Draft Decision

Interim Review of 2005 Determination on Maximum Levels of Airport Charges at Dublin Airport

Commission Paper 5/2007

21 May 2007

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FOREWORD

This Report sets out the provisional conclusions of the Commission for Aviation Regulation ('Commission') arising from the Interim Review of the maximum levels of airport charges that may be levied at Dublin Airport by Dublin Airport Authority (DAA). The Decision to hold a Review was announced on 8th December 2006 and the review process has now culminated in the draft decisions and policy statements set out in this document.

A key driver of this Report, as of the prevailing 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.

Although this Report can only consider prices in the four-year period 2006-2009, it also discusses regulatory policy after 2009 in order to provide as much regulatory clarity as possible to the airport, its users and other interested parties. These policies would be consistent with charges at Dublin Airport, in the five years after 2009, averaging €7.75 per passenger in 2006 terms. Such a price increase would permit the airport to move from its present position – of comparatively low charges and comparatively poor service quality – to one of charges on average being approximately 17% higher, but at much better levels of service. Following this proposed step change in prices and services, the Commission would expect subsequent investments to give rise to lower or constant charges, in real terms, or for the DAA to demonstrate that current and prospective users are willing to pay for service quality upgrades.

The proposals contained here are provisional in nature, and based, *inter alia*, on the information that the Commission has received and accepted to date. The Commission has reached no final conclusions, and none will be made concerning the prevailing (2006-09) price cap until the Commission has considered any and all representations that it receives, and has decided to either accept or reject them. The Commission's work for this Interim Review has involved significant information collection from the DAA, and detailed engagement with the airport and other interested parties. The Commission is grateful to all these parties for their engagement. In addition, the Commission retained a number of consultants who have analysed different parts of the airport investment plan.

The Commission wishes to thank interested parties for their information provision, written submissions and other engagements over recent months. In particular the Commission wishes to acknowledge the burden of time and effort which was placed on the DAA in contributing to this exercise.

Cathal Guiomard

Commissioner

21 May 2007

EXECUTIVE SUMMARY

The Commission for Aviation Regulation has been reconsidering Dublin Airport's charges over recent months because the current price cap (of 2005)[1] was concluded before the Dublin Airport Authority (DAA) had finalised its investment plans. In these circumstances, and after the subsequent receipt of the airport's investment plan (CIP2006), the Commission decided in December 2006 that there was justification to hold an Interim Review of the prevailing (2006-2009) price cap.[2] In publishing its decision to hold an Interim Review, it was made clear by the Commission such a Review was without prejudice to whether, and by how much, airport charges might be changed.

Summary of key decisions

We summarise the key decisions under two headings:

- Decision on the funding of the DAA's revised investment plan
- Decision on the price cap for the 2006 – 2009 period.

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[1] See Commission Paper (2005) "Determination on Maximum Level of Airport Charges" CP3/2005.

[2] See Commission Paper (2006) "Decision to Hold an Interim Review of the Dublin Airport Charges' Determination", Commission Paper CP9/2006. The Commission also paid regard to the suggestion of the regulatory appeal panel in its April 2006 decision that the Commission undertake a review of its 2005 determination once the uncertainties surrounding the costs of T2 had been resolved.

1. The DAA's investment plan

The Table below shows how the DAA's investment programme has changed over the 2005 to 2006 period.

	DAA's investment programme 2006 -2009		
	May 2005 estimates (€ million, 2006)	**October 2006 estimates (€ million, 2006)**	**Commission assessment (€ million, 2006)**
Terminal 2 related projects	€234	€607	€582*
Other projects	€337	€571	€535
Total	**€571**	**€1,178**	**€1,117**

* *To be recovered in two stages subject to the changes in airport passenger numbers over time.*

Based on its assessment of the investment plan, the Commission is proposing not to include in the regulatory price calculations some €61 million (€1,178 - €1,117) of the proposed costs in the investment plan. The two main reasons for this are:

The review of the DAA's proposed costs indicated some overstatement of project contingency costs, particularly for projects which are either already completed, or nearing completion; and

Since the DAA first submitted its investment plan in 2006, some projects have already gone out to tender. The outcome from the tender process shows that, for certain projects, actual tender costs are coming in significantly below projected costs as set out in the DAA's investment plan.

With respect to Terminal 2 ('T2') related costs, the Commission is making two further proposals:

The DAA will only begin to recover the costs of investing in T2 from the commencement of operations at the terminal, currently envisaged to be the end of

2009. This not only provides the DAA with strong incentives to deliver T2 on-time, but it also means that customers will only pay for those facilities that they actually use.

The allowed costs for T2 will be recovered in **two stages**. The reason for this proposal is that it is the Commission's view based on a review of past and likely future demand trends that the DAA is proposing to build a very large Terminal 2 complex. Therefore, in the **first stage**, while demand in the airport as a whole remains below 30 million passengers per annum, the Commission is proposing that the DAA will recover €430 million of T2 costs, with the remainder being recovered in the **second stage** once total demand exceeds 30 million passengers per annum.

The Commission envisages that the precise details of the two-stage approach will be agreed with the DAA and airport users as part of the consultation for the 2010 – 2014 price cap.

The 2006 – 2009 price cap

With respect to the existing determination, the Commission is not proposing to make any changes to the 2005 price cap. This is despite the fact that there has been a significant increase in the capital expenditure of the DAA.

The financial modelling carried out by the Commission indicates that the increase in allowed costs is almost exactly offset by the increase in passenger numbers, relative to the 2005 determination. Annual passenger numbers were around 2 million higher in 2006–07 higher compared with forecasts at the time of the 2005 review. Therefore, while airport costs are higher as a result of increased capital expenditure, the passenger numbers against which these costs are recovered are also substantially higher.

According to the 2005 determination, the cap on passenger charges is allowed to change by each year in the 2007 to 2009 period by CPI+4%. At the time of the compliance statement in December 2006, the allowed passenger charge for 2007 was set at €6.39. A result of the proposals in this Draft Decision would be to continue with this price mechanism until the end of 2009.

Background - key driver and regulatory objectives

A key driver of this Interim Review, as of the prevailing 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. Although the Interim Review can only consider prices in the four-year period 2006-2009, this Report also discusses regulatory policy after 2009 in order to provide as much regulatory clarity as possible to the airport, its users and other interested parties.

While the discussion of some of the options presented here would, if adopted, only come into effect in the next regulatory period, the Commission believes it is helpful to all parties for it to give advance notice on its current thinking on these issues. The Commission is willing that discussions on these matters with the industry would continue after the conclusion of the Interim Review, according to a timetable that would lead into the next price review.

The Commission has sought to develop proposals that could satisfy all of its statutory objectives, including meeting the needs of current and prospective airport users (both those that have expressed support for T2 and those that have argued that the costs of the proposed investment are excessive) and enabling the DAA to operate and develop Dublin Airport in a sustainable and financially viable manner. Such proposals could lay the basis for a longer-term 'regulatory settlement' by way of a price cap and other policy proposals that would:

- provide incentives for DAA to carry out much needed infrastructure investments to boost capacity at Dublin Airport; while
- protecting the interests of passengers by ensuring that they do not have to over-pay for investment in infrastructure that potentially provides them with little or no incremental benefit.

The Commission believes that the proposals in this Interim Review satisfy the statutory objectives placed by legislation, namely:

- to facilitate the efficient and economic development and operation of Dublin Airport which meet the requirements of current and future prospective users of Dublin Airport;

- to enable DAA to operate and develop Dublin Airport in a sustainable and financially viable manner; and
- to protect the reasonable interests of current and prospective users of Dublin Airport in relation to Dublin Airport.

The proposals presented here provide the DAA with strong incentives to carry out infrastructure investment at Dublin Airport, while also ensuring that such investment is delivered in an efficient manner to the maximum benefit of customers. The financial modelling carried out by the Commission also indicates that the proposed mechanism for recovery of allowed costs associated with CIP2006 are such that the DAA remains financially viable within the period of the current price control and beyond.

Context

The context for the current Interim Review is challenging in certain respects. Unusually for an airport of its size, Dublin Airport simultaneously serves significant numbers of passengers using the services of low-cost carriers and of full-service carriers.[3] Moreover, marked differences between airlines' needs and the business models mean that an absence of genuine and mutual engagement by interested parties runs the risk of deadlock concerning airport services and associated prices. This can create difficulties, *inter alia*, for regulatory decision-making, insofar as the regulator's office is charged with setting prices that, along with other objectives, permit the development and operation of the airport to meet the needs of *all* users.

For example, if all users agreed that a proposed investment was necessary and the costs were acceptable, the Commission would be minded to incorporate the planned capital expenditure into a determination. Conversely, the Commission would be keen not to allow the DAA to recover the costs of investments that users do not want. In that regard, genuine consultation with users about their investment (and other) needs, and what they are willing to spend to have those needs met, is critical. Based on its analysis of the DAA's consultation leading up to the publication of CIP2006, the Commission has concluded that the DAA's consultation process does not appear to

[3] A recent DAA submission to the Commission described the airport's customers as "users with very different commercial objectives and agendas … [and with] … conflicting commercial needs", paragraphs I.3.2 and II.1.5, DAA (2007) "Statement of Case" available from the Commission's website (www.aviationreg.ie/images/ContentBuilder/ER_AC_DAA_Response_CP1_2007_Redacted_090307.pdf).

have always given users meaningful cost information that would have allowed them to inform the key cost-affecting decisions.

Despite the consultation exercises that have taken place to date, there appears currently to the Commission to be relatively little common ground between the airport and some of its users about the appropriate approach to providing passengers with their desired level of service, or about associated decisions on the kind and amount of investment needed at the airport and the appropriate way to recover the costs of such investments. As a consequence, relations between the airport and at least some users appear often to be conflict-ridden.

Proposals regarding 2006-09 price cap

In announcing its decision to hold an Interim Review, the Commission was mindful of the increased scale of the DAA's revised investment plan; for the 2006-09 period, total planned investments increased between May 2005 and October 2006 from €542 million[4] to €1.18 billion. The Commission stated that the scale of the revised investment plan was potentially large enough that its viable implementation might be in doubt, and thus for the objectives of the 2005 determination possibly to be compromised, without a review of the 2005 Determination.

Furthermore, given the scale of the proposed investment, as outlined in the CIP2006, the Commission felt it important to provide an indication to the DAA and airport users as to how the costs of such investments might be recovered in the years beyond the current price control period. Therefore a key output from this review is guidance on:

- the scale of the investment costs as outlined in CIP2006 that the Commission proposes to write into the Regulatory Asset Base ("the RAB");
- when these costs are proposed to be written into the RAB; and
- the mechanism for recovery of these investment costs once they are written into the RAB.

[4] Page 4, Dublin Airport Authority, CIP03, May 2005; this figure is equivalent to €571 million in 2006 prices.

To have included immediately in the current price cap the entirety of the proposed costs of CIP2006 would have lead to an average airport charge per passenger of €9.50 between 2010 and 2014, compared to the 2006-09 cap of €6.68 (all prices quoted in 2006 prices).

For the reasons set out in this Report, the Commission does not propose to adopt such a mechanistic change to the calculation of the price cap.

For the purposes of recovering the costs associated with investing in Terminal 2 ("T2") the Commission has concluded that the profile of charges should be one that more closely aligns with user benefit; for Terminal 1 Extension ("T1X") the Commission has sought to ensure charge neutrality; and for Pier D the Commission has decided to treat the revised estimates as it would a cost overrun in circumstances where there was no Interim Review.

The Commission has carefully analysed the ability of the DAA to finance the provision of additional terminal and pier capacity as set out in the Government's Aviation Plan, and without recourse to Exchequer funds. The Commission's view is that no changes in the airport charges are necessary for the DAA to maintain an investment grade credit rating during the current regulatory period.

Review of CIP2006

Notwithstanding the arguments made by the DAA and some other parties, the Commission is convinced that its statutory objectives require it to review the DAA's projected capital expenditure needs, to protect the interests of current and prospective users and to facilitate the efficient and economic development of the airport. The Commission will add to the RAB its forecast capital expenditure needs for the DAA, carefully considering the representations made by the DAA and other parties. Adjustments to the RAB may occur when the actual level of capital expenditure deviates from the forecast level.

The Commission has recently been criticised (for example, by the 2006 Aviation Appeal Panel, by the ITIC and IBEC as well as by the DAA)[5] for taking a view on such

[5] See Aviation Appeal Panel Decision, 4 April 2007; ITIC (2007) "Submission to the Commission in Response to the Paper CP1/2007" available from Commission's website; and IBEC (2006) "Submission to the Commission on CP3/2006 Aviation Appeal Panel Ruling of 4 April 2006", available from Commission's website.

matters as the size and design of facilities at Dublin Airport. It has been argued that the Commission should have no role in such 'engineering' matters. However, the Commission's core role – like that of any price regulator – might be summed up as (*inter alia*) seeking to protect users from being charged for inappropriate costs. These costs might be on the operating or on the investment side of the business. Where the supplier and the users have failed to agree amongst themselves on service levels and charges, it falls to the regulator to assess the appropriateness of proposed costs and, inevitably, this leads to consideration of size and other specifications where these affect costs.

However, mindful of the criticisms, and aiming at good regulatory practice, the Commission, in a paper published in February 2007, made suggestions regarding possible future charging frameworks at Dublin Airport.[6] This paper sought to establish if the airport and its varied users might be able to agree a level and structure of charges that would meet their respective needs and be compatible with the statutory framework. The Commission's proposals in that regard – which would have allowed it to stay out of 'engineering' matters by inviting the parties to come to the regulator with 'packages' of prices and services – have not to date been taken up.[7] As a result, the fact that Commission's proposals in this Report involve facility-related pricing elements has proven to be unavoidable in the context of Dublin Airport, at least for now.

It is not the role of the regulator to dictate to the DAA either the location, scale or ultimate design specification of any project it wishes to undertake. The DAA, in full consultation with all airport customers, is best placed to do this. The Commission's role is to evaluate, given all the information available at the time, whether there is a sufficient demand for a given investment, such that those airport customers wishing to use it are willing to pay for it on a long-term basis. The Commission does not currently believe that such demand exists for a T2 project designed to cope with 4,200 passengers per hour in the busy hour of the day - the proposed scale of T2 as outlined by the DAA in CIP2006. However, the Commission's proposals allow the DAA sufficient flexibility to recover the costs of such an investment, either early on through some form of differential charging mechanism whereby those airlines who

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[6] Commission (2007) "Public Consultation on Dublin Airport Charges Following the Capital Investment Programme 2006", Commission Paper CP1/2007.

[7] Paragraph 3.4, page 14, DAA Statement of Case, 6 March 2007.

value the additional extra peak time capacity that exceeds that Commission's demand estimates contribute towards the cost of this additional capacity; or, further down the line through an airport-wide charge, should demand materialise to such an extent that it is clear that *all* airport users benefit from the scale of T2.

A review of T2's costs suggests that it is the size, rather than differences in the quality of the new facility, that is the main driver of its envisaged costs. The DAA has chosen to build a large terminal in one go with considerable excess capacity, rather than building a smaller facility and adding an extension at a later date if the traffic growth mandated further capacity expansion. The Commission therefore proposes to require the DAA to assume some of the risk the risk that the proposed T2 is potentially too large. The Commission proposes to calculate future user charges on the basis that this capacity will ultimately be required. However, it will only add the final €152 million of the capital expenditure on T2 into the RAB if and when annual passenger numbers at Dublin Airport exceed 30 million. The risk that the facility ultimately proves to be too big is one that the DAA has introduced by proposing to build such a large facility.

Notwithstanding the doubts regarding the proposed size of T2, the Commission has also reviewed in detail the costs for the major projects in the CIP2006. This exercise has consisted of:

- a review of the cost benchmarks used by the DAA as set out in the DAA report entitled "DAA CIP04 – Cost Benchmarking Report" (January 2007);
- a review of the non-construction costs relating to T2, consisting largely of project contingency costs and project planning and design fees; and
- a review of twenty-seven projects in the CIP2006 where total projected capital expenditure for each project exceeds €5m.

On the basis of the evidence collected as part of this review, which is described in detail in this report, the Commission proposes not to allow €61 of the proposed CIP2006 into the RAB, €25 million of which is taken off the proposed T2 capex of €606.7 million. That is, were the DAA to carry out all of the projects as specified in the CIP2006, including a T2 on the scale of that proposed, the amount that would enter into the RAB upon completion of those projects is €61 million less than that set

out by the DAA in the investment plan. However, as indicated, given the uncertainty over the proposed size of T2, the Commission is proposing a two-stage approach to writing T2 capex into the RAB.

Proposals regarding price cap after the opening of T2

The Commission believes that it is best to favour a charging profile that lets the DAA start collecting revenues when users begin to realise the benefits of a major new investment, such as T2. This represents, in the Commissions view, the best outcome for airport users, as they will be paying for the services they actually receive. Furthermore, there should be some thought about the willingness to pay of different airport users for the facilities.

The Commission is willing to allow the DAA to fund a new terminal and will adjust the price cap such that the DAA is able over time to recover the efficiently incurred costs of building the new terminal. The Commission proposes to backload the charges, so as to protect current users. Nevertheless, the Commission will also have regard to enable the DAA to operate the airport in a sustainable and financially viable manner. Should the need arise in the future, and subject to the DAA carrying out investments in an economically efficient manner, the Commission would consider changes to the treatment of the investments in the RAB such that the DAA continues to be financially viable. One common proposal in this respect is to accelerate the depreciation of assets in the regulatory asset base (RAB).

Based on feedback received from stakeholders, and evidence collected as part of Rogerson Reddan and Vector (RR&V)[8] research on the likely demand for airport capacity going forward, the Commission has doubts as to whether the costs associated with the proposed size of T2 in the CIP2006 – in particular a T2 designed to cater for 4,200 passengers per hour ("pph") in the busy hour – should be recovered from all potential passengers in an airport-wide charge, at least in the medium term. Therefore, the Commission is reluctant, at this stage, to write into the RAB the full cost of the T2 investment on the scale proposed by the DAA in CIP2006.

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[8] The Commission commissioned RR&V to review a number of aspects of the costs in the CIP2006, including costs relating to the proposed size of T2. Redacted versions of the RR&V reports are presented as annexes to this report.

The Commission is not willing to allow the DAA to recover *automatically* all of the costs associated with the proposed T2, since it is a very large facility. Instead, the Commission proposes to divide the costs into two components:

- **Box 1:** The Commission proposes to allow the investment costs associated with building a T2, which combined with T1 will provide an airport capacity of up to 30 million passengers per annum ('mppa'), to be incorporated into the RAB from commencement of operations at T2. The costs of this investment will then be recovered from customers through a uniform airport-wide charge on all passengers. The Commission's estimate of this investment cost is €430 million compared with the €582 million that Commission considers to be a reasonable estimate for the actual proposed T2.

- **Box 2:** The Commission proposes that the DAA assumes the demand risk for the remaining €152 million. It currently proposes that this sum will only be written into the RAB once annual passengers numbers reach 30 million. At that point, the incremental investment costs could be recovered on an airport-wide basis, through a charge based on a unitised costing approach.

This approach would be consistent with charges at Dublin Airport, in the five years after 2009, averaging €7.75 per passenger in 2006 terms. Such a price increase would permit the airport to move from its present position – of comparatively low charges and comparatively poor service quality – to one of charges on average being approximately 17% higher, but at much better levels of service. Following this proposed step change in prices and services, the Commission would expect subsequent investments to give rise to lower or constant charges, in real terms, or for the DAA to demonstrate that current and prospective users are willing to pay for service quality upgrades. While this issue has not been considered during this Review, it is appropriate to consider such as issue when the additional capacity comes on stream, i.e. during the next regulatory review.

