ATRS) and so the material is hereafter called the ATRS report.

European airport by 40%" yet the scenarios presented indicate price increases of up to 40%.

The Commission rejects this submission and believes Ryanair has not properly engaged the issue of operating efficiency but has consistently put forward a simple position that on the basis of a single benchmarked operating cost factor (as cited by the Commission's 2001 benchmarking survey or the recent work undertaken in 2005) the Commission should reduce overall airport charges by a corresponding amount to close the measured efficiency gap.

This approach by Ryanair does not address the following issues:

- Aer Rianta/DAA can similarly cite single benchmark operating cost factors which indicate that there is no basis for any efficiency adjustment [see Aer Rianta submission to Commission dated 4 June 2003]

- The requirement that benchmarking results be interpreted cautiously, taking into account inevitable differences in circumstances between airport operators;

- Operating expenditure is but one building block in the making of a price cap and therefore there can be no linear relationship between projected operational efficiency improvements and the ultimate price cap.

- The extensive "bottom-up efficiency" assessment undertaken by BAH on behalf of the Commission and the outputs contained therein which do not support the efficiency adjustment advocated by Ryanair. See Annex 13 and 14.

8. **"imposing minimum restrictions on Dublin Airport Authority consistent with the functions of the Commission."**

Under Section 32(6) of the Aviation Regulation act, 2001, the Determination may "operate to restrict increases in any such changes or to otherwise require reductions in them, whether by reference to any formula or otherwise. By proposing a revenue cap based on a per passenger yield, the Commission will be affording a large measure of discretion to Dublin Airport Authority.

In relation to runways the Commission has decided that the case for a runway sub-cap for off peak utilisation of runway 10/28 is no longer compelling and for that reason it will not be continued.

9. **"such national and international obligations as are relevant to the functions of the Commission and Dublin Airport Authority."**

The Commission notes that it is only obliged to have due regard to national and international obligations, as are relevant to the functions of the Commission and Dublin Airport Authority. To the extent that DAA has safety or compliance obligations under national law, including the Air Navigation and Transport Acts, 1936 to 1998, as well as legislation constituting, and relating to the Irish Aviation Authority, the Commission has had due regard to them in formulating its proposed Determination. They are reported in the Recoverable CAPEX Programme as compliance items.

Separately, given that airports are used both to enter and exit the State, they are subject to particular security, immigration, and health and safety requirements, collective referred to as compliance obligations. The Commission considers these to be national obligations. Those requirements are evolving and could be subject to change during the period of the Determination.

In relation to cost pass throughs for security, the Commission has decided that their inclusion would be at variance with the statutory objective of cost-effective airports. Separately, the Commission also notes that DAA is planning to reorganise its use of human resources in the discharge of compliance obligation in respect of fire and security. This is likely to lead to cost savings.

In relation to international obligations, Ireland is a signatory to the Chicago Convention, which has been incorporated into domestic law by the Air Navigation and Transport Act, 1964. To the extent that this Treaty creates international and national obligations, the Commission has had due regard to it.

Separately, Ireland as a Member of the EU, is bound by its laws, and in particular the competition rules. Accordingly, Articles 10, 12, 81, 82, 86 and 87 of the Treaty may be generally relevant[64]. However, only Article 86 is a directly relevant international obligation. In that regard, the Commission is only proposing maximum permissible per-passenger yields, which will leave DAA free to convert those maximum permissible yields into a corresponding price structure for charges. In doing so, DAA will be bound by Article 82 in particular.

[64] Under the European Communities Acts, these obligations are also part of the domestic law of the state.

6. STATUTORY REPRESENTATIONS

In the course of its statutory consultation the Commission received submissions from the following parties:

1. Aer Lingus plc.
2. Construction Industry Federation
3. Dublin Airport Airline Operators Committee
4. Dublin Airport Authority plc.
5. Irish Association of International Express Carriers
6. Irish Business Employers Confederation
7. Irish Tourist Industry Confederation
8. Ryanair Ltd.
9. United Portmarnock Residents Opposing Another Runway (UPROAR) a sub committee of the Portmarnock Residents' Association.