As outlined above, the Commission believes that it had full regard of its statutory duties, as well as the Ministerial Direction it has received. This is illustrated in the Table below which summarises, amongst other things, the projected revenues per passenger, RAB and average FFO:Debt over the 2010-2014 period.[9] The demand

[9] FFO is Funds from Operations.

forecasts used in the two-box approach, which also underlie the illustrative figures in the Table below, are the DAA's own forecasts to 2014. The DAA forecasts total airport passengers to be just short of 29 million per annum in 2014.

2010-14 regulatory projection *CPIiy2006 - 115.7*		2010	2011	2012	2013	2014	PV
Discount factors - in-year		1.036	1.112	1.195	1.283	1.378	
End of period discount factor						1.429	
RAB at the start of the year	*€m*	1,551.4	1,660.8	1,930.0	2,144.7	2,134.6	(1,551.4)
Net investment	*€m*	132.8	298.5	250.3	28.3	99.6	(700.5)
Depreciation	*€m*	(23.4)	(29.3)	(35.7)	(38.4)	(41.0)	138.6
RAB at the end of the year	*€m*	1,660.8	1,930.0	2,144.7	2,134.6	2,193.2	1,534.8
Average RAB	*€m*	1,606.1	1,795.4	2,037.3	2,139.6	2,163.9	
Discounting rate of return		7.40%	7.40%	7.40%	7.40%	7.40%	
Rate of return on average RAB		7.14%	7.14%	7.14%	7.14%	7.14%	
Return on assets	*€m*	114.6	128.1	145.4	152.7	154.4	
Operating expenditure	*€m*	[…]	[...]	[...]	[...]	[...]	[...]
Net commercial revenues	*€m*	[...]	[...]	[...]	[...]	[...]	[...]
Regulatory levy	*€m*	1.7	1.7	1.7	1.7	1.7	(7.2)
Depreciation	*€m*	23.4	29.3	35.7	38.4	41.0	(138.6)
Other adjustments	*€m*						
Allowed revenues	*€m*	178.5	196.8	219.1	227.5	230.3	877.1
							0.0
Passenger numbers	*millions*	25.3	26.1	27.0	27.9	28.8	
Allowed revenues per passenger		€7.05	€7.53	€8.11	€8.16	€8.00	
Projected average FFO/debt	17.6%						

**Note: […] figures have been redacted for reasons of commercial confidentiality*

The figures presented in the Table above are for illustrative purposes only, and are clearly sensitive to a number of key regulatory parameters which could change as part of the consultation for the 2010 – 2014 price review, such as the regulatory cost of capital. These parameters and all other relevant factors will be reviewed for the next determination.

The Commission is willing to consider other pricing structures that would allow the DAA to recover the €152 million in **Box 2**, provided that the generality of users and prospective users are protected from the risks that there is no demand for a facility

large enough to handle 4,200 passengers in the busy hour. For example, a proposal to charge T2 users a peak-hour charge may have merit, since it would recover the incremental costs associated with building the larger facility from the user(s) that value having such a large T2 now. Aer Lingus's support for a large facility suggests that it values having a busy-hour capacity in T2 of 4,200 passengers.

The Commission is keen to provide the DAA with incentives to carry out the investment in T2 in an efficient manner. Therefore, the Commission envisages at the 2010 price control allowing the DAA to keep for a period of up to five years (to the end of 2014) any benefits associated with bringing the T2 project in under the investment costs as set out in the Commission assessment presented in this Report. Conversely, the risk of any cost over-run, would be borne by the DAA.

As indicated in CN5/3007,[10] the Commission requests that interested parties submit responses to this consultation paper no later than 12**.00 noon, 21 June 2007.**

[10] Available from www.aviationreg.ie

1. INTRODUCTION

This Paper sets out the findings that the Commission has reached following a review of its 2005 Determination governing airport charges that can be set at Dublin Airport

Section 32(14) (a) of the 2001 Aviation Regulation Act ("the Act") gives the Commission the discretionary power to hold an interim Review. If it sees fit, the Commission may amend a determination following such a review. An amended determination remains in force for the remainder of the period of the original Determination, which in this case runs to 31st December 2009.

As well as setting out the Commission's proposals with respect to the existing Determination, this document presents our initial thinking on the allowances that we intend to provide for at future price controls in order to fund the DAA's extensive capital programme going forward. In particular, we outline our proposed approach to the funding of efficient investments in key assets such as Terminal 2 and associated projects such as Pier E.

The deadline for responses to this Draft Decision is **12.00 noon**, **21st June 2007**. After it has given careful consideration to submissions received, the Commission will publish a Final Decision with respect to 2006-09 price cap as soon as feasible thereafter.

The remainder of this Report is divided into the following sections.

Section 2 presents the background to the current determination outlining the process that the Commission has followed in the lead-up to this Review

Section 3 describes how the Commission has taken into account the two Ministerial Directions (2005 and 2007) it has received.

Section 4 outlines how our current draft proposals satisfy the statutory objectives of the Commission in relation to the sustainability and financial viability of the DAA.

Section 5 reviews the consultation process that the DAA conducted while developing its revised capital investment plan (CIP2006).

Section 6 describes the views of parties on various pricing options proposed by the Commission in the consultation on the interim review (CP1/2007) and outlines our current thinking on these options.

Section 7 presents the Commission's assessment of the DAA's revised Capital Investment Programme (CIP2006). This section outlines how the Commission proposes to set a cap on charges that will allow the DAA to recover allowed costs relating to the T2 project, once T2 is operational. We also present our proposals on the treatment of the non-T2 costs in CIP2006.

Section 8 describes the implications of the Commission's proposals for the current and future determinations.

Section 9 restates in summary how this Draft Decision complies with the statutory framework in which the Commission operates.

The deadline for responses to this draft Decision is **21st June 2007**.

2. BACKGROUND TO THE INTERIM REVIEW OF REGULATED AIRPORT CHARGES

In order to assist parties in understanding the scope of the Interim Review, this section provides background information relevant to the current Review in the form of a summary of the process that the Commission has followed leading up to this Draft Decision, from the time of the original Determination in 2005.

2.1. The process leading up to the current Review

The second determination on airport charges was made on 29 September 2005.[11] It was the first determination made after the State Airports Act 2004. Given this new Act, the Commission had set out its interpretation of its statutory objectives in a commission paper.[12] It concluded that the new statutory objectives permitted the Commission to continue regulating airport charges with reference to the economic concepts of productive, dynamic and allocative efficiency. Accordingly, economic efficiency continued to be the driving principle of this Determination, as it has been for the first Determination in 2001 and the subsequent review in early 2004. The statutory timetable required the Commission to make a new Determination prior to 1 October 2004. The basis for the new Decision was the DAA's CIP of May 2005. However, following the publication of the Aviation Action Plan by the Government in May 2005, the DAA revised its investment proposals and engaged consultants to assist it.

Consequently, by 19 September 2005 the DAA were only in a position to provide the Commission with a high-level summary of its revised Capital expenditure programme. Given the statutory timetable of 1 October 2004, the Commission was unable to analyse the revised DAA capex programme against the statutory objective of economic efficiency; nor consider the effect on all revenue streams and costs throughout the period of the Determination, analysis the Commission considered central to determining the appropriate level of airport charges.

Instead, the Determination was based on an independent assessment by the Commission of the May 2005 CIP provided by the DAA. The Determination included an allowance for the efficient development of infrastructure at Dublin airport. It

[11] See Commission Paper (2005) "Maximum Level of Airport Charges in respect of Dublin Airport – Draft Determination and Explanatory Memorandum", Commission Paper CP2/2005.

[12] See Commission Paper (2005) "Determination on Maximum Level of Airport Charges", Commission Paper CP3/2005.

included funding for a second terminal and additional pier capacity. The Commission stated that a key driver of this Determination was:

> "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."[13]

In setting the cost of capital, the Commission thought that it was preferable to set a rate of return that was more likely to err on the high side rather than the low side, particularly given that existing capacity constraints required substantial infrastructure investment.

Following the adoption of the Aviation Action Plan, the DAA undertook a review of its capital investment programme. This included a period of consultation with the main stakeholders at the airport as to the particulars of the necessary infrastructure. The Commission fully supported this review and consultation process as a necessary precursor to the implementation of the Aviation Action Plan.

At the time of the consultation on the 2005 Determination, some respondents argued for the exclusion of the DAA's revised capital expenditure programme from the Determination, including funding for a second terminal, until the airport achieved agreement from the majority of users that the projects were necessary and the costs not excessive. Such a policy would not, in the Commission's view, balance with the needs of the Airport to be able to invest, 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.

The Commission continues to hold this view, and believes that the proposals presented as part of this interim review are consistent with such a view. Furthermore, it is considered that such a view is endorsed by the objectives for the Commission as set out in the State Airports Act (2004) as well as in the two Ministerial Directions received to date.

The DAA's review of its capital expenditure needs meant that the Commission made its 2005 Determination on the basis of a May 2005 CIP that was subject to revision because of the Aviation Action Plan. The Commission indicated at that time that it

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[13] See page 3, Commission Paper CP3/2005.

might be appropriate to review the Determination once it and other interested parties (including the Government's own aviation experts) had time to consider fully the finalised capital expenditure programme proposed by the DAA.

While the Commission recognised that its Determination must allow the DAA to finance an efficient capital expenditure programme, it did not accept the DAA's submission that such an objective requires the company to maintain an "A" rating. Rather, the Commission concluded that:

> "The DAA will have adequate access to funds as long as it maintains a rating within investment grade, which includes BBB."[14]

The Commission recognised that it had not been able to carry out a comprehensive review of certain risk issues, particularly in relation to the capital programme, but that it would have the opportunity to consider the risk issues as part of a later review.

When determining the starting regulatory asset base, the Commission stated that

> "[A]s 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 airport as passenger numbers grow and, therefore, it is appropriate to restore it to the regulatory asset base."[15]

Investments deemed in 2001 to have been delivered imprudently early but which were now generating an economic benefit to users were restored in the 2006 regulatory asset base (RAB).

The Commission removed the sub cap on off-peak landing and take-off charges, having concluded that there were no longer periods of under-utilisation of the runways that difference in peak and off-peak charges could encourage airlines to use. Nevertheless, the Commission reiterated its advocacy of marginal-cost pricing as a means of encouraging efficient capacity utilisation, and observed that were the DAA 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.

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[14] See page 39, Commission Paper CP3/2005.
[15] See pages 73-74, Commission Paper CP3/2005.

Appeal Panel

On 4 April 2006, pursuant to Section 40(5) of the Act, an Appeal Panel established by the Minister for Transport referred the 2005 Determination back to the Commission for review. The Panel stated that the matters raised by the DAA in its appeal concerned the reasoning and general approach adopted by the Commission only in so far as they might affect the ability of the DAA to operate and develop Dublin Airport in a sustainable and financially viable manner. The Panel decided, having regard to this statutory objective, that there were grounds for the Commission to review its price cap allowances in respect of (a) two Capex projects; (b) two adjustments to the Regulatory Asset Base (RAB); and (c) three forecasted commercial revenue streams.

On 22 June 2006 the Commission issued a revised Determination having reviewed the matters referred to it by the Appeal Panel.[16] In making its revised Determination the Commission reiterated that economic efficiency continued to be the driving principle of its airport charges determinations and that the three statutory objectives in Section 22(4) of the 2004 State Airports Act must be read together and in light of each other.

Following careful consideration of the Panel's decision and of submissions received, the Commission varied the 2005 Determination by including in the price cap the full cost of Pier D (€64 million) as notified to the Commission by the DAA in the May 2005 CIP to be the cost of Pier D. The Commission accepted that further delay to Pier D, even if it produced a cheaper specification, would impose higher overall costs on airport users. In reaching this conclusion, the Commission disagreed with the Panel's view that it is not for the Commission to adjudicate upon the design and configuration of airport facilities as part of the regulator's assessment of the capital expenditure plans of the regulated firm. In that regard, the Commission pointed out the specific findings of the High Court in 2003 which described the Commission's role regarding capex evaluation in clear terms. The Commission observed that the provision of airport capacity can lead to excessive costs for airport users in a number of different ways:

[16] Commission (2006) "Decision of the Commission further to a Referral by the 2006 Aviation Appeal Panel" Commission Paper CP5/2006.

> "If airport facilities are provided too early, and included in the calculation of airport charges, users pay charges that are excessively high. If airport facilities are provided at the right time but at excessively high unit costs, or are built to a specification that is much higher than users wish to use and are willing to pay for, the airport charges that users pay are too high. If airport capacity is provided too late, even though airport charges do not change, airport users are exposed to congestion costs, such that the sum of airport charges and congestion costs are excessively high. Congestion costs may take the form of time costs (delays) as well as crowding and other discomfort."[17]

When addressing whether to include a clawback relating to Pier D, the Commission accepted that it was important to provide clarity and certainty to users on what the DAA is expected to deliver (and when, albeit that that is more difficult) within the spending limits fixed in the Determination. When assessing capacity projects that are in fact delivered and whose outcome might deliver efficiencies the DAA should be rewarded while demonstrable inefficiency that is to the detriment of users should be penalised. The Commission proposed to address this issue as part of any subsequent capital expenditure review.

The Panel suggested that the Commission should undertake a review of its Determination once the uncertainties surrounding the costs of T2 had been resolved. The Commission reiterated that it continued to believe that it might be appropriate to review the Determination once it had an opportunity to consider fully the DAA's finalised capital expenditure programme.

Consultation on Whether to Hold an Interim Review

In September 2006 the Commission published a consultation paper:

- "to advise that it has decided in accordance with section 32 (14) (a) of the 2001 Act that there **appear to be** 'substantial grounds' to conduct a statutory review (the "Review") of the 2005 Determination; such grounds for a review include, but are not limited to the following:

- (a) a requirement to analyse the forthcoming 200x6 CIP for Dublin Airport arising from the circumstances surrounding the unavailability of a finalised CIP at the time of the 2005 Determination; (II) to advise that it has decided in accordance with Section 32 (14)(a) of the 2001 Act that there **may be**

[17] See page 13, Commission Paper CP5/2006.

‘substantial grounds’ to conduct a review of the 2005 Determination; such grounds for a review including but are not limited to the following:

- (b) the degree to which airline users of Dublin Airport have revised their anticipated requirements for airport facilities such that the DAA has developed a substantially larger capital programme.” [18]

The Consultation Paper set out the Commission’s initial thinking on three matters:

- the way in which ‘substantial grounds’ should be interpreted;
- whether the proposed tests to interpret ‘substantial grounds’ were met in current circumstances; and
- the scope of any interim review.

Interpretation of substantial grounds

In the Consultation Paper the Commission argued that substantial grounds for a review would exist

> “only if not holding a review would be more harmful to efficiency (which in the Commission’s view is the essence of its statutory objectives) than holding a review, even allowing for the known detriments to efficiency of the latter.”19

Interim Reviews can potentially have detrimental effects on efficiency, in particular by impacting on the primary mechanism by which the regulatory determinations of maximum airport charges aim to promote efficiency; namely, through the incentive effect of additional profits that the DAA can realise if it performs more efficiently than the regulator reasonably estimated at the time of a determination. This incentive effect depends on there being a passage of time between making estimates (and basing a determination thereon) and the corresponding outturns.

Other possible detrimental effects identified from holding a multiplicity of Interim Reviews in a single price control period were: increased uncertainty in the regulatory regime for the DAA, providers of finance and airport users; weakened incentives on the DAA to provide the Commission with timely and properly justified information for

[18] Page 5, Commission Paper CP6/2006

[19] Page 15, Commission Paper CP6/2006.

price reviews; and additional staffing and consultancy costs that the Commission, the DAA and other participants in consultation would incur.

Circumstances identified where the threshold at which substantial grounds for an Interim Review might be satisfied were when the financial or other effects fell outside a reasonable range of expectations at the time of a determination, or when (exceptional) uncertainties around significant elements of the forecasts required for a determination were so great that only by relying on the possibility of an Interim Review could the Commission's statutory objectives be robust to a reasonable range of expectations at the time of a determination.

Finally the Commission observed the desirability of regulatory consistency. Given its statements in the Determination that an Interim Review might be necessary following receipt of a finalised CIP, the Commission was more open to holding an Interim Review than otherwise would be the case.

The Commission indicated that any review undertaken in 2006-07 would be the only Interim Review that it would be minded to initiate under Section 32(14) during the period 2006-2009.

Whether the current circumstances meet the test for substantial grounds

The Commission suggested that the current circumstances appeared to satisfy a three-stage test for substantial grounds:

- *The circumstances at the time of the 2005 Determination appeared to be exceptional.* The 2004 State Airports Act required a new determination within one year, bringing forward by almost a year the date of a new determination. The Act also created a new Board for Dublin Airport. In May 2005 the Government published its Aviation Action Plan which mandated the DAA to build at Dublin Airport a new pier for 2007 and to open a new terminal in 2009. These impacts rendered the company unable to submit a final CIP to the Commission in time for it to be properly considered for the 2005 Determination.

- *The circumstances were generally outside the control of the DAA.* The Government's actions had been taken in its capacity as legislator and policy maker in the transport sector, rather than as the shareholder.

- *Finally, the scale of the revised programme was potentially large enough that its viable implementation might be in doubt without a review of the 2005 Determination.* The Determination was designed for a less substantial capex programme than what the DAA was now contemplating.

The scope of any Interim Review

Because of the adverse incentive effects that an Interim Review can cause, the Commission suggested that an Interim Review should be no wider than necessary to address the grounds for that review. In particular, it should not revisit assumptions made at the time of the determination that are not materially compromised by the circumstances relevant to the review.

The Commission proposed one option for a review would be to consider, as far as possible, the data and arguments before the Commission as they were in September 2005 *except that* the 2006 DAA investment plan (and associated materials) would be substituted for the May 2005 DAA investment plan. Because the DAA had advised the Commission that the 2006 CIP was structured to address a revised outlook for user requirements, including update passenger forecasts, the Commission indicated that it may adopt revised traffic forecasts for the review and to recognise the consequential impacts on operating costs and retail revenues. Other consequences for operating costs, commercial revenues or other model inputs might also be considered if strong evidence can be provided that they are material and arise directly from the revised plans for the capital programme.

Matters comprehensively rehearsed during the work for the September 2005 Determination – for example, the methodology used to project operating costs and commercial revenues, the treatment of the pension deficit, the impact on the company's balance sheet of activities not directly related to Dublin Airport (GSH, Cork Airport, Shannon Airport), and the cost of capital – did not appear to meet the Commission's threshold for substantial grounds for a review.

The Paper alerted parties not to presume that the Commission will accept the 2006 CIP in its entirety before reaching its conclusions during the interim review. The

decision to hold a review "is entirely separate from a decision about whether to revise a price cap consequent on a review".[20]

Consultation following CP6/2006

Consultation Paper CP6/2006 invited comments generally from parties on whether substantial grounds for a review of the 2005 Determination existed and what matters should be considered as part of such a review.

In order to engage with interested parties on the holding of an Interim Review, the Commission organised an Information Meeting in Dublin Airport to raise awareness of the contents of CP6/2006 and of the Commission's possible approach to an Interim Review. This meeting was held on 11 September 2006. The DAA and all users of Dublin Airport were invited to attend. The Commission presented the possible substantial grounds for a review, informed users about the Commission's other work streams related to investment questions, and outlined the Commission's views as the regulator's role and the industry's role during any review. The Commission emphasised the importance it attached to airport users' views of consultation with the DAA on its capital investment plan. Airport users were invited to meet with the Commission during the subsequent weeks.

In addition, on 3 November 2006, the Commission sent a letter to all airport users inviting views on the holding of an Interim Review, the major components of the CIP, and the fit between those components and users' future requirements at Dublin Airport.

On 17 November 2006, the Commission met with seven representatives from the airport's Airline Operating Committee (AOC). At that meeting, the Commission presented an overview of the background to the current level of airport charges, the Commission's position as set out in CP6/2006, and its initial impressions of the CIP. The Commission emphasised its wish that airport users be aware of the apparent implications, including for airport charges, of the CIP and that users provide their assessment of the CIP to the Commission.

During November 2006, the Commission also met with Ryanair, Aer Lingus, and CityJet. The Commission received written responses to CP6/2006 from Aer Lingus,

[20] Page 21, Commission Paper CP6/2006.

bmi, CityJet, the DAA, the Industrial Development Agency (IDA), the Irish Tourist Industry Confederation (ITIC), and Ryanair.

Decision to Hold an Interim Review

In December 2006, following careful consideration of the views expressed by interested parties following publication of CP6/2006, the Commission published its decision to hold an Interim Review of the Dublin Airport charges' determination.[21] The Commission concluded that there were

> "substantial grounds to hold [an interim] review, including on the basis of a requirement to analyse the Dublin Airport Authority's (DAA) 2006 Capital Investment Plan (CIP) for Dublin Airport arising from the circumstances surrounding the unavailability of a finalised CIP at the time of the 2005 Determination."[22]

The issues relating to the impact of the 2004 Act on the CIP's finalisation were considered to be outside the control of the DAA. The Commission also concluded that the scale of the costs of the 2006 CIP so far exceeded the cost base underpinning the September 2005 Determination as to be liable to compromise the objectives of that Determination if no Interim Review took place.

The Commission decided not to rely on the change in airline requirements for facilities at Dublin Airport as constituting substantial grounds for an Interim Review of the 2005 determination. However, the Commission did reassert that it continued to believe that the demands of Dublin-based airlines had changed significantly since October 2005. Even if traffic growth *rates* thereafter would not be significantly affected by revisions to the plans of the two largest airlines at Dublin, the shift towards a larger Dublin-Airport-based airline fleet appeared to have significant implications for the facilities required at Dublin Airport.

Given its decisions on the grounds for holding an Interim Review, the Commission concluded that the correct regulatory approach was to undertake an interim review so that the 2006 CIP can be comprehensively considered and the Commission's statutory objectives can be fulfilled as required. To the extent possible, the review would be narrow in focus, considering the data and arguments before the

[21] Commission (2006) "Decision to Hold an Interim Review of the Dublin Airport Charges' Determination Dated 29 September 2005", Commission Paper CP9/2006

[22] Page 3, Commission Paper CP9/2006

Commission as of September 2005 "*except that* the 2006 DAA investment plan (and associated materials) will be substituted for the May 2005 DAA investment plan"[23] To maintain the internal consistency of the review assumptions, the Commission indicated that it may be necessary to adopt revised traffic forecasts for the review and to recognise the consequential impacts on operating costs and retail revenues, as well as to recognise other material consequences for operating costs, commercial revenues or other model inputs if they arise directly from the revised plans for the capital programme, and if evidence of the materiality of these consequences are before the Commission.

Commission Consultation on the DAA's New Capital Investment Programme

In February 2007 the Commission published a Consultation Paper seeking views on whether and how the revised capital investment programme (CIP2006) that the DAA released in October 2006 might be funded.[24] The Commission was keen to understand whether there was a structure and level of charges, with the implicit allocation of risks, that would be acceptable to all parties and be consistent with the Commission's statutory objectives

The Paper explored a number of ideas on how the CIP might be funded, noting that given the likely lifetime of the new assets the Commission expected that the DAA will recover the overwhelming majority of the costs associated with the projects (should they proceed) after the current Determination ends in 2009. Three questions relating to possible charging structures were raised:

- What share of the total costs should current and future users pay?
- What share of the costs of expanding capacity at the airport should peak-hour users pay?
- What share of any costs associated with improving the service quality Dublin Airport provides should users who value these improvements pay?

The Commission stated that it was keen to create the right incentives so that the DAA is not encouraged to either under-invest or to over-invest. This included giving consideration to the risks that various parties would implicitly assume under differing

[23] Page 18, Commission Paper CP9/2006.
[24] Commission (2007) "Public Consultation on Dublin Airport Charges Following the Capital Investment Programme 2006", Commission Paper CP1/2007.

charging regimes that the Commission might consider. The Commission noted that it could not guarantee that the DAA will recover the costs of new investments for which the Commission has reasonable doubts that there is sufficient demand, such as if users have indicated that they do not want the new facilities. But the Commission was willing to propose a charging structure that allowed the DAA to assume some of the risks of actual demand out-turns corresponding to the DAA's forecasts even where the Commission thought the assumptions were overly optimistic.

Parties were also invited to comment on the DAA's investment plan, including the extent to which they felt the costs were justified.

Aer Lingus, bmi, the DAA, Fingal County Council, Forfas, the International Air Transport Association (IATA), the IDA, ITIC, the Portmarnock Residents Association (Uproar), and Ryanair submitted responses to Consultation Paper CP1/2007.[25] The DAA requested in its response a meeting with the Commission to present its case. This was arranged. Other respondents were offered the opportunity to present their arguments to the Commission. Uproar, Ryanair, and ITIC accepted this opportunity and met with the Commission in April 2007.

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[25] The responses to the consultation are published on the Commission's website at http://www.aviationreg.ie/ER_AC_Doc_SR_NEW_index_of_SR_on_CP12007.HTML

3. MINISTERIAL DIRECTIONS

This Draft Decision arises from an Interim Review of the Commission's Determination of September 2005. In making the present Draft Decision, the Commission has complied both with the Direction it received from the Minister for Transport prior to the September 2005 Determination as well as a second, more recent, Direction which was received from the Minister for Transport and dated 3 April 2007. Both Directions were made under Section 10 of the Act.

3.1. The 2005 Direction

In August 2005, the Commission received a Direction from the Minister. The full text of the Direction is set out in Annex 2. The Direction addressed the issue of sustainable development at Dublin Airport and also referred the Commission to the Statement of Strategy of the Department of Transport.[26] In the report accompanying the 2005 Determination, the Commission set out the ways in which it had taken due regard of the Statement of Strategy.[27]

The 2005 Direction itself was in two parts:

- the Commission was directed to "make every reasonable effort to ensure that its final Determination reflects the importance Government has attached to implementation of its policies on infrastructure development at Dublin airport and

- the position of Dublin Airport pending the restructuring of the State airports as contemplated by the Act."

The Aviation Action Plan was announced by the Government on 18 May 2005. It included a decision on the delivery of additional pier and terminal capacity at Dublin Airport. As the Commission noted in the report accompanying its 2005 Determination, 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.

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[26] The Statement of Strategy had been separately notified to the Commission in 2005 under Section 33(2)(f) of the Act.
[27] See pages 82-83, CP3/2005.

The Ministerial Direction of August 2005 had a different emphasis from that conveyed in the Government Decision. The Direction pointed out the importance the Minister 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. Accordingly, the Commission's clear direction was to make a Determination that enabled Dublin Airport to add additional capacity in an efficient and timely manner.

In 2005, the Commission complied with this Direction in the following manner. It made a Determination which fully funded an efficient capex programme designed to meet the capacity needs of Dublin Airport during the period of the Determination. The Commission also thoroughly considered the sustainability and financial viability implications of the capex programme on Dublin Airport and was fully satisfied that the DAA would be able to fund its capex programme in the context of balancing its three statutory objectives. Accordingly, the Commission considered that it had complied with the 2005 Direction.

Turning to the restructuring of the State Airports, the Minister directed the Commission as follows:

> "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 directed 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.

In the report of its 2005 Determination, the Commission stated that it had complied with this Direction by thoroughly examining not only the obligations of DAA regarding Cork and Shannon airports, but the entire DAA Group. From this examination the Commission was satisfied that the DAA's obligations relating to Cork and Shannon airports would not undermine an efficient DAA from fully implementing Government policy as to restructuring. The Commission further indicated that an efficient allocation of group assets among the three airports would improve the DAA's ability to operate Dublin Airport in a sustainable and financially viable manner.

Consequently, the Commission's 2005 Determination implemented the statutory framework for the restructuring of the State airports to the extent that DAA's responsibilities in relation to all three State Airports were taken into account.

3.2. The 2007 Direction

On 5 April 2007, the Commission received a further Direction from the Minister for Transport under Section 10 of the Act. The full text of the Direction is set out in Annex 3.

The Minister's Direction again addressed the issue of new capacity at Dublin Airport. It highlighted two particular developments since the August 2005 Direction. Firstly, it highlighted the conclusions of the independent cost verification team and in particular that:

- Consultation by the DAA followed IATA guidance and accorded with best practice;
- the methodology, approach and execution of the planning objectives and considerations for passengers accorded with best practice; and
- the estimated cost of T2 on a per-square metre basis lies at the mid-point range of UK terminal facilities and is within industry norms for this type of project in a European capital city.

Secondly, the Direction highlighted the emphasis the Government has placed in the most recent National Development Plan (NDP) 2007-2013 on the role of infrastructure investment in optimizing national growth and development over the long term. The Minister's Direction also notes that the NDP 2007-2013 makes specific reference to the fact that ensuring that infrastructure capacity increases in line with growth in air services is particularly important for Dublin airport because of its international gateway status. In this regard the Plan includes provision for new pier terminal and runway capacity in line with the schedule drawn up by the DAA, i.e. with the second terminal operational by 2009.

In addition, the Minister's Direction points out that one of the objectives of the Department of Transport's Statement of Strategy is to facilitate as wide a range as possible of reliable, regular and competitive commercial air services for Irish tourism,

trade and industry. In that regard, the Direction also referred to the need for Dublin Airport to be positioned to take full advantage of internationally liberalized air services.

The Direction concluded:

> "In the context of the policy considerations outlined in my direction of 18th August 2005 and in this letter, I am directing that the Commission take due and manifest account of:
>
> The importance Government has attached to implementation of its policies on infrastructure development at Dublin airport and the restructuring of the State airports;
>
> The Government policy, in the public interest, that there be a 2nd terminal fully operational in 2009 so as to serve passenger growth needs and the requirements of a growing economy; and
>
> The need to enable Dublin Airport Authority to operate and develop Dublin Airport in a sustainable and financially viable manner having regard to Government policy that the Dublin Airport Authority should operate on a commercial basis without recourse to Exchequer funding or an equity injection by the State."

Accordingly, the Commission's clear direction is to make a Determination that enables the DAA to add additional capacity, and in particular a second terminal, in an efficient and timely manner and without recourse to Exchequer funding. This inevitably means that in carrying out this Review the Commission must consider in detail the ability of the DAA to finance the provision of additional capacity without having recourse to Exchequer funding or an equity injection by the State. Given that the ability of a firm to access funds on capital markets is a function of, *inter alia*, that firm's credit rating and expected future earnings, the Commission analysed how a number of factors including airport charges, passenger forecasts and operating expenditure will impact on the DAA's Funds From Operations to Debt ("FFO:Debt") ratio, a ratio used by credit rating agencies.

The Commission's financial analysis in Section 3 below shows that if the DAA were allowed to fund the full capital programme set out in CIP2006 with no change in airport charges, the DAA's FFO:Debt ratio will remain above 15%, the level which the DAA believes it needs in order to maintain its current rating with credit ratings

agencies. In other words the DAA will be able to finance increased capacity without recourse to exchequer funds.

Following receipt of the Direction, the Commission undertook a review of the NDP 2007-2013. The overview summary of the Plan sets out seven general goals, two of which relate to physical infrastructure and to value for money from Plan expenditures:

- **Decisively tackle structural infrastructure deficits** that continue to impact on competitiveness, regional development and general quality of life and to meet the demands of an increasing population; and
- **Provide value for taxpayers' money** through robust and transparent appraisal, management and monitoring systems for NDP investment.[28]

Chapter 7 of the NDP 2007-2013 sets out the investment plans in regard to the economic infrastructure priority. Within this priority, there is an Air Transport Sub-Programme of €1.9bn, covering the 3 State airports and the 6 regional airports. The Plan states that "the DAA operates under a commercial mandate and this investment will be funded from its own internal resources."[29] In regard to Dublin Airport, the plan states:

> "Ensuring that infrastructural capacity increases in line with the growth in air services is particularly important for Dublin Airport because of its international gateway status for a capital city. A new Pier D, which will have a capacity for an additional 14 departure gates, is scheduled to come into operation by end-2007. Work on the second terminal is due to commence in the first half of 2007. When the terminal, pier and related works are completed, the airport will have an overall capacity to cater for in excess of 30 million passengers. Along with a new associated pier (Pier E), the terminal is scheduled to be completed by end-2009. In addition, the provision of a second runway at Dublin Airport, which is currently at the physical planning stage, will be progressed over the period of the Plan.
>
> Further additional terminal capacity at Dublin Airport is likely to be required by the middle of the next decade and planning will commence during the Plan period on how best to facilitate this." [30]

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[28] Forewords to the NDP by An Taoiseach, An Tánaiste, and the Minister for Finance each underlines the importance, *inter alia*, of achieving value for money.
[29] NDP 2007-2013, page 135.
[30] NDP 2007-2013, page 135.

Chapter 12 of the Plan addresses the general goal of value for money. It provides, *inter alia*, that all expenditure under the NDP 2007-2013 will be subject as appropriate to value for money and assessment frameworks. It further states that "key elements" of the value for money framework are that "all capital projects over €30m will require a full cost-benefit analysis" and that "NDP programme evaluations and Value for Money and Policy Reviews will be published and submitted to the relevant Select Committee of the Oireachtas".[31]

In the work and analysis described above, the Commission is satisfied that it has complied with the Ministerial Direction.[32]

[31] NDP 2007-2013, page 273.
[32] The Ministerial Direction is also discussed in Section 9.2 below.

4. ASSESSING THE FINANCIAL VIABILITY OF THE DAA

One of the Commission's statutory objectives in making a determination is to enable Dublin Airport Authority to operate and develop Dublin Airport in a sustainable and financially viable manner.[33] The 2007 Ministerial Direction to the Commission included a statement along similar lines, adding that the DAA was to operate on a commercial basis without recourse to Exchequer funding or an equity injection from the State.

At the time of the original Determination, in September 2005, the Commission gave careful thought to this statutory objective. At that time the DAA was planning for a large increase in capital expenditure compared with levels in the preceding decade. Its financial performance, as measured by conventional accounts-based financial indicators, had been poor in 2002 and 2003 and the scale of the proposed investment programme between 2006 and 2010 indicated that airport charges would need to rise to provide lenders with confidence during the period when the DAA would require debt capital to fund its investments. The Commission conducted extensive risk simulations and considered a range of financial ratios that credit-rating agencies and the financial community use, particularly the FFO:Interest and FFO:Debt ratios that Standard & Poor's (S&P, the agency that rates DAA's Eurobond) indicated it was most interested in.[34]

The Commission sought to enable the DAA to maintain its investment grade. It was satisfied that the volume of investment grade debt with a rating below single A in the international bond markets was sufficiently large. The Commission also found examples of other airports, including Brussels International Airport Company and Macquarie Airports, that are going concerns while having credit ratings below an A grade. Consequently, the Commission concluded that an investment grade would suffice to allow the DAA to have adequate access to funds.

The Commission concluded that the 2005 Determination provided a reasonable foundation for lender confidence. Although the Commission signalled that it may be appropriate to review the Determination when it could fully consider the DAA's finalised investment programme, the purpose of such an Interim Review was not to protect lenders against general business risks. The Commission considered those

[33] See Article 22(4) State Airports Act 2004
[34] FFO is an acronym for Funds From Operation.

risks, with reference to financial indicators and risk simulations, and concluded that DAA's financial position was reasonably robust to the underlying level of uncertainty in the airport business and consistent with at least an investment grade credit rating.

The Commission's conclusions from the 2005 determination broadly corresponded to an FFO:Debt ratio of around 15% under the centre-line assumptions, although for similar reasons as the ratings agencies the Commission accords only a limited weighting to such indicators. S&P stresses that its analysis only gives limited weight to such financial ratios; its overall assessment of risk considers the broader economic environment facing the DAA, notably its regulatory regime, its level of market dominance, its ownership and the strength of the Irish economy. Nevertheless, the financial indicators and especially the FFO:Debt ratio, provide a useful reference point for the analysis. The outlook at the time of the 2005 determination, which was based on the May 2005 CIP, is illustrated in Figure 1.

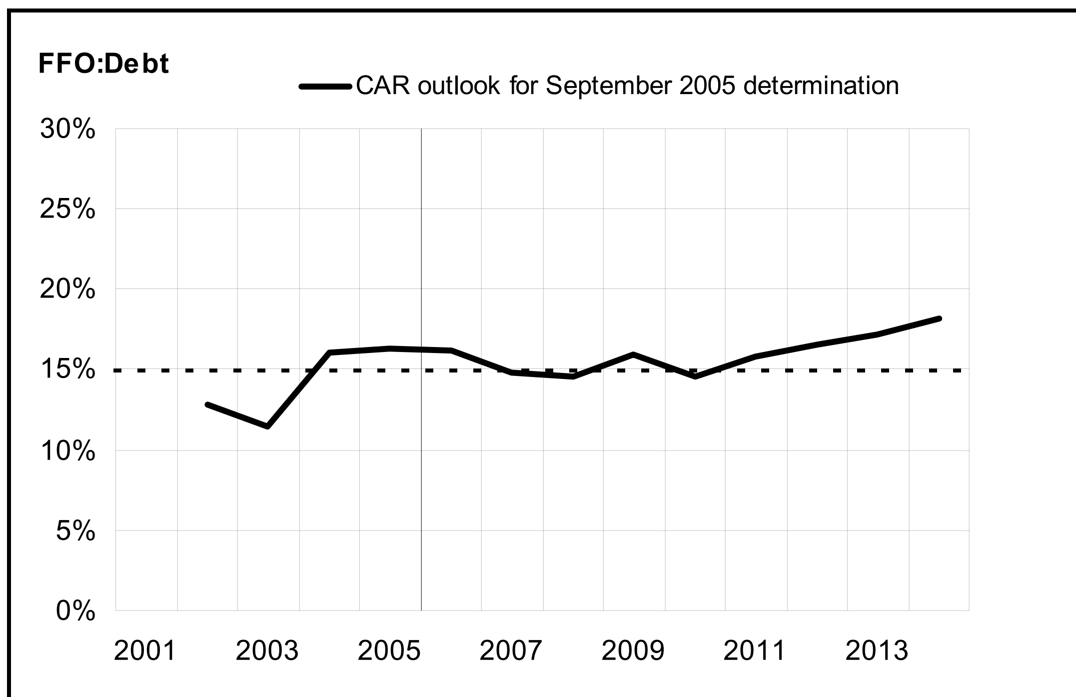

Figure 1: The DAA's FFO:Debt ratio – Commission outlook for the 2005 determination

Source: IMR

The DAA also highlights the relevance of the FFO:Debt ratio and, referring to evidence from S&P ratings of European airports with a ratio above 15% as the minimum to maintain a BBB+ rating, centres on a level of 15% in its 6 March 2007 'Statement of Case':

> "DAA must target maintaining a credit rating of at least BBB+ to finance its investments and that achieving such a rating is linked to the maintenance of FFO/Debt ratios above 15% over the long term and therefore that Commission should set the DAA's airport charges at a level to ensure compliance with this ratio/rating."[35]

4.1. The evolution of the DAA's FFO:Debt ratio since 2005

For the full years 2005 and 2006, DAA's FFO:Debt ratio has significantly outperformed the Commission's September 2005 centreline assumptions, as shown in Figure 2 below. There are three main reasons for the observed out-performance of the DAA's FFO:Debt ratio relative to earlier projections:

1. DAA's financial position at the end of 2005 turned out to be stronger than DAA's submissions to the Commission had indicated
2. Growth in passenger numbers, particularly in 2006, has been significantly more rapid than the DAA had forecast and the Commission had assumed, resulting in significantly higher revenues than forecast in 2005; and
3. DAA further improved its financial position by selling the Great Southern Hotel chain for around €265 million.