All of the representations received were placed on the Commission's website and additionally an opportunity was provided for submissions to be made on the individual representations received.

The Commission has addressed the various representations in the text of the document when discussing its approach to the relevant topic. Some of the submissions were very detailed, for example, the papers by DAA and Aer Lingus on cost of capital. To the extent that the Commission has relied on the analysis conducted by its consultants in making this Determination, an explanation of the reasons for the Commissions approach is contained in the consultant's reports annexed to this Determination which also contain responses to the relevant submissions.

Some of the submissions made, concerned topics outside the remit of the Commission. The Commission is not a planning authority nor is it entitled to prescribe to the DAA how to develop the airport. Consequently, it has not responded to many of the views contained in the UPROAR submission as it discusses topics for which the Commission has no statutory function. For example, noise, pollution, access and the "over-flying of residential areas" are issues for which the Commission has no statutory remit. UPROAR also expressed concern that the price cap may be reactive rather than proactive and that the cap may be set in such a way that Dublin Airport could choose a path that would only seek to maximise revenues. The Commission wishes to confirm that its approach in making this Determination has been a proactive one. The price cap is set to give Dublin Airport Authority incentives to operate and develop the airport in an efficient manner.

The IAIEC representation noted that Dublin Airport CIP has no allowance for investment in cargo infrastructure. Accordingly, it argued that no cost of passenger infrastructure (such as Terminal 2) sound be passed on to cargo operators. In addition, the IAIEC acknowledged that it would be a challenging exercise to find an appropriate regulatory framework to accomplish this objective.

The Commission notes the different demands made on airport infrastructure by cargo operators as compared to passenger carriers. However, the Commission continues to be of the view that its statutory objective of economic efficiency is best met by maintaining a regulatory formula which places an overall limit on revenue earned from airport charges by way of a yield calculation – rather than a limit or sub-limits on individual prices. Such an approach provides the regulated firm with substantial freedom to set its own prices in the most efficient way possible, and to change pricing policy to adjust to changing market conditions. In addition, the Commission notes that it must have due regard to the statutory factor at Section 33(2)(h) and place minimum restrictions on the regulated firm.

7. ANNEXES

Annex 1

Dublin Airport Passenger & Aircraft Movements Demand Forecast Report, March 2005*

Annex 2

Policy Recommendation on Sub-Cap on Off-Peak Landing and Take off Charges

Annex 3

Colm Kearney and Elaine Hutson's Dublin Airport Authority's Cost of Capital, May 2005 *

Annex 4

Colm Kearney and Elaine Hutson's Responses to comments on the Kearney & Hutson (2005) estimate of Dublin Airport Authority's cost of capital, August 2005

Annex 5

NERA Economic Consulting. The Cost of Capital for the DAA, A Final Report for the DAA, April 2005 *

Annex 6

Ministerial Direction dated 18th August 2005

Annex 7

Aviation Action Plan Letter dated 20th May 2005

Annex 8

Ian Rowson and William Hynes, Review of Airport Charges at Dublin Airport – Review of Capital Programme, September 2005

Annex 9

The Performance of Dublin Airport: The Findings of the Comparative Reports of the TRL and the IITL - ATRS, May 2005 *

Annex 10

TRL and the IITL – ATRS Comments on the DAA Response to Commission Paper CP2/2005

Annex 11

Alan Stratford & Associates Final Report of Dublin Airport Assessment of Commercial Revenue 2005 – 2014, May 2005 – Executive Summary *

Annex 12

Alan Stratford & Associates Revised Final Report of Dublin Airport Assessment of Commercial Revenue 2005 – 2014, August 2005 – Executive Summary

Annex 13

Booz Allen Hamilton, Dublin Airport Bottom – Up Efficiency Study – redacted report, April 2005 *

Annex 14

Booz Allen Hamilton, Dublin Airport Bottom – Up Efficiency Study – summary report, September 2005

Annex 15

Suggested Template for 'Rolling Schemes' for inclusion in the future price regulation of Dublin Airport

* These documents were previously published as part of the Annex Section of Commission Paper CP2/2005. They are available on the Commission's website at http://www.aviationreg.ie/economic_regulation/cp22005annex.htm