In addition, the cap on airport charges ended up being higher than modelled in the September 2005 Determination. This was because of the revisions to the Determination following the Appeals Panel decision to refer certain issues back to the Commission for further consideration. However, these changes did not occur in time to affect the results in 2006.

[35] Paragraph 1.7, DAA (2007) "Statement of case", available from the Commission's website

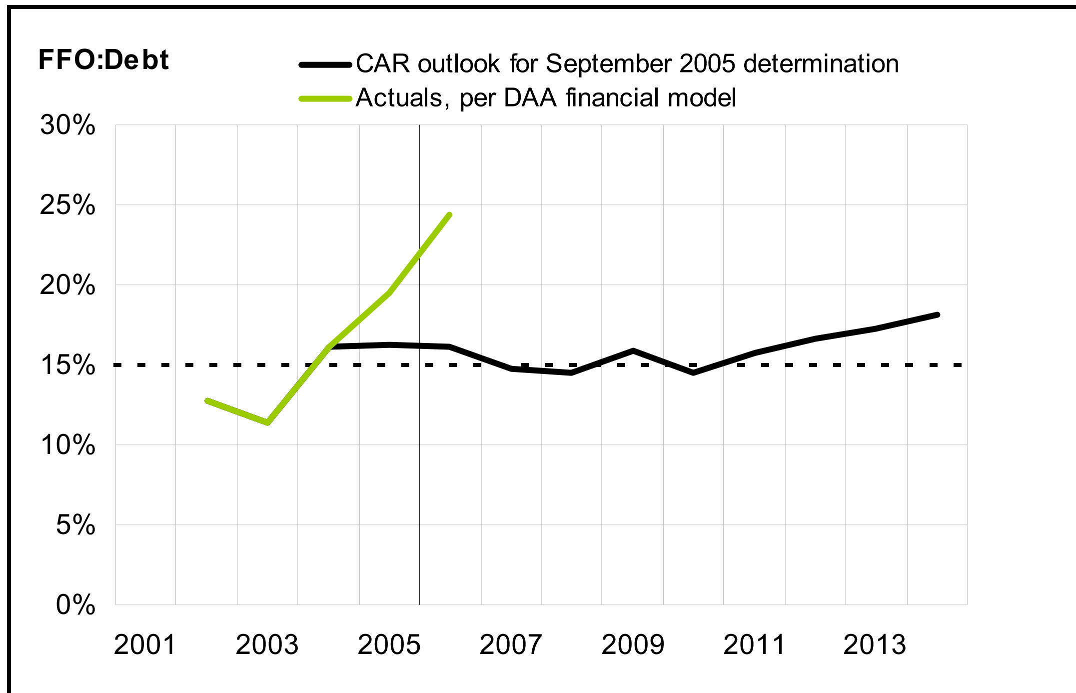

Figure 2: The DAA's FFO:Debt ratio – comparison of projection with out-turns

Source: IMR

4.2. The impact of CIP2006 on the DAA's FFO:Debt ratio

While the DAA's financial position undoubtedly looks stronger than it did in 2005, the proposed scale of the investments in CIP2006 has the potential to change this. This is especially the case given that the DAA's shareholder has indicated that it is not willing to provide new equity to underwrite the work. Instead, the DAA will rely on retained earnings and new debt.

Aer Lingus, bmi, and Ryanair all argue that the DAA should not be allowed to pre-fund its investment plans since this is contrary to how other industries work. Aer Lingus also argues it is unnecessary provided the Commission has allowed an appropriate cost of capital, since the long-term investment is secured if the DAA operates efficiently. bmi suggests that raising the funds is an internal matter that the DAA can resolve through third party financial channels. In other correspondence, Ryanair has suggested that the DAA's capital programme should be funded by the sale of non-core assets.

The DAA argues that an increase in airport charges is necessary, and notes that:

"an average charge per passenger in real terms between 2006 and 2009 of c.€7.50 and c.€8.50 [in December 2004 prices][36] between 2010 and 2014 ... [consistent with] a FFO:Debt ratio of 15%, with a stable outlook ... is the minimum needed to ensure financeability."[37]

The DAA's proposed profile of charges represents a significant increase over the level of charges provided for in the existing determination, as shown in Figure 3

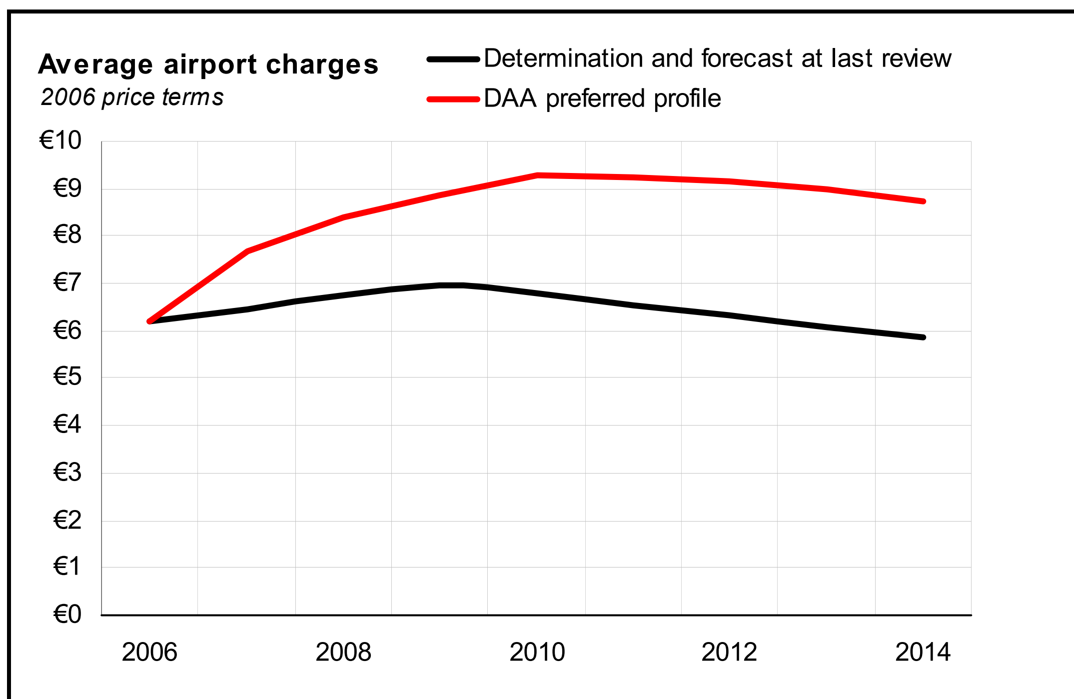

Figure 3: Comparing the DAA's proposed profile of charges to fund CIP2006 with the current profile of charges

Source: IMR

The DAA's calculations of the financial impact of the profile of charges showed a profile for the FFO:Debt ratio which settles down to just above 15% for the period 2010-14, as shown in Figure 4.

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36 The profile of charges set out in the financial model supplied to the Commission by DAA in support of the Statement of Case translates into an average of €7.80 for 2006-09 and €9.00 for 2010-14 in 2006 price terms.

37 Paragraphs 1.10-1.12, DAA (2007) "Statement of case", available from the Commission's website.

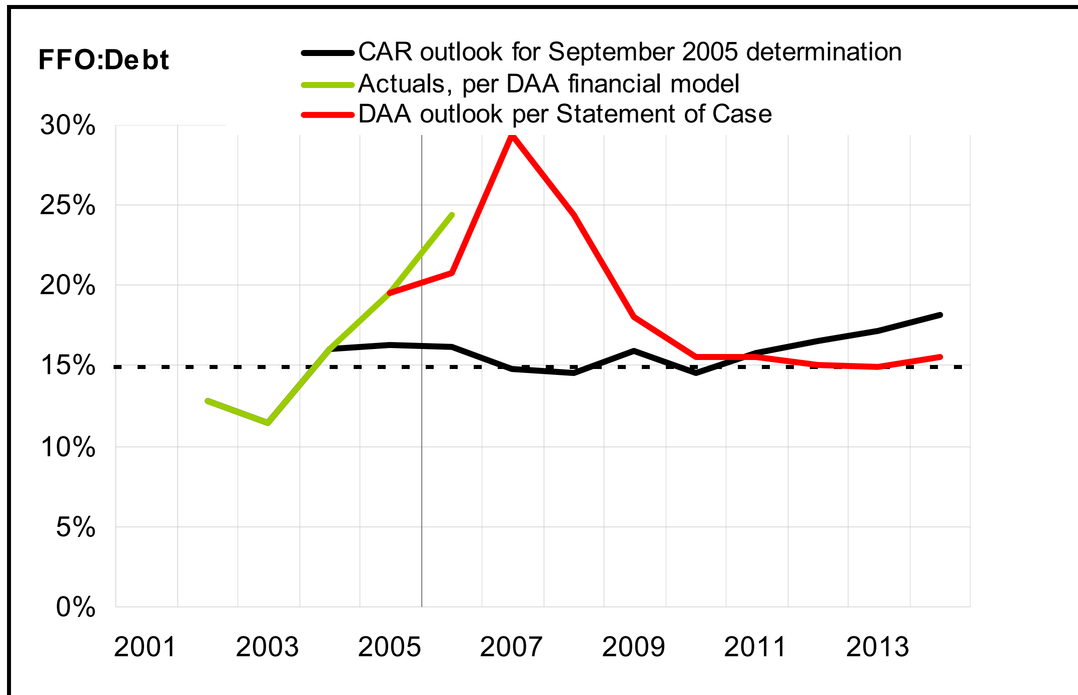

Figure 4: Comparing FFO:Debt ratio from the DAA's financial modelling with the current determination

Source: IMR

4.3. The outlook using the DAA's latest forecasts for passenger numbers

Figure 4 showed that the FFO:Debt ratio shown for 2006 in the DAA's Statement of Case is significantly lower than the actual outturn for that year. This is because the calculations behind DAA's Statement of Case reflected forecasts and budgets made before the end of 2006. These forecasts did not anticipate in full the growth of passenger numbers in 2006. DAA has since provided the Commission with an updated financial model with more up-to-date forecasts, including a passenger number profile that reflects the 2006 outturns. Figure 5 shows the outturn figures for passenger numbers, against a range of different forecasts. The figure also shows the forecasts by the DAA up to 2014.

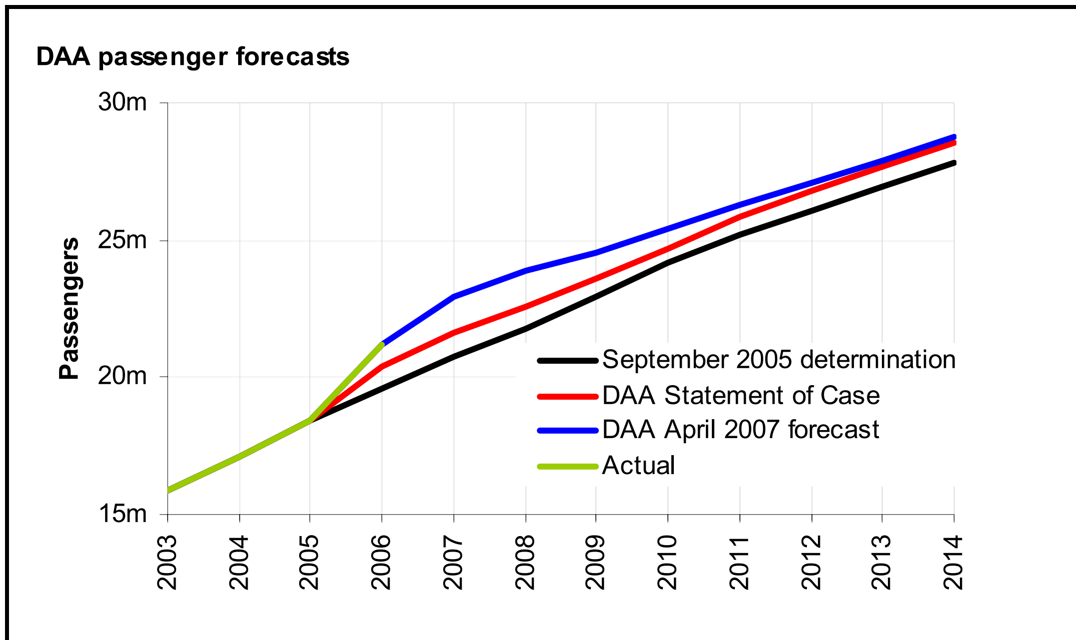

Figure 5: Comparison of passenger forecasts (to 2014) with out-turn (to 2006)

Source: IMR

Using these more recent forecasts, the DAA's financial model indicates that its preferred profile of charges for the period 2006-09 is consistent with the FFO:Debt ratio remaining above 15%, as illustrated in Figure 6 below.

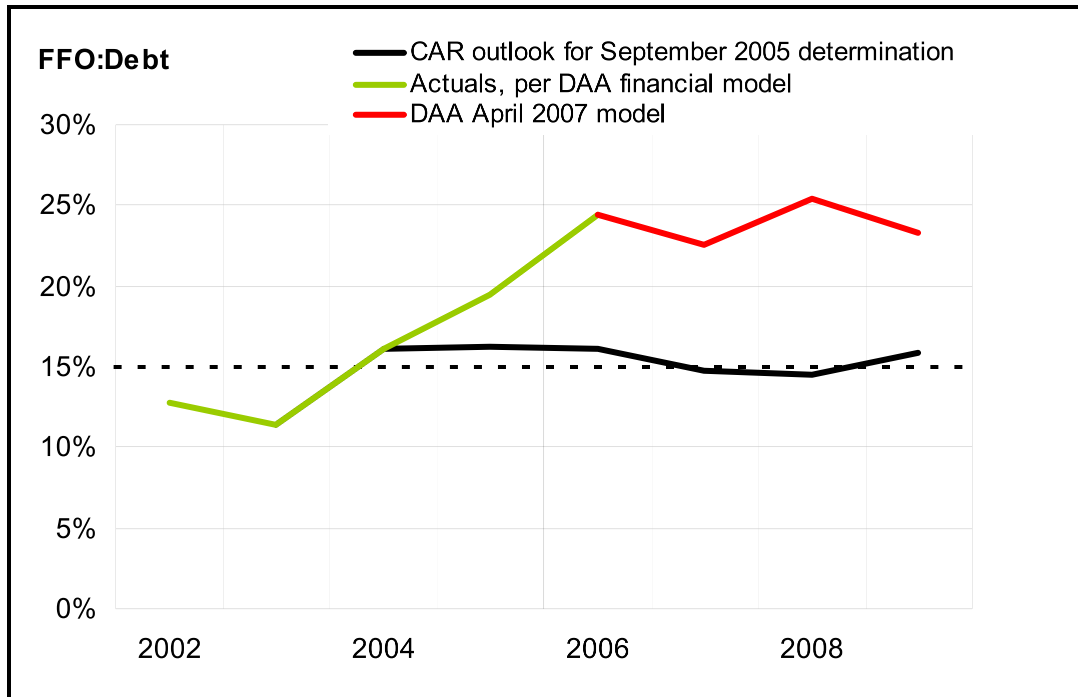

Figure 6: Comparison of DAA projections for FFO:Debt (April 2007) with projections under the 2005 Determination

Source: IMR

This suggests that the DAA's preferred profile of charges, at least for the period 2006-09, is not now strictly the minimum needed to ensure financeability. Using DAA's financial model - which includes spending plans as per the CIP2006, and opex and commercial revenue assumptions in line with the latest DAA forecasts - and substituting airport charges at the level set in the current Determination, the FFO:Debt ratio only barely falls below 15% at the end of the period 2006-09. The minimum FFO:Debt ratio is 14.3% under this scenario assuming no dividend is paid in 2009, or 13.8% if dividends are paid at the level assumed by DAA.

The FFO:Debt ratio remains above 15% throughout the current price control period if operating expenditure and commercial revenues remain in line with the cost and revenue drivers adopted by the Commission for the 2005 determination model. This scenario is illustrated in Figure 7 below.

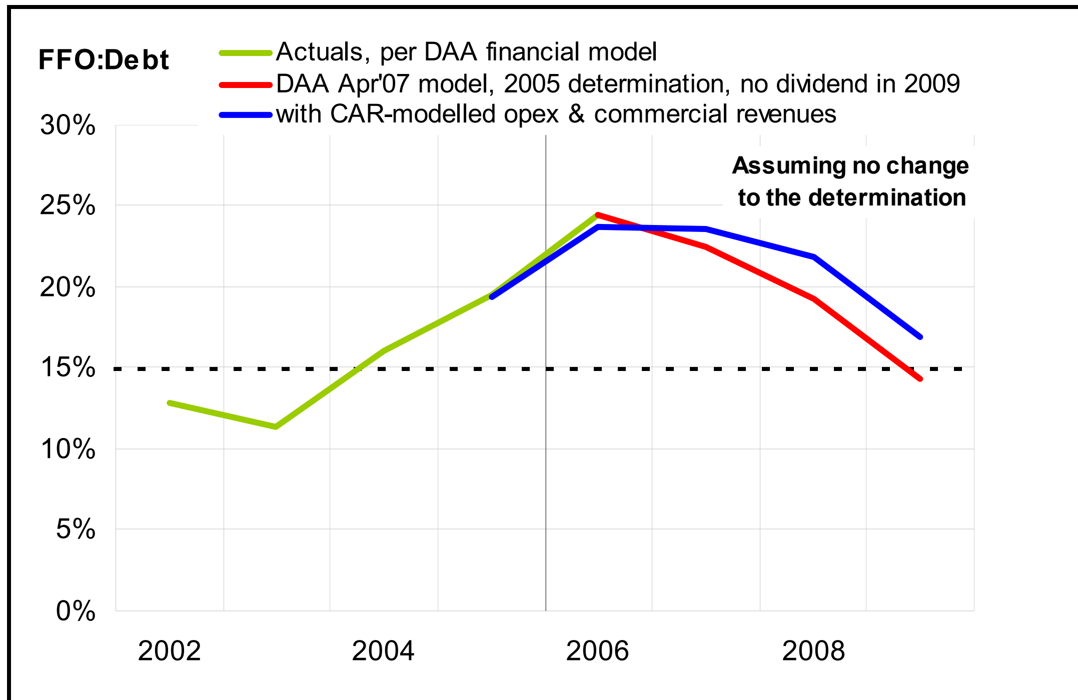

Figure 7: FFO:Debt ratio for the current price control period to the end of 2009

Source: IMR

Both scenarios illustrated in Figure 7 assume that the DAA is allowed to fund the full capital programme as set out in the 2006 Capital Investment Programme ("CIP"). The divergence of lines after 2006 arises because the DAA's model assumes a marked deterioration in operating costs and commercial revenues after 2006. This is illustrated in the following figure.

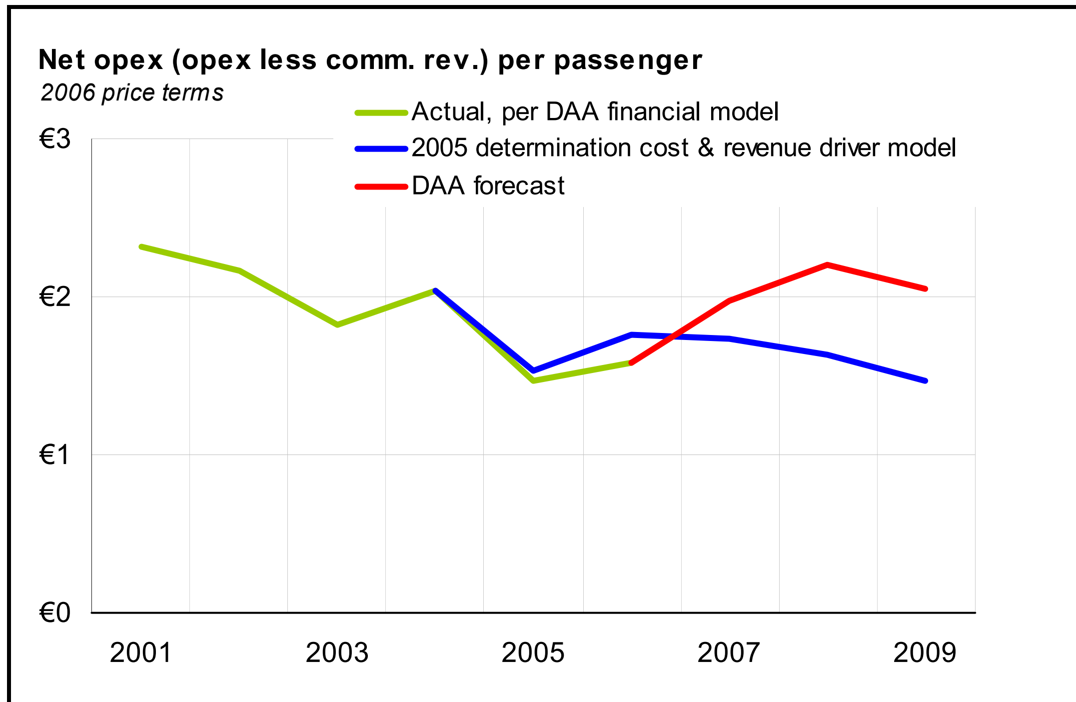

Figure 8: Net operating expenditure per passenger 2001 - 2009

Source: IMR

The Commission's financial model on which it based the 2005 determination used 2004 as a base year and projected costs and revenues using growth and efficiency drivers informed by the Commission's specialist advisors. Up to 2006, DAA outperformed those projections, adjusted for outturn growth in passenger numbers, for both operating expenditure and commercial revenues (combined in the blue line in the chart above). In contrast, DAA's projections after 2006 infer faster growth in operating expenditure than growth in passenger numbers, reversing the usual relationship, and rather slower growth in commercial revenues until 2009, especially in retail revenues for non-EU passengers.

The Commission considers, especially given the outturns for 2005 and 2006, that the modelling of operating expenditure and commercial revenues as per the 2005 determination remains appropriate as a basis for assessing the financial viability of DAA. On this basis, the key financial indicator is projected to be reasonably positive (above or close to a reasonable target) for the remaining part of the current control period, to 2009. Other cash-based indicators considered by the Commission at the time of the last review are also generally positive. Some profits-based indicators,

notably the EBIT interest cover ratio, can appear stressed towards the end of the period if DAA starts depreciating T2 in its historical-cost accounts before the end of that year, but the Commission does not consider this to be a critical issue.

The Commission concludes that the FFO:Debt ratio projections for the period 2006-09, in isolation, do not provide a compelling reason to change the formula for airport charges up to 2009.

4.4. The outlook beyond 2009

The Commission recognises that investors funding long life assets will be looking for assurance beyond the very short term. The DAA is now planning a very substantially larger capital programme than the one it presented to the Commission in time for the 2005 Determination. Lenders will reasonably seek clarity over how the Commission will treat the additional costs, what risks will remain with the DAA and over what period costs will be recoverable through airport charges. The Commission set out in the next sections of this Draft Decision its proposals for the longer term treatment of the capital programme.

The next three sections address these issues, looking at whether the Commission thinks the proposals meet the requirements of users and prospective users of the airport, how charges might be structured to recover such costs, and the level of costs that the DAA could recover over future price controls. Section 7 then summarises the Commission's proposals for the current Determination and signals how it currently envisages treating the DAA's proposed capital expenditure at the time of the next Determination.

In summary, the key conclusions are as follows:

- the DAA will be able to fund the efficient costs of a new terminal from airport users that will benefit directly from such an investment;
- the price cap after 2009 will be adjusted such that the DAA is able over time to recover the efficiently incurred costs of building the new terminal;
- the Commission proposes to backload the charges, so as to avoid a situation where current users are paying for an investment for which they receive no immediate benefits;

The Commission will also have regard to enable the DAA to operate the airport in a sustainable and financially viable manner; and, should the need arise; the Commission would consider accelerating the depreciation of assets in the regulatory asset base (RAB).

Section 1 includes a summary of how these proposals could impact on a number of financial measures, in particular the FFO:Debt ratio, based on the information currently available to the Commission.

4.5. Risk analysis

The DAA aims to maintain an FFO: debt ratio above 15% over the long term. There may be some uncertainties in the future which could jeopardise these ratios. In CP3/2005, the Commission approached uncertainties by considering the extent of information asymmetry between itself and the DAA and also sought to determine the scale of uncertainty surrounding its assumptions.[38] The Commission carried out a simulation of the forecasting model used for the Determination calculations and assessed the performance of the main financial indicators in terms of a wide variety of outcomes. Several outputs from this risk analysis are presented in this report – in particular in Section 7, which considers the implications of the Draft Decision for airport charges. The Commission concludes from this work that the DAA is in a position to finance the investments in the CIP, while remaining financially viable over the remainder of the current price control and beyond.

The DAA's response to CP1/2007 details the risks that it perceives its sustainable and financial viability is exposed to as it introduces a large investment programme.[39] It is anxious that even increasing airport charges to €7.50 will weaken its financial ratios below the 15% threshold for FFO:debt. It points out that despite S&P defining the DAA's business risk profile as 'strong', the regulatory regime is deemed to be 'immature'. S&P anticipates that the DAA's financial indicators will weaken as a result of the large investment programme, over the next few years.

Twelve potential shocks that the DAA thinks may increase its riskiness in the future are:

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[38] Page 42, Commission, CP3/2005, Determination of Maximum Levels of Airport Charges, 29 September 2005

[39] Pages 78–83, Section 3 and Appendix 3 of the DAA's Statement of Case, 6 March 2007

- Event risks and the difficulties associated with forecasting traffic
- Risk of insufficient capacity to accommodate actual growth in business
- Capital Expenditure Plan Risk
- Risk of Excessive Construction Inflation
- Risks associated with Operating Costs
- Risk of increased requirements for security measures
- Risks associated with the operating model for Terminal 2
- Pension cost risks
- Risks on commercial revenues
- Risk relating to the cost of capital/capital structure risks
- Risks related to the support from and performance of non-regulated business
- Risk due to airport separation

Some of these risks are arguably less than in 2005. In particular, the risks associated with the costs of its investment programme should be less. The DAA has had an opportunity to hire experts and undertake an extensive review of its capital expenditure needs. Moreover, its cost plans for T2 have been subject to an independent verification by a Government appointed consultancy, and more recently have been reviewed by consultants hired by the Commission.

Uncertainty about traffic out-turns remains. However, the Commission believes that the DAA has chosen to build a very large facility. Airport users should not be required to pay higher charges to mitigate a risk that the DAA has chosen to assume. There may be a role for individual airlines that support the building of such a large facility to share some of this risk.[40] That is for the DAA and the individual airlines to discuss. One of the obligations placed on the Commission is to protect the interests of all current and prospective users. Given the size of the facility, the Commission

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[40] This topic is discussed in more detail in a report by CEPA that the Commission commissioned. See CEPA (2007) "Airline Involvement" www.aviationreg.ie

does not believe that there is a significant risk of insufficient capacity in the near future.

Many of the other risks are as in 2005, but arguably remain less material than those associated with the costs of building the new facilities and traffic risks. For example, regardless of who wins the tender for the operation of T2, the DAA's exposure to the risks associated with its operating costs should be limited since any issues that arise would be considered at the next and subsequent price reviews.

5. DAA'S CONSULTATION PROCESS

This section reviews the consultation process that the DAA has followed in developing its revised CIP, to the extent that this is relevant for the Commission in undertaking an interim review. Respondents to the consultation, including both the DAA and a number of airlines, expressed strong support for an independent review of the consultation process in developing the CIP. In the general context of assessing the issue of user consultation and user needs, the Commission refers to the findings of the High Court in its Judgment in April 2003, where it stated that "*[it was] conscious of the need to ascertain if identified projects meet the needs of users when considering how they will impact on the calculation of charges"*

This section begins with a discussion on the Commission's motivation for reviewing the DAA's consultation process as part of this Review. This is followed by a summary of the responses to the Commission consultation (CP1/2007), which sought the views of respondents on the DAA's consultation process. We then provide an assessment of the DAA's consultation process for the three of the major projects in the CIP: Terminal 2 (including Pier E), Terminal 1 extension (T1X) and Pier D.

5.1. Motivation for reviewing the DAA's consultation on CIP2006

Consultation between the DAA and airport users offers the possibility of reducing the regulatory burden. The Commission has indicated in its recent Determination governing the IAA's aviation terminal services charges that it intends to publish a paper this summer outlining how a regulated entity might demonstrate user support for a new investment project following a suitable consultation process. If a given consultation is conducted to everyone's satisfaction and results in a proposal for which all users agree with the proposed costs and consequent implications for airport charges, the Commission would feel more confident in setting a Determination on this basis without undertaking such an extensive review of the costs as is otherwise necessary.

However, the consultation process need not always be decisive when the Commission assesses the DAA's capital expenditure needs and what to include in the RAB. If all users agreed that a proposed investment was necessary, met their needs and the costs were acceptable, the Commission would be minded to incorporate the planned capital expenditure into a determination even if there has been no significant consultation in developing the plan. Conversely, the Commission would

not include investment on a project in the RAB that has not yet commenced if users all expressed the view that despite the DAA undertaking an extensive consultation process and reflecting all their suggestions, in the interim the situation had changed such that all users no longer felt the project would meet their needs.

In regulating the charges the DAA can set at Dublin Airport the Commission's objective is amongst other things, to protect the needs of users. To this end it must be vigilant against taking into account the DAA's costs for investments which do not meet the needs or requirements of users. In a competitive industry a firm would not be able to recover the costs of investment from consumers who did not want such an investment. Any attempt to recover such costs by increasing prices would lead to consumers using alternative suppliers. Given that there is no alternative supplier of airport infrastructure at Dublin Airport, it is appropriate for the Commission to consider how the planned supply of additional infrastructure by the DAA is driven or responsive to demand from current and prospective users. Therefore, the Commission believes it is appropriate to ask what consultation has occurred between the DAA and identifiable users on the planned provision of additional infrastructure.

The Commission is also mindful that the DAA has to cater to all airport users in Dublin, whereas in a competitive industry there might be different competitors serving different niches of the market. This may lead to circumstances were some investments are only sought by a subset of the DAA's users.

To date, the Commission has not received conclusive evidence from users that they are willing to pay for the entirety of the DAA's proposed investments. The DAA Statement of Case contains citations from the DAA's minutes of consultation meetings with users that indicate some user support for the outcome of the consultation process.[41] During its engagement with the DAA, the Commission has indicated that it would prefer to evaluate the DAA's consultation with users on CIP2006 in terms of an explicit ex post evidence of user support for the investment projects (rather than by reference to the technicalities of the consultation process itself). Therefore, on a number of occasions, the Commission invited the DAA to provide evidence of user support for CIP2006 and T2 in particular. The DAA stated in correspondence in late November 2006 that it would write to users to ask them for explicit statements of support. However the Commission received no such statement

[41] Pages 31-36, DAA (2007) "Statement of Case", available from the Commission's website.

except as part of users' responses to CP1/2007. In subsequent correspondence, the DAA drew the Commission's attention to the conclusions of the independent verification exercise by BCS that the DAA's consultation had been in line with best practice. In addition, the DAA provided the Commission with a copy of the Arup 'Dublin Airport Terminal 2 Stakeholders Management Report' for the period January - September 2006. The Commission has relied on this document in preparing the next subsection of this Report.

A motivation for publishing the Commission's Consultation Paper CP1/2007 was to explore whether there might be a charging arrangement that would be acceptable to all parties, including those parties who consider the current proposals to be more expensive than they require. Section 6 discusses in more detail the responses from parties to various charging regimes. The feedback did not lead to any parties proposing a charging regime that would be acceptable to all airport users.

Consequently the Commission is keen to understand how the DAA consulted with all users who might be asked to pay for the proposed investments. The evidence that the Commission is interested in is similar to that suggested in the CAA Annex referred to by the DAA in its statement of case. For example, the Commission seeks to see evidence that users were informed:

> "of the high level options for the development of the airport, including details of the cost and output trade-offs involved in each option, and the likely impact on user charges" [42]

To what extent were users informed about the likely impact of different options on the charges they pay, and were their views on any trade-offs satisfactorily addressed? We consider the answers to these two questions in Section 5 below where we review the DAA consultation that took place with Airport users and other stakeholders for projects relating to T2, T1X and Pier D.

5.2. Opinions on the consultation process

As part of the independent verification of costs, the firm of Boyd Creed Sweett (BCS) was commissioned by the Department of Transport to undertake a review of the stakeholder consultation that the DAA had carried out in developing its CIP, and in

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[42] Page 95, Annex 4, CAA (2003) "Economic Regulation of BAA London Airports (Heathrow, Gatwick and Stansted) 2003-2008" www.caa.co.uk

particular the consultation regarding the proposed T2 and associated works at Dublin Airport. The terms of reference for the BCS report were to:

> "Provide their opinion in a brief report to the Minister for Transport […] on the following:
>
> The methodology and approach adopted in the production of the terminal design and cost plan and whether such approach was in line with best practice; and;
>
> In particular, the reasonableness of the overall estimated cost of Terminal Two arrived at through the above process."[43]

The main conclusion of the BCS Report, which is published on the Department of Transport website, is that the approach followed by the DAA was in-line with the guidance set out in the IATA Airport Development Reference Manual, and that the consultation process "therefore accords with best practice."[44]

A number of respondents to CP1/2007 provide views on the consultation process to the Commission.

The DAA argues that "the consultation process shows user support for the proposals."[45] It suggests that its consultation met international best practice, and that the Commission cannot impose its ideas and policies on the calculation of the RAB "as these have been clearly agreed and set out between users and the DAA."[46] For anyone to expect all users to support the final plans given each has its own commercial interests is unreasonable. The DAA must ultimately decide how to proceed having regard to the views of all users. The DAA refers the Commission to the regulatory approach of the Civil Aviation Authority (the Commission's equivalent in the UK) with regard to consultation and allowing capital expenditure.

Forfas agrees that the Commission or others should not second guess the DAA's decisions. The DAA, in consultation with its users, is best able to determine the airport's future needs, although a corollary of this is that the DAA should bear most

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[43] Page 5, BCS (2006) "Independent Verifier's Report. Proposed terminal two and associated works Dublin airport", www.transport.ie.
[44] Ibid, page 10.
45 Page 17, DAA (2007) "Statement of Case", available from the Commission's website.

[46] Page 18, DAA (2007) "Statement of Case", available from the Commission's website.

of the risks of the new terminal. Forfas argues that if the capacity of T2 is built to accommodate the peak-time capacity of a specific customer, this should be the result of a deliberate consultation process.

Some of the other respondents to the Commission's consultation paper CP1/2007 have expressed satisfaction with the consultation process. Aer Lingus states that the DAA has engaged in a wide-ranging consultation process about the specification of its investment plans. It supports the development of T2 as outlined in the October 2006 CIP and opposes any reopening of the discussion about the design and scale of the plans since it would delay necessary capacity expansion. Aer Lingus' response to CP1/2007 includes confirmation that it has accepted a price cap of €8.50 at the next price cap to fund T2, provided this includes the costs associated with operating T2 (which is to go to tender).

IATA claims that there has been very good consultation by the DAA on its investment plans compared to other airports in Europe and worldwide. However, it does suggest that there are asymmetries in the information available to the airport and users concerning achievable costs.

By contrast, Ryanair argues that the DAA has failed to consult users. It suggests that the DAA is using the consultation process as part of a regulatory gaming exercise, because of distorted incentives to invest. Ryanair considers it difficult to respond to the CIP2006 given the limited amount of information it has received. Ryanair cites a letter sent to the DAA on 8 December 2006 with a list of questions that have still not been answered. Inadequate information about the traffic forecasts is a particular concern because these forecasts drive the sizing requirements and hence costs for the proposed T2. Ryanair argues that the Commission cannot proceed with its review of the Determination until airlines have received fuller information and been properly consulted with about their requirements.

bmi also expresses dissatisfaction with the consultation process. It comments that it has not received any explanation for the increase in costs from €234m in May 2005 to €607m in October 2006.

The next three subsections look at the consultation that has occurred relating to T2, the T1 extension (T1X), and Pier D respectively. The focus is on when and how users were involved in reaching decisions affecting the scale and costs of major

investment decisions. In compiling this section, the Commission has relied on documents provided by the DAA, including the slides used at industry consultation meetings and the minutes of those meetings. The Commission is aware that Ryanair has expressed dissatisfaction with some of the minutes of meetings that the DAA has kept. Parties that believe the Commission's summary of the consultation process is inaccurate are invited to suggest corrections. In inviting such comments, the Commission would stress that ultimately the requirements of current and prospective users, rather than a judgement on the merits of the consultation process should determine whether the DAA is allowed to recover efficiently incurred costs of proposed capital spending programmes.

5.3. Review of the consultation on key projects in the CIP2006

T2 Consultation

To assess the consultation process concerning T2, the Commission has relied heavily on a report prepared by Arup, one of the DAA's consultants, titled "*Dublin Airport Terminal 2 Stakeholder Management Report"*. The report is dated 19 December 2006, and provides an "overall summary of the Stakeholder Management process from January 2006 to September 2006"[47] covering the Gateway 1, 2 & 3 planning phases and the Concept Design phase. Gateway 1 "focused on defining the brief for the new terminal and pier" (Arup, page 2). The Concept Design phase (or "Concept Stage") delivered a "finished concept [that] provides a fixed point in the design process where the brief, the design proposals, the budget cost plan and the construction programme are aligned" (Arup, page 12). It therefore appears to be a report on the consultation process from a time before the brief was decided, to the point where all the key decisions had been made.

The report starts with the statement:

> "Since the inception of the Dublin Airport Terminal 2 (T2) project, Stakeholder Management has played a critical role in both informing the design and assisting with the smooth progression of the project." (Arup, page 1)

The stated objectives of stakeholder management include:

47 Page 1, Ove Arup and Partners (2006) "Dublin Airport Authority Terminal 2 Stakeholder Management Report."

> "Gain the input (technical or otherwise) required from the users." (Arup, page 1)

A critical question is whether the process ensured that the concept and design of T2 was appropriately informed by the views of affected stakeholders. In particular, to what extent were DAA's cost trade-off decisions informed by the stakeholders who would be remunerating the additional investment involved, notably airlines?

The report identifies that "non-T2 airlines have a lower level of influence, but a number in this group are not supportive of the project" (Arup, page 17). The Arup report goes on to show that the non-T2 airlines included a group of airlines that were both "opponents" and "non-supporters" of the proposed T2 at the time, as well as non-T2 airlines that were either "neutral" or "supporters" (Arup, page 17).

The Gateway 3 Phase took place between 17 June and 4 July 2006. This phase analysed the various architectural options to be applied to the design of T2. It appears that the stakeholders were surveyed to gain an understanding of their views and influence on the T2 project in July 2006, before the full costs of T2 were known. Cost ranges for T2 of €318m to €396m, including "infrastructure/roads", were revealed at the third consultation meeting in May but the figure of €609m appears not to have been revealed until 28 September 2006.[48]

The report outlines the structure for the consultation, and identified Aer Lingus separately from the other airlines, indicating that DAA engaged more with Aer Lingus than other airlines. Aer Lingus was included in the "Key Input/Output" group of stakeholders, whereas all other airlines were included in the "Significant Input" group (Arup, page 4).

If all airlines are to pay for T2, it is important to focus on consultation with these other airlines. The Arup report noted that "The consultation with the [other] airlines to date has largely been through the coordinated programme wide airline events. There has been some individual consultation with the T2 airlines, which has been reported on separately". The report indicates that the additional engagement with non-Aer Lingus T2 airlines consisted of "a smaller focus group session", two sets of questionnaires, (one on 15 March and another in September), one-to-one meetings

[48] Note that the actual proposed cost for T2 and associated projects in CIP2006 is just under €607 million. The additional €2 million to increase the total cost to €609 million is only scheduled to be spent in 2010.

with airlines that requested them (appears to be Continental, Delta and Air Canada) and two further meetings in July.

The "programme wide airline events" appear to be identified as the series of airline presentations, together with a focus group on 3 May 2006. Annex 4 provides a timeline for the key decisions and the information available to airline users and the opportunity for them to inform those decisions.

The brief definition (Gateway 1)

> "Gateway 1 took place between 3 January 2006 and 30 March 2006 and focussed on defining the brief for the new terminal and pier. During this period the stakeholder management focussed on Group 1 (e.g. DAA, DA, Aer Lingus, Retail and Catering). In addition key statutory groups [FCC, IAA and Independent Verification] were consulted to ensure that their early input was obtained." (Arup, page 2)

Engagement with non-Aer Lingus airlines was not planned at all for Gateway 1, but one all-airline meeting was held toward the end of the process, in March 2006. It appears from this meeting that decisions on the location and occupancy of T2 had already been made. In other words, other airlines appear not to have had the opportunity to inform these key decisions.

At the stakeholder meeting, the DAA showed the adjustments of projects within the CIP and the possible changes to the September 2005 CIP. A key graphic in the presentation indicated that T2 would be significantly smaller than T1, in terms of capacity. It thus appears that either the decision about location and occupancy of T2 had no significant cost implications or, if it did, users were not given any cost information to inform the trade-offs implicit in that decision.

The increase in T2 sizing

The size of T2 appears to have increased between the first meeting on 21 March and the second meeting on 21 April 2006. There was an earlier meeting on 27 January on "Aer Lingus Requirements", but the focus of the 21 March meeting suggests that there was little thought of a radical change in the size of T2 at that time.

The Stakeholder Management Report indicates that the T2 Team engaged with Aer Lingus, particularly in relation to establishing the size of T2 and understanding their operating procedures including baggage handling requirements. This informed the

Concept Design Report. At a meeting with Aer Lingus on 7 April, the DAA outlined the parameters it was adopting to size the terminal. Other Aer Lingus meetings in the intervening period focused on the Customs and Border Protection (CBP) and baggage. It is not clear to what extent Aer Lingus understood the cost implications.

No cost information appears to have been provided to the industry at the 21 April 2006 meeting, the DAA indicating that it was not yet available.

Decisions between options

There appears to have been a considerable amount of detailed consultation work on the choices between different detailed design options, once the key decisions about location, occupancy and size had been made. These appear to have been costed, in relative terms.

Relative costs for design options were presented to users in the third consultation meeting in May. The differences between the costs for different options were relatively small. The cost range indicated at that time was €318m to €396m, including infrastructure and roads. It would not have been clear to users how these amounts relate to the CIP as a whole.

The increase in the cost of the CIP

At the first consultation meeting, users would have understood the CIP for 2006-14 would be some 9.4% more than the (adjusted) May 2005 CIP. By the end of the consultation and design process, the actual CIP was 90.9% more. How was users' appreciation of this cost impact able to inform DAA's cost trade-offs?

The minutes of the third consultation meeting in May indicate that the DAA acknowledged that there could be a cost implication for a larger T2 project:

> "The additional costs associated with the larger T2 project could add to [the €7.50 needed to fund the Sep 05 CIP]. The regulator will have a key role in the process of analysing the effect on charges for the overall CIP when it is finalised."[49]

It was not until the sixth consultation meeting (August 2006) that users were given a figure of €609m for T2, Enabling works, Access & Roads, Utilities/Energy Centre and

[49] DAA's Minutes of the 3rd consultation meeting with airlines and handlers, 26 May 2006.

Pier E. At this stage, an informed user would have been aware that the CIP would be significantly bigger, especially over the first four years, but not how much bigger.

The full impact on the CIP was not apparent until the CIP itself was provided to users, after all the key decisions had been made.

T1X Consultation

To understand the consultation process for the Terminal 1 extension (T1X), the Commission has relied on two sets of information:

- the T1X gateway 1, 2 and 3 documents; and
- the general CIP/T2 consultation documentation (slides and minutes of meetings).

The original concept for T1X was developed in 2002. In the May 2005 CIP, the DAA proposed €47m of T1 complex upgrades. To this, the Commission implemented a €5m reduction, leaving €42m in the RAB. In addition the Commission included €26.5m in the RAB for the "Northern De-bottlenecking Extension North" (the original name for T1X).

Gateway Reports 1, 2 and 3 were produced in May, August and December 2006 respectively. Between the second and third gateway reports, there were consultation meetings with airlines and ground handlers in June and September, as well as specific consultation with Ryanair.

Gateway 1 refers to five specific initial options, as well as a "do nothing" option. Of these, it would appear two were developed further (a variant of the CIP 3 bay option referred to as Option 6, and a splay option referred to as Option 8). Option 8 was preferred since it met operational requirements but also capitalised on retail opportunities (with 2055m^2 of retail space). A cost comparison for the options, including benchmark data, is reported to have been prepared.

As part of Gateway 2, three options based around the chosen splayed option were developed. DAA Stakeholders were involved in a value-management workshop which reviewed the three options. The DAA chose option 3 after conducting its own multi-criteria analysis.

In the June 2006 consultation meeting, the DAA presented a slide that stated "Reduced/No impact on passenger charges" as a result of T1X investments.[50]

This position was confirmed at the September 2006 consultation meeting, where the minutes record:

> "During CS (DAA)'s presentation on the T1 Extension project, Niall Walsh (Aer Lingus) interjected and asked for confirmation that this project would have no impact on airport charges as CS (DAA) had made reference to. MF (DAA) stated that the business case for the project was self-financing and that this would be how the project would be presented to the Regulator."[51]

Aer Lingus indicated that it would find this arrangement satisfactory. The Gateway 3 report discusses one further option, an alternative debottlenecking option for the departures level. This would increase costs by about €6.5m.

Pier D Consultation

The Pier D project has been in each of the CIPs since 2001 and has been the subject of significant debate before each regulatory Determination. Following the 2006 Appeal Panel referral, the Commission included in the RAB the 2005 May CIP estimate of €72.1m (of which €8.1m had already been spent prior to 2005 and so was already in the RAB).

The refusal of planning permission to allow use of the OCTB as the route for passengers to Pier D created a significant problem. DAA claim that there was significant optioneering and discussion about the appropriate design and cost of Pier D in 2002. As such, the loss of planning permission forced them to utilise one of the other options (the aerial bridge) that had been discussed in 2002.

This issue was raised in the second CIP/T2 consultation with airlines and ground handlers in April 2006. From the slides this was primarily a discussion about the operational requirements, such as the relocation of car-parking from OCTB. However, the minutes do record that stakeholders did not like the aerial bridge and the issue of its likely cost was raised, as the following two passages from the minutes illustrate.

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[50] Slide 16, DAA consultation event with airlines and handlers, June 2006

[51] Page 2, DAA's minutes of 6th consultation event with airlines and handlers, 28 September 2006.

> “David O’Brien (Ryanair) questioned the decision by the DAA to pursue the high level access bridge to Pier D when it had previously been rejected by stakeholders. Reference was made to an article in the Times. MF explained that the DAA had presented 11 access options for Pier D to users as part of the evaluation process in 2002. Having identified the high level walkway as the lowest risk option from a planning perspective and obtaining planning permission for it as part of the overall Pier D project. The board of the DAA instructed the design team in May 2005 to pursue a lower cost option for access to Pier D via the OCTB. This option was diligently and expeditiously pursued until very recently but was not acceptable to the planning authorities. DAA therefore withdrew the planning application recently and took the first opportunity it had to advise users of the situation i.e. this meeting. Ultimately the high level access bridge now represents the only viable access option for Pier D. To pursue any other option when all had previously been reviewed and rejected for planning and/or cost reasons would be pointless and would lead to a further delay of at least 18 months and would add significantly to the cost of the overall project.”[52]

and

> ‘David O’Brien (Ryanair) asked for confirmation that the bridge would be excluded from the RAB. Miriam Ryan (DAA) noted that some allowance had already been made for access through the OCTB in the existing price cap as the project had been included in the May 2005 CIP on which the existing Determination was based. The additional costs of the high level option would be included in the forthcoming CIP. MF confirmed that DAA will not commit to the exclusion of the project from the RAB – capital investment must be remunerated.”[53]

During the consultations on Pier D in 2006 the DAA does not appear to have made it clear that the cost was increasing by €60m until the CIP was published, even though some brief updates on Pier D were provided in the May and September 2006 consultation meetings.

5.4. Conclusions on the Commission review of the DAA consultation

Based on this analysis, the consultation process does not appear to have always given users meaningful cost information that would have allowed them to inform the key cost-affecting decisions. There was a 9% increase, from the May 2005 CIP, before the process started, but during the process it seems that users were not kept informed of how the *90% increase* in costs was due to decisions on the brief definition (location and occupancy), the size of T2 or other non-T2 factors: *users do*

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[52] Page 1, DAA’s minutes of 2nd consultation meeting with airlines and handlers, 21 April 2006.
[53] Ibid, Page 2.

not appear to have been provided with cost information that would have allowed them to inform their engagement in those crucial decisions.

It appears that detailed T2 design choices (between options 5, 6, 7, 8 and 9), where users did have some relative cost information, did not have a major impact on overall cost.

The material provided by the DAA suggests that the design of T2 has been largely driven by the needs of one user, Aer Lingus – the proposed anchor tenant. There are certain design issues that the Commission accepts are best conducted on a bilateral basis between the airport and the proposed tenants of the facility, but other users need to be informed of issues that might have a material affect on overall costs and more importantly the charges they may be asked to pay. The Commission has therefore sought to understand whether there are significant costs associated with the proposed new facility that are driven by Aer Lingus' needs and for which other users were not presented with the costs and trade-offs involved and consulted with accordingly.

From the consultation that the DAA had with parties concerning T1X, it was reasonable for parties to assume that any developments would not require any increase in airport charges. This is consistent with how the DAA has presented the rationale for T1X to the Commission, most recently in its Statement of Case. T1X is intended to be self-financing. Given this background, the Commission has sought to ensure that T1X costs do not affect the cap on charges.

For Pier D, there is no evidence to suggest that the changes reflect the outcome of a consultation process where users expressed a requirement or need for a revised specification. The Commission has previously set charges based on capital expenditure forecasts that include an allowance for work to build Pier D. The Commission does not propose to revisit whether the costs of such a project should be included in the RAB for this Interim Review.

6. PRICING OPTIONS DISCUSSED IN CP1/2007

Earlier this year the Commission published a Consultation Paper that, among other things, sought the views of parties on different possible charging structures that might form the basis of a regulatory settlement that allowed the DAA to be remunerated for any necessary investments contained in CIP2006. The consultation sought responses from interested parties on a number of topics, including: trigger pricing, time profiling of charges, peak pricing principles and the potential for differential pricing. This section summarises the responses the Commission received and outlines the Commission's current thinking on each of the issues.

There was some sentiment that the declared scope of the interim review meant that the Commission could not introduce innovations affecting the structure of charges in this current Determination. This argument accepts that the Commission might implement such changes post 2009, and the Commission believes it would be helpful to all parties – the DAA, airport users, and potential investors – for it to give advance notice on its current thinking on these issues.

Furthermore, the Commission does not accept that the interim review should automatically rule out the options discussed in CP1/2007, although it does agree that all parties can benefit from greater certainty about the regulatory regime. The scope of the review is to reconsider the Determination given the new, finalised CIP rather than the investment plan presented to the Commission at the time of the 2005 Determination. The new plan entails considerably larger amounts of capital expenditure. It is quite possible that had it been presented with the current larger capital programme (CIP2006) in 2005, the Commission would have taken a different approach to the pricing options in determining the structure of charges. This seems particularly relevant when thinking about the T2 proposals, which envisaged a smaller facility and smaller costs than is now proposed.

6.1. Trigger Pricing

The consultation paper (CP1/2007) asked respondents for feedback on the use of trigger pricing principles when setting price-caps for airport charges at Dublin Airport. Specifically, the following two questions were asked:

- What are the advantages and disadvantages of using trigger-pricing principles when setting price caps for airport charges at Dublin Airport? and

- For what projects in CIP2006, if any, should the Commission incorporate the principle of trigger pricing when making future determinations? To what key milestones and dates should the triggers relate?

The following two sections summarise the responses the received, and the Commission's current thinking on the issue.

Views of the Parties

The **DAA** considers trigger pricing to put the Commission at odds with its statutory objectives, in particular the requirement to impose minimum restrictions on the DAA actions and the need to enable the DAA to operate and develop the airport in a sustainable and financially viable manner. The DAA anticipate that trigger pricing will increase their financial risk, which will have knock on consequences for their financing of the CIP. Trigger pricing is not viewed as a practical or a cost efficient means of delivering large-scale capacity. The DAA are anxious that poorly designed triggers will not only increase their risks, but increase costs overall. It also fears that triggers will make it difficult to source funding for its capital expenditure from the capital markets. This could result in an increased cost of debt and cost of equity.

The DAA refers to ICAO's Policies on Charges for Airports and Air Navigation Systems (2004). These state that charges should be designed to introduce changes in price levels gradually. They cannot find precedents where triggers were introduced that were based on a large fraction of the total cost of the expenditure. Also, negative triggers are viewed as being contrary to incentive-based regulation. The DAA does not think that the Commission will be able to introduce meaningful triggers at this stage of the development process.

IATA supports the introduction of agreed triggers based on investment outcomes to incentivise timely and cost efficient investment in major projects. Triggers could be set following comprehensive and effective consultation between the Commission, the airport and the users. It is suggested that the triggers reflect when part of the investment is completed and the level of service quality is visible for reference. IATA recommends a penalty element for poor target progress and not reaching agreed delivery dates. Triggers are noted by IATA as possibly providing a protection against

the pre-financing of investment and prevent the deferral of investment once price caps are set.

Aer Lingus supports the introduction of triggers that could provide users with protection against being charged for new capacity before it is available for use. Triggers have a role when the completion date of the project is uncertain. They could motivate the DAA to provide projects on time or earlier. All triggers should be output based, not input based; the latter might weaken the DAA's incentives to complete the project in a timely fashion. Aer Lingus suggests that the trigger is related to outputs in terms of capacity delivered at Dublin and not the partial delivery of projects. Aer Lingus does not support triggers as described in CEPA's paper. There is no justification for triggers that allow the DAA payments for significant investments in advance of their completion, especially if the project straddles two regulatory periods. The role for triggers is to ensure that revenues and costs follow an equitable and efficient profile over time. The amount of expenditure added to the RAB should be based on the Commission's assessment of the costs and not the actual final costs; triggers should not prevent the Commission from scrutinising the CIP.

bmi considers that trigger pricing will provide an essential link between price and output delivery, while allowing the users to monitor the progress of the investment plan against pre-agreed delivery dates. However, a potential disadvantage is that there is the risk that quality will be sacrificed with a view to completing a project on time. It is recommended that a number of trigger points for major investments are spread over the life of a project.

Ryanair does not think that any projects in the CIP should have a trigger applied. Trigger pricing should only be applied to facilities for which there is a clear need and to which users can ascribe a value. Contracts could be signed with users that value the use of the new facilities. Reference is made to the UK's Office of Fair Trading (OFT), which suggests that new facilities should be funded through revenues derived from the growth in scale following their completion.

Forfás thinks that triggers might have a role to play in incentivising the DAA through the price cap. Triggers are also useful if the infrastructure is to be developed on a modular basis.

Commission's Conclusion

The Commission believes that there are circumstances where it is appropriate to adopt trigger pricing principles when setting a cap on the charges a regulatory entity can levy. This was demonstrated in the Commission's recent determination governing the level of aviation terminal service charges that the Irish Aviation Authority (IAA) can levy.[54] That determination includes two "milestone" events that must be passed before the cap on charges is revised to include an allowance for the costs of building new towers at Cork and Dublin airports.

The principle of triggers appears to be particularly relevant for large-scale projects, such as T2. Such projects imply a significant increase in the RAB. This could materially affect the level of the cap on charges that the Commission determines. To adjust the cap without any requirement on the regulated entity to develop the facility for which the funding was sought risks undermining the incentive properties of price-cap regulation. A higher price cap without any restrictions attached would allow the regulated entity to collect higher revenues and potentially invest in other, smaller capital projects without having to have regard to managing the costs carefully, rather than investing in the large-scale project which was the justification given for the higher price cap. "Triggers" or "milestones" are one way of avoiding this scenario. In other words, a trigger mechanism is a method whereby the airport operator is enabled to develop and operate the airport in a financially viable and sustainable manner that meets the needs and requirements of users for additional infrastructure whilst protecting those users' interests.

Also, triggers have the desirable property of providing incentives to complete projects in a timely fashion. Looked at from the perspective of users, the Commission agrees with the sentiment that in other industries, including the airline industry, firms cannot charge users for services that they are not yet able to offer. The Metro North public-private partnership only entails a first payment when the Metro opens for passenger service;[55] the Spencer Dock Convention Centre Dublin Ltd

[54] Commission (2007) "Determination and Report on the Maximum Level of Aviation Terminal Service Charges that may be imposed by the Irish Aviation Authority" CP4/2007.

[55] Railway Procurement Agency "Metro North, Frequently Asked Questions" www.rpa.ie/?id=327

will receive annual charges for building the National Convention Centre once it is open for business.[56]

The arguments for output-based rather than input-based triggers are generally persuasive. One caveat is that the Commission wants to have the right incentives in place such that the DAA stops investing in projects for which there no longer remains a demand. In such circumstances, the Commission is minded to include the costs incurred to that date in the RAB, notwithstanding that the project had not been completed. Similarly, efficiently incurred costs for projects which the DAA has to abandon for reasons outside its control, e.g. new legislation prohibiting completion of a project, might also be included in the RAB at subsequent determinations. These scenarios assume that the project was initially justified to meet the requirements of current and prospective users of Dublin Airport, and for which a separate bi-lateral contract between the DAA and a subset of users was not appropriate.

To introduce trigger prices would not necessarily be inconsistent with the Commission's statutory objectives. The Commission has and will continue to have regard to all of these objectives, including enabling the DAA to operate Dublin Airport in a sustainable and financially viable manner. In cases where triggers might protect the reasonable interests of current and prospective users of the airport, by providing the DAA with incentives to complete needed projects in a timely manner, the Commission will consider including them in determinations. Their design will be such that they are not at odds with the Commission's other statutory objectives.

The argument that triggers will necessarily increase the cost of capital that the DAA faces is not convincing. Moreover, the responses received from users suggest that they might be willing to incur a marginal increase in the cost of capital in exchange for linking payment for facilities with the time when those facilities are available.

If the DAA is keen to avoid sudden step increases in charges because of ICAO policies, it has the discretion not to price up to the cap on airport charges that the Commission sets. This argument suggests that notwithstanding the outcome of this interim review, the DAA will not be raising its charges significantly, a conclusion that seems at odds with the DAA's statements about the need to increase charges above the current cap before the current Determination ends.

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[56] Press release, Department of Art, Sport and Tourism (2007) "Contract awarded for National Conference Centre" www.arts-sport-tourism.gov.ie

The scope of this interim review is more limited than for a new Determination, and there is some merit in the argument that introducing a trigger in the middle of the Determination would be inappropriate. For this reason, the Commission does not intend to introduce an output-based trigger for the prevailing Determination, although should T2 not be open by the time of the next determination the Commission will give careful thought to introducing one then.

6.2. Time Profile of Charges

The consultation paper (CP1/2007) asked two questions in relation to the time profiling of charges:

- Are there any reasons for allowing the DAA to start levying higher charges to allow it to fund CIP2006 in advance of the projects being completed? and

- Should charges [and subsequent revenues] to recover the costs of CIP2006 be front or back loaded?

Views of the Parties

The **DAA** states that it does not support back loading of charges, as it increases the regulatory risk and the cost of financing. Front loading of charges is preferred as it helps demonstrate the demand for new facilities. Front loading enables the early delivery of lumpy investment as it prevents the risks associated with back loading, which might delay projects following exogenous shocks. The DAA perceives back loading to increase the risks from future difficult economic circumstances and the risks that the airlines might exaggerate their forecasts.

IATA encourages costs to be recovered on a constant unit cost basis, with the per passenger charge remaining constant in real terms. It is expected that this will involve a certain amount of back loading as the DAA will earn greater revenue as passenger numbers increase in future years.

Aer Lingus also supports the recovery of costs on a constant unit cost basis, as this is the most economically efficient means of recouping costs. Aeronautical charges should be set at a constant level in real terms per passenger over the life of the terminal. Financeability is not an excuse to allow the advance recovery of funds, as this is not how a competitive market functions. Also, the cost of capital is set at a level that removes any requirement for advance funding.

bmi supports the back loading of charges as it is NPV neutral for the DAA and the costs will match the costs of carriers, as more passengers will use the facilities in later years of the project's life.

Similarly, **Forfás** supports pricing that does not charge initial users a high price when utilisation is low.

Ryanair does not feel that there should be a discussion on the profiling of costs until the correct level of investment is decided. They view the current CIP as the result of a poor consultation exercise and regulatory gaming on the part of the DAA. Users should not have to pay for facilities that they will not use.

Commission's Conclusion

There are a number of precedents that lend support to the case for not front loading charges for facilities that will have excess capacity in the early years.

In the aviation sector, the regulation governing charges at Schiphol Airport requires the use of the *unuiteiten* method to depreciate assets whose value exceeds €100m when initial overcapacity is expected.[57] The method results in a maintained level of depreciation and cost of capital per unit of use for the asset's expected useful life, as anticipated at the time of the investment decision. The result is a stable charge profile over the life time of the asset, with total revenues increasing as demand increases in-line with the designed capacity of the facility.

Other regulators do not limit themselves to using straight-line depreciation when estimating the costs that a regulated entity should be allowed to recover in any given year. For example, in its 2003 gas transmission determination, the Commission for Energy Regulation created the possibility of setting charges based on a kinked depreciation schedule for an interconnector asset for which utilisation was uncertain. The asset, despite having an expected operational life of 50 years was initially depreciated over 100 years for the purposes of setting that determination. The depreciation profile would be revisited at the time of the third determination, and the remaining value of the asset would be recovered over the remaining operational life of the asset.

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[57] Article 8(7), Amsterdam Airport Schiphol Operation Decree 2006.

The DAA has not sought to front load charges at Cork Airport following completion of the new terminal. Current users would presumably be unwilling to pay the higher charges such a pricing profile would entail. The Commission does not think that the lack of competition at Dublin Airport should be a reason to allow the DAA to front load airport charges in Dublin.

Instead, when estimating the costs to be taken into account in a Determination, the Commission intends to depreciate the costs of T2 on a constant unit cost basis. In doing so the Commission will have regard to all its statutory objectives, including the need to enable the DAA to operate Dublin Airport in a sustainable and financially viable manner. The depreciation of T2 assets will commence from the point at which they enter the RAB, which the Commission is proposing will be from the period of commencement of operations at T2.

The proposed approach is consistent with the DAA's desire that changes in price levels occur gradually, as required by the ICAO policies on airport charges.

The Commission proposes to estimate the charges on the basis of constant unit charges assuming that traffic grows in line with the forecast in the DAA's April 2007 financial model until 2014, and by 3% per annum thereafter. The DAA will have an incentive to outperform the forecast and hence collect revenues in excess of the depreciation charge to the RAB. At the start of each determination, the Commission would update the traffic forecasts and re-estimate the depreciation charges to allow for T2 based on a constant user cost basis. The DAA will consequently face the same regulatory risk as it does for other assets in the sense that if traffic is more than forecast for the purposes of setting a determination, the DAA will have an opportunity to collect additional revenues during the life of that determination, and vice versa.

The Commission is also proposing that the DAA take-on some of the demand risk that is attributable to the fact that it has chosen to build a large terminal in one go with potentially considerable excess capacity. The evidence submitted as part of the consultation, as well as the analysis carried out by the Commission's consultants indicates that there is potentially significant excess capacity in DAA's proposed plans for a 75,000m^2 T2.

The RR&V analysis states that a more realistic projection for the number of passengers likely to use T2 in the busy hour of the day in 2013 is around 3,000, as opposed to the figure of 4,200 presented by the DAA to justify a terminal of the scale of that outlined in the CIP, i.e. 75,000m^2. Section 7.4 below outlines the Commission's proposed approach to dealing with this issue.

6.3. Peak Pricing

The consultation paper (CP1/2007) asked two specific questions in relation to the use of peak pricing principles:

- What are the merits of using peak-load pricing for airport charges at Dublin Airport to fund Terminal 2? and
- What calculations should the Commission make if it decides to set a price cap that encourages the DAA to recover the costs of expanding Dublin airport by means of peak-load pricing?

Views of the Parties

When responding to CP1/2007 the **DAA** raises a number of concerns in relation to the possibility of introducing peak pricing.

First, the lessons from the period 2001-2005 when a form of peak pricing was employed has shown that it is complex to implement (especially when calculating the appropriate differential since it involves capital and operating costs as well as off-setting commercial revenues). Further, since it was dropped at the 2005 Determination it is inappropriate to consider re-introducing it at this Interim Review.

Second, if predicated on the forecast increase in peak period traffic as addressed in response to other questions, DAA believes that the interpretation of T2 leading to a significant increase in the peak is overstated. Consequently this rationale for employing peak pricing is questionable.

Third, the DAA believes that the Commission's focus should be on facilitating the expansion of capacity, not considering ways in which existing capacity can be rationed.

Fourth, if a peak pricing system were introduced when T2 opens it would (i) not be required since excess capacity would exist; and (ii) it would risk damaging the DAA's financial position since it could deter some demand and so affect the SFV of the business.

Finally, there is a risk that introducing a peak-load price at Dublin airport when most competing airports do not employ such an approach runs the risk of distorting competition between airports.

Responses from airlines and IATA generally share the DAA's opposition to peak pricing. **Aer Lingus** thinks there is no justification for peak pricing to fund the new terminal. If an airport-wide view of the terminal is taken there is no justification for peak pricing of terminal services during this time period. The constraint at the airport is the runway, not terminal capacity, as illustrated by the fact that the airport is slot constrained. Consequently there is no economic benefit from optimising throughput of passengers.

bmi argues that introducing peak pricing would just act as a charging mechanism since studies have shown that customers do not change the times they use the airport (although they may choose an alternative transport mode). It would penalise business customers, disadvantaging passengers flying to conduct business within the EU. It would also disadvantage airlines using Dublin relative to airlines using other airports or competing modes of transport since there is a limit as to how much of any increase can be passed-on to customers without them choosing to use alternative routes or modes.

IATA does not support peak pricing since it would arbitrarily reallocate costs between airlines that have little opportunity to react to these changes given the other constraints and pressures under which they operate.

Further, the appropriate reaction to congestion is through slot coordination, which is proposed for Dublin airport. A charging system would not add anything to this overall more global approach.

Finally, IATA believes that capacity costs should be considered joint costs which are most appropriately allocated on the basis of average costs.

Before considering whether peak-load or congestion pricing is appropriate, **Ryanair** believes that the drivers of the increased peakiness of traffic using T2 has to be understood. When calculating a potential peak charge it is important that care be taken. Determining an appropriate slot value is difficult, especially when the airport is, in Ryanair's view, not slot constrained. The figures presented in the CEPA paper on congestion charging for Commission are unrealistically high given the nature of the comparators used. Also, the impact of T2 on elements of any congestion charge, such as quality improvements, need to be considered in terms of the nature of different passenger groups as well as the status of the "congestion" at different times of the day.

More generally, Ryanair argues that peak pricing would reward the DAA's inefficiency while disadvantaging home-based carriers, such as Ryanair, that need to launch as much of their Dublin based fleet as early as possible.

ITIC observes that peak pricing does not have a proven ability to change the demand profile. More generally, ITIC believes that peak or differential pricing could affect airline competition and with potentially undesirable consequences for tourism in Ireland.

The one respondent to CP1/2007 to offer support for peak pricing is **Forfás**. It believes that since peak passengers determine capacity requirements it is appropriate for them to pay some of the additional costs. However, the charge should not be excessive and that a comparison with costs in countries that Ireland competes with would be appropriate.

Commission's Conclusion

The Commission agrees with Forfás that peak pricing has merit. Those parties who argue that it has no effect on behaviour arguably make a case for peak pricing: since the costs of running an airport include a significant portion of fixed and joint costs, it is most efficient to collect such costs from those users with the most inelastic demand.

The Commission believes that peak pricing can play a very important role in the efficient provision of infrastructure. In the absence of peak pricing there will be a socially excessive investment in infrastructure to satisfy peak demand, with calls for

further investment in infrastructure in the future which would incur a heavy investment cost but lie underused or even idle at non-peak times.[58]

However, for operational reasons and to allow for a flexible response to changed circumstances, the Commission believes that a peak-pricing charge is best devised and introduced by the DAA in consultation with users. Thus for now the Commission does not propose to estimate and impose a peak price within the overall price cap although it might propose to do so in the future and will continue to favour a price structure that differentiates between peak and off-peak periods.

The DAA will still have the discretion to introduce such charges if it considers them appropriate. Prior to approving further capital expenditure to expand the capacity at Dublin Airport, the Commission will expect to see evidence that the DAA has attempted to utilise existing capacity efficiently and that there is genuine demand for increased capacity; the use of peak pricing will be one way that the DAA might demonstrate users' willingness to pay for additional capacity.

The Commission agrees that generally it should consider airport-wide demand, rather than demand in T2, when thinking about the merits of peak pricing. However, the DAA has justified the size of T2 on the basis that a single airline wants to be located in one terminal and will have a very peaky demand. If an airline genuinely values being in one location and having the option to develop a very peaky schedule, the Commission thinks that there is a case for requiring that user to pay for the extra costs that the DAA has to incur to build this extra capacity. The evidence that has been presented to the Commission does not demonstrate that Dublin Airport requires capacity for an additional 4,200 busy hour passengers before 2014, yet this is the proposed capacity for T2 when it opens. As indicated above, if the DAA wishes to recover more of the costs of T2 in the early years of its operation, the Commission is willing to consider proposals that would allow the DAA to charge peak-hour T2 users a higher charge than other users.

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[58] This point is made in Edgar Morgenroth and John Fitzgerald (eds.) (2006) "Ex-Ante Evaluation of the Investment Priorities for the National Development Plan 2007-2013", Economic and Social Research Institute, Dublin.

6.4. Differential Pricing

The Consultation Paper (CP1/2007) asked two questions in relation to the use of differential pricing:

- What are the merits of using differential pricing when setting airport charges for T1 and T2 users at Dublin Airports? and
- What calculations should the Commission make if it decides to set a price cap that encourages the DAA to recover the costs of improved service qualities in T2 by means of differential pricing?

Views of the Parties

The **DAA** response, set out on pages 15 to 19 of the document entitled Response, addresses the questions of differential prices in several ways.

First, the DAA queries the assumption that there will be different levels of service in the two terminals, stating that both will provide IATA level C service. This is because:

the DAA plans to upgrade T1 at the same time as commissioning T2; and

the opening of T2 will free capacity at T1 and relieve overcrowding.

The DAA also states that the continuous upgrading of terminals means that while service may be perceived to be higher quality at one terminal compared to another; this should be a short-term occurrence and would be reversed. Further, the introduction of differential pricing would raise significant issues with respect to airport development, downstream competition and add complexity in allocating airport facilities when users need to switch between terminals.

The determination of the €259m cost of differential quality at T2 is also disputed.

Differential pricing would also be questioned since users will have little choice as to which terminal they use. The DAA believes that the majority of users will not have a choice since the airline allocation will partly be driven by services (T2 will be better able to handle long-haul operations) and partly by decisions by the DAA. As such, differential pricing "would therefore unfairly penalise some carriers and could seriously affect competition between them…" (page 17). Given this concern, any

further development of the differential pricing idea would need to consider downstream competition implications.

Splitting operations between two terminals, to try and overcome a charging imbalance between the terminals would in itself increase an airline's operating costs and so again place them at a "significant operational disadvantage" (page 17).

The points above also lead to a concern that users might complain that differential pricing contravenes competition law and would leave the DAA open to a claim of abuse of dominant position. In order not to contravene Article 82, DAA would need to prove that the charges are objective – justified through a consideration of quality and the cost base. In a single-till environment cost allocation can be difficult and would also need to consider commercial revenues. For example, non-EU passengers generate retail revenues roughly 4.5 times those of EU passengers. If non-EU passengers are concentrated in T2 (as would be the case) then retail revenues will be that much greater. Since it is also likely that operational costs will be lower at T2 (owing to its smaller size, combined with Pier E) then any differential pricing is hard to justify.

Finally, differential pricing could also make the tendering process for operation of T2 more difficult. Airlines might choose to switch between the terminals and so complicate forecasts of throughput, so making the tendering more complex.

The Commission received mixed views about differential pricing from representatives of the airlines. **IATA** argues that a basic low-cost level of service at the airport should be provided on a non-discriminatory basis, and any differences in quality can be provided on a bilaterally agreed basis between the airline and airport. This will provide a level playing field for airlines.

Given that service levels will be the same for both terminals. IATA thinks that the ICAO pricing rules that do not allow for differential charging are especially important

Aer Lingus also argues that T2 is designed to provide the same level of service as T1 and consequently there should be no difference in the charges. Any differentiation of charges based on the cost differential associated with T2 over T1 should not be allowed. The cost of T2 is the marginal cost of capacity and it is this that should determine the charge. Both are providing the same service and

consequently penalising one group which happens to be in the newer terminal would be inappropriate and breach efficiency issues. Aer Lingus does not want and is not willing to pay for additional services.

In principle the Commission should set a cap for charges and allow separate bilateral negotiations between the airline and airport if additional services are required. The risk that a regulator could get the pricing of additional services wrong and provide perverse incentives is too great.

Ryanair thinks that the real question is about willingness to pay. If the user demand is for a lower quality product but the airport is seeking to enhance quality and maximise investment then Commission should not allow the price cap to increase.

The existing level of service at T1 is acceptable to Ryanair and its passengers. Ryanair would like the opportunity to develop a lower quality terminal that would imply lower charges.

In addition, something developed specifically for one airline which then is unable to use that service should not be underwritten by the totality of passengers but rather viewed as a risk for the airport operator.

Linking charges to quality is appropriate provided lower quality products are priced at a lower cost. The example of the Temporary Forward Lounge is quoted where no rebate has been provided, despite the poorer service level being provided.

bmi thinks that if there are commercial advantages from using one terminal rather than the other, perhaps due to enhanced quality, then the users of the higher quality terminal should pay at least a part of the commercial advantage. This ensures that a level playing field for competition exists, something that is important for bmi since it is competing on the Heathrow-Dublin route with other operators.

However this should not be an issue since both T1 and T2 are due to be IATA Level of Service C. Costs included in the differential charging should be directly attributable to any improvement in quality above service level C. bmi raises a concern about how any cost overrun should be handled if differential pricing is proposed.

bmi cites the example of differential pricing in Glasgow, and notes that they are being proposed for bmi at T5 in Heathrow.

Forfás is broadly supportive of the concept of user pays and differential pricing to capture any difference in quality between services. However, this needs to be placed in context and any difference needs to be appropriate since:

T1 users will benefit from T2 inasmuch as less crowding in T1 once T2 opens;

operational costs at T2 should be lower than at T1; and

administrative decisions about differential pricing should not damage the potential for competition between the terminals.

The **IDA** expresses concern that a "two-tier standard" not develop between the existing and new terminal because the airport needs to be seen in the whole with the new terminal complementing the existing one. This would seem to argue against differential pricing.

ITIC does not believe differential pricing is needed or practical. Further, it could affect airline competition with undesirable consequences from a tourism perspective.

Commission's Conclusion

As reported in the Jacobs Report presented as an annex to this Report, there are divergent views on the issue of differential pricing. As might be expected, those airport users who would prefer better facilities favour uniform prices, effectively requiring other users who do not value the improved facilities to pay some of the costs associated with the higher service level.

The Commission agrees with those parties – bmi, Ryanair and Forfás – that support the principle of differential pricing between terminals.

The evidence from around Europe suggests it is possible for airports to set differential prices for the use of different facilities without automatically falling foul of competition laws. For example, Schiphol airport sets differential charges, and its charges require approval from the NMa, the Dutch Competition Authority. Moreover, the Commission has sought clarification from the Competition Authority and is satisfied that the DAA could set differential prices for airport users operating in

different terminals. This would seem to provide a stronger objective rationale for differentiated charges than to offer discounts according to the route being flown, a distinction the DAA currently makes when setting charges.[59]

The Jacobs Report indicates that ICAO has no objections to the principle of differential pricing, provided that airport charges are transparent, non-discriminatory and cost related. It is suggested that for commercial reasons airports may be reluctant to open low-cost facilities.

This is consistent with the findings of a recent report on competition for the European Commission (EC) that argued that some dominant firms may prefer not to be able to engage in price discrimination since it reduces their market power.[60] The firm can avoid having to engage in bilateral bargaining and offering parties lower prices. This can be especially detrimental to competition if the customers are themselves competing with one another (such as airlines, the customers of an airport), and seeking lower costs is one way that they might realise an advantage.

Given this background, it is not clear that the DAA would automatically run foul of competition law if it were to offer differential charges. In addition, looking forward, Article 8 of the EC's proposed Directive on airport charges makes provision for differentiation of charges, so as to allow the airport to provide tailored services.[61]

If, as the DAA suggests, T2 is better suited to meeting the needs of long-haul operators than T1 this suggests that the two terminals are not providing identical services. There would be a rationale for charging long-haul carriers a different price than short-haul carriers. The Commission would be happy for the DAA to engage in differential pricing, while accepting the points made by the DAA, Aer Lingus and Forfás that all airport users realise some benefits from a new terminal because it relieves the demands placed on the existing facilities.

A review of T2's costs suggests that it is the size, rather than differences in the quality of the new facility, that is the main driver of its envisaged costs. Consequently, the Commission does not intend to intervene and mandate differential

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[59] DAA (2007) "Non-EU Route Support Scheme 2007" www.dublinairport.com

[60] Gual, Jordi, Martin Hellwig, Anne Perrot, Michele Polo, Patrick Rey, Klaus Schmidt and Rune Stenbacka (2005) "An economic approach to Article 82", report by the EACGP, http://ec.europe.eu.

[61] European Commission (2007) "Proposal for a Directive of the European Parliament and of the Council on airport charges" http://ec.europa.eu.

prices now, although the DAA is welcome to engage in such a pricing policy as a means of ensuring that user demand for the two terminals is consistent with the capacity that the two facilities can provide. If all users would prefer to be in T2, the Commission would expect a lower charge to apply for users operating out of T1 and vice versa.

Capital expenditure undertaken to ensure the quality of service available in the two terminals is the same will not automatically be included in the RAB. From the submissions received, there is some demand for a low-cost facility. If users would prefer lower charges rather than improvements in the terminal specifications, the DAA should meet these users' requirements. The capital expenditure for future upgrades of T1 (T2) will only be included if the DAA can demonstrate that they lower charges or that current and prospective T1 (T2) users are willing to pay for the upgrades.

The Commission has to have regard to all current and prospective users, and expects that different airlines will have different views about the appropriate trade-off between airport charges and the level of facilities available. In contrast to ITIC's position, the Commission believes that allowing airlines more discretion over the price and travel experience that they offer passengers can potentially enhance airline competition. Airlines should not be forced to accept more expensive facilities than they desire merely because a rival argues it cannot compete if airport charges differ. Instead, in this scenario the "complaining" airline needs to decide whether its passengers would prefer higher charges and better facilities or the lower charges and lesser facilities offered by its rival(s). The DAA should then seek to provide the appropriate mix of facilities, to the extent that this is practical.

7. REVIEW OF THE DAA'S PROPOSED INVESTMENT PLAN (CIP 2006)

This section reviews the proposed costs of the CIP2006, as presented to the Commission by the DAA in October 2006.

Notwithstanding the arguments made by the DAA, summarised below, the Commission is satisfied that its statutory objectives require it to review the DAA's projected capital expenditure needs, to protect the interests of current and prospective users and to facilitate the efficient and economic development of the airport.

The section is divided into three parts:

- part one summarises the representations the Commission has received to date from interested parties concerning the costs of the CIP;
- part two reviews the cost verification exercise that BCS undertook, the second of three safeguards proposed in the Aviation Action Plan; and
- part three summarises the work that the Commission has commissioned to look at the costs in the CIP and how it proposes to treat such costs for the purposes of this interim review.

7.1. Views of the Parties

The **DAA** refers to the BCS verification report that concluded that

> "the estimated cost of Terminal Two on a cost per square metre basis lies at the midpoint range of the UK terminal buildings benchmarking study carried out by the DAA's team of consultants."[62]

The DAA considers that the Aviation Action Plan requires the Commission to not assess in detail the components of the CIP, in particular in relation to the design, sizing and configuration of T2, Pier D and other elements which respond to the Aviation Action Plan. All of these costs and others in the related CIP should be included in the RAB. The DAA claims that if the Commission does not take this approach then it will be acting contrary to its statutory remit to ensure the

[62] Page 4, BCS (2006) "Independent Verifier's Report, Proposed Terminal Two and Associated Works" www.transport.ie

financeability of the DAA, which would like to sign construction contracts prior to the completion of the Commission's Interim Review. This interpretation is believed to be in line with international practice, with reference to the CAA's 2006 Airport Review that adds the amount in the BAA's capital investment programme into the RAB, with a future adjustment for actual versus forecast expenditure.

The DAA states that the cost plan of T2 was made available to all stakeholders, throughout a period of continuous engagement, prior to the publication of the CIP. The costs of the CIP have been benchmarked against similar infrastructure projects in Western Europe. The DAA also expects that the projected costs of the CIP will be a reliable guide to the actual expenditure. It points out that the Commission has incorrectly used the €3,500 per m^2 benchmark as it only refers to the construction cost of the terminal. The DAA thinks that the costs of the CIP are in line with reasonable benchmarks in their consultants' databases.

Ryanair views T2 as overly specified and excessively expensive, based on inappropriate benchmarks. It states that it has not received any justification for the increase in costs from the May 2005 CIP and the current plan. Ryanair goes on to say that it will not pay the charges necessary to fund the current CIP and will not use T2 if construction proceeds on the basis as described in the CIP or at the current proposed price.

Ryanair views the increase in the cost of Pier D between CIP2005 (May) and CIP2006 of 38% as evidence of the inability of the DAA to efficiently deliver a capital programme. The costs associated with T1X are viewed as an unnecessary T2-enabling cost, which is seen as another example of the inefficiency of the development proposed by the DAA.

In order to achieve a cost effective CIP which meets the needs of users, Ryanair suggests that factors such as the phasing of the development, the size of the minimum capacity increment and the extent of the traffic growth should be considered. The current CIP is viewed as an example of regulatory gaming, as T2 is ten times more expensive than other similar sized terminals. Ryanair points out that T2, when it is eventually needed, could be a smaller and more cost effective building if the additional capacity that will be available in T1, following the extension, is considered.

Aer Lingus accepts the DAA's indicative price of €8.50 as the price cap to recover the costs of the CIP, including the operational costs of T2. While it supports the specification of T2 set out in the CIP, this depends on the DAA being able to deliver the infrastructure at a fair cost which is funded in an equitable manner across *all* (Commission emphasis) airport users. Aer Lingus supports the Commission if it decides to disallow costs if the costs of T2 exceed reasonable benchmarks. Such excess in costs over the benchmarks should not be treated as the cost of providing additional quality of service.

bmi notes that there has been no explanation given for the increasing costs of the CIP from the May 2005 level to the current amount. As T2 appears too excessive in costs, bmi does not support T2 in the current investment plan. This plan suggests inefficiencies to them, especially when compared with UK benchmarks.

IATA generally supports the investment in new airport capacity, along with more efficient usage of the existing facilities. It points out that there is significant difference between the information that the DAA has and that users have concerning the costs of the investment plan. There should be extensive benchmarking against a wide range of airports using a variety of metrics. If costs are found to be in excess of the benchmarks, these costs should not be included as part of the regulatory determination.

ITIC views the Commission and the DAA as being in the best position to determine the absolute costs of the CIP. It considers the airlines' opposition to an increase in charges of €1 or €2 to pay for a capital investment programme as suspect, as it contrasts with the airlines' increases in ancillary fees, such as baggage-handling fees. ITIC does not expect the Commission to gain greater understanding on the costs of the CIP, given that it has been approved by the government's independent verifiers. It has faith in the DAA's tendering process to achieve value for money in the CIP.

Forfás cannot validate from the information that they have seen whether the costs of T2 amount to gold plating. It does not wish to see gold plating recovered through the price cap.

The **IDA** strongly supports investment, in a timely manner that leads to a highly efficient and cost effective Dublin Airport.

Uproar notes that analysis of the current investment plan of €2.5 billion should be extended to include analysis of the costs of the metro and the 'Airport Box' road projects. They would also like land at or near Dublin Airport to be economically valued, prior to infrastructural development at the airport. UPROAR argues that the DAA does not include a value for the 840 acres ear-marked for the new runway and the 3,500 plus acres of land in the new safety zone. It suggests that land should be valued at least at opportunity cost to take account of the continuation of the current use of the land or the cost of not making alternative use of the land. The CEPA Cost Benefit Analysis should be amended to take account of the high value of land at and around Dublin Airport. Any charges that are calculated without taking account of the value of land are largely understated.

7.2. Boyd Creed Sweett's Independent Verification of the Costs

The views of parties concerning the proposed costings in CIP2006 include a number of parties that refer the Commission to the cost-verification study by BCS. This study constituted the second of the three safeguards in the Aviation Action Plan:

> "2. VERIFICATION**:** Final specifications and costings of Terminal Two will be independently verified by aviation experts."[63]

In March 2006, the Government appointed BCS, in association with Parr Architects and Faber Maunsell, to verify the costs and the specifications of T2 at Dublin Airport.

On conclusion of its work, the BCS report was sent to the Minister for Transport in September 2006. The Commission sought a copy of the report and of the supporting technical analysis from the Department on 13 November. The Department published the report on its website on 29 November 2006.[64]

The Commission has carefully considered the BCS report to understand the extent to which the Commission might rely on it for the purposes of setting charges. In December 2006, the Commission wrote to BCS seeking the technical analysis underlying the report, and posing certain questions that would allow the Commission to understand how BCS had evaluated the DAA's costs and project specifications. In particular, the Commission was interested in how BCS had independently verified the cost benchmarking exercise that the firm of Turner and Townsend had undertaken

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[63] Page 5, Aviation Action Plan speech by Martin Cullen, TD, Minister for Transport, 20 May 2005.
[64] http://www.transport.ie/viewitem.asp?id=8531&lang=ENG&loc=432

for the DAA; and details on BCS's verification of the sizing process conducted by the DAA's consultants.

Correspondence continued until March 2007; copies of all the written correspondence between the Commission and BCS are provided as an annex to this report.

Based on information that the Commission received, the Commission concluded the following:

- BCS's conclusion that the estimated costs of T2 are "within industry norms for this type of project in a European capital city" relates only to the construction costs of T2, which account for half of the proposed total cost of T2 (€607m);
- The European industry norms with which BCS compared the T2 construction costs related to UK 'mid-range' and 'high-range' facilities;
- BCS "did not independently assess the sizing of the terminal [T2]" since their brief was to verify the methodology and approach in the production of the terminal design; and
- As its brief related only to T2, BCS has not verified the non-T2 costs of the DAA's CIP2006.

7.3. Commission's Assessment of DAA's Capital Expenditure Needs

Following the exchange of correspondence with BCS, the Commission concluded that there remained aspects of the costs in the CIP that needed to be reviewed before coming to a view on both the level of costs to include in the RAB, and how these costs might be recovered through regulated airport charges. The Commission therefore commissioned consultants Rogerson Reddan and Vector Management (RR&V) to assist it in reviewing certain aspects of the CIP.

The RR&V work broadly considered two issues: (i) the robustness of the DAA's estimated costings per square metre; and (ii) what is the appropriate capacity of the T2 terminal, given the likely demand going forward. The following two sections summarise the main findings from the RR&V work. This is then followed by a description of the proposed Commission treatment of the costs in the CIP, drawing on the key results in the RR&V reports.

While RR&V analysed the DAA's costs of providing new infrastructure at Dublin Airport, the Commission retained Jacobs Consultancy to review dedicated low-cost airport passenger facilities[65]. If an airport's objective is to develop a terminal with a lower specification than is currently planned by the DAA, this generally requires a smaller budget. Jacobs gathered information on low-cost developments at airports, focusing in particular on Marseilles, New York JFK, Budapest, Kuala Lumpur, Schiphol and Frankfurt-Hahn airports. The costs of providing new low-cost terminals were found to range from €25 million at Frankfurt Hahn to €600 million at the Jet Blue terminal, JFK New York. As the terminals vary according to their physical specifications and their quality of service, it is not possible to determine proximate benchmarks for low-cost terminals. None the less, it appears reasonable to infer that it is possible for an airport to develop facilities for low-cost carriers or airlines within that market segment at a much lower cost than the proposed T2 development at Dublin Airport.

Assessment of the DAA's proposed costings – summary of key findings

The terms of reference for the RR&V assessment of the DAA' proposed costings, as set out by the Commission, were to:

- Assess the reasonableness of the cost benchmarks prepared for the DAA by Turner & Townsend;
- Advise as to the reasonableness of the non-construction costs of T2 that BCS had not validated;
- Benchmark the principal non-T2 costs in the DAA CIP in line with similar work by RR&V for the Commission for the 2005 Determination; and

The Commission has requested that RR&V only provide an assessment of the costs of those projects planned to take place up to the end of 2009, the period of the current price control. The DAA has provided the Commission with high-level estimates for a number of projects starting after 2009. However, the Commission considers that a detailed review of post-2009 investment projects is outside the scope of this Interim Review, and has therefore decided not to assess these cost projections at the current time. Furthermore, at this point in time, the Commission does not make any

[65] Annex 5, Review of Dedicated Low-Cost Airport Passenger Facilities, Jacobs Consultancy, 11 May 2007

commitments on how proposed investments post-2009 might affect the price cap in the future. For similar reasons, the Commission has also not revisited the issue of how to value land for the purposes of making a regulatory Determination.

RR&V undertook this work throughout March and April 2007. With a view *inter alia* to timely completion of the Interim Review, and also mindful of the timetable in the Aviation Action Plan, the Commission engaged with RR&V continuously throughout its work, allowing the Commission to update its assessment of these issues over these months. The approach adopted by RR&V for this exercise is set out in a number of annexes to this report, which present redacted versions of each of the RR&V reports. In summary, the RR&V approach consisted of putting a number of questions to the DAA on these matters, and analysing the responses received. RR&V also engaged in a number of discussions with both Aer Lingus and Ryanair on these and other related matters, such as traffic forecasts and airline schedules – the latter being more relevant to the RR&V work-stream that considered T2 capacity issues.

The conclusion that the Commission draws from the RR&V studies is that the proposed costs are generally reasonable for what the DAA proposes to build. Table 1 below shows the CIP2006 costs under eight major project groupings, along with the amounts that the Commission thinks would be reasonable if the projects, as specified in CIP2006, were to be included in the RAB[66].

[66] For ease of presentation the Commission has grouped each of the individual projects in the CIP under eight major project headings: *T2 Main Projects, T2 Associated Projects, Pier D, T1X, Other Capacity Projects, Runway Project Fees, Airfield Projects and General Projects.* The type of works included under each of these sections is described below, and in more detail in Annex 11.

	CIP2006 Estimate (€ million, 2006)	Commission assessment (€ million, 2006)	Difference (%)	Difference (€, millions)
T2 Main Projects	607	582	-4.10%	25
T2 Associated Projects	150	141	-6.10%	9
Pier D Project	120	112	-6.40%	8
T1X Project	55	52	-5.50%	3
Other Capacity Projects	94	94	0.00%	0
Runway project fees	7	7	0.00%	0
Airfield projects	103	86	-16.10%	17
General projects	43	43	0.00%	0
Total	1,178	1,117	-5.20%	61

Table 1: CIP2006 costs for eight major project groupings[67]

Source: Commission analysis based on RR&V reports. Notes: The Commission has not reviewed the costs of projects commencing after the end of the current price control period, i.e. from January 1st 2010.

If all of the projects in the CIP2006 were to be carried out in accordance with the specifications in the plan, then the Commission is proposing to reduce the amount that the DAA could recover from customers over the lifetime of these assets from €1,178 million to €1,117 million. The bulk of the difference of €61 million is in the T2 project (main projects and associated projects, €25 million), the Pier D project (€8 million), T1X project (€3 million) and Airfield Projects (€17 million).

In order to illustrate the potential impact of the revised CIP on airport charges, the Commission has estimated the increase in passenger charges that would come about, *were* the higher investment costs of the CIP *all* to be allowed by the Commission, and for cost recovery to begin within the current price control, i.e. 2006 – 2009. The Commission estimates that the average charge of €6.68 (2006 price

[67] Values in Table 1 are subject to rounding.

terms) would increase to €7.50, an increase of €0.82 per passenger[68]. The proposed changes in allowed costs from €1,178 million to €1,117 million, given the project specifications in the CIP and as outlined in Table 1, would reduced this price increase from €0.82 to €0.69, a change of €0.13.

In the following sections, we outline the motivation for, and scale of, each of the adjustments for the major project groupings shown in Table 1; each section also outlines the Commission's proposed approach to writing the investment costs into the RAB, and mechanism for recovery of costs over time. In advance of presenting the figures we first summarise the key findings from the RR&V assessment of T2 capacity.

Assessment of T2 capacity – summary of key findings

The terms of reference for the RR&V assessment of the DAA's proposed capacity for T2 were to assess how much of the costs of T2 relate to specific airlines' requirements. The focus of the analysis was on the appropriateness of a terminal designed for an annual passenger throughput of 11.4 million p.a, (as set out in the Gateway 2 Report), when measured against future traffic projections, as well as the robustness of the DAA's estimate of 4,200 busy hour passengers.

In the process of producing its review of T2 terminal capacity, Vector Management retained Aviation Economics ("AE") to advise on the robustness of busy hour traffic forecast for 2013 contained in CIP2006 relating to T2.

The DAA have proposed to build T2 to cater for a 2013 capacity of 11.4 mppa under a "high growth" scenario. Using data provided by the DAA, RR&V estimated annual T2 passengers for the period 2006-2016 under both a "centerline" and "high growth" forecast. Both projections indicated that the 11.4 million threshold will be reached well in advance of 2013 with the "high growth" forecast predicting 11.4 million passengers just before 2010 and 13.1 million in 2013 and the "centerline" forecast predicting 11.4 million passengers in 2010 and 12.1 million passenger in 2013.

[68] This calculation allows for the impact of passenger numbers being significantly higher than forecast at the time of the 2005 determination.

Year	Centerline Forecast (mppa)	High Growth Forecast (mppa)
2006	8.0	8.0
2007	8.7	9.0
2008	9.5	9.9
2009	10.2	10.8
2010	10.8	**11.7**
2011	**11.3**	12.3
2012	11.7	12.7
2013	**12.1**	**13.1**
2014	12.5	13.5
2015	12.8	13.9
2016	13.2	14.4

Table 2: RR&V traffic forecasts for T2

Source: RR&V Report No.4

RR&V's analysis of the data suggested that the DAA's "high growth" forecast of 11.4 million in 2013 was unreasonably low. With respect to annual capacity RR&V concluded that it would not have been unreasonable to base T2's design around an annual throughput of 13.8 million which will occur in 2016 under the DAA's centerline forecast and in 2014 under the DAA's high growth forecast.

The second aspect of the RR&V report on T2 capacity was an assessment of the DAA's decision to design T2 to cater for a 2013 busy hour capacity of 4,200 passengers. The Commission's consultants used a different methodology to the DAA as it was felt that the DAA's method tended to overestimate the busy hour.[69] In addition the RR&V and AE reports question the choice of day used by the DAA in calculating a busy hour.

Notwithstading the doubt that may surround the DAA's methodology for choosing the busy hour of 6.00 to 7.00 am, AE's analysis demonstrated that the DAA's estimate of 4,200 busy hour passengers was based on assumptions which are generally at the high end of expectations and which give significantly lower values for the busy hour throughput when altered to a rather small degree.

[69] The DAA's reference point for a busy hour is a "clock hour" in other words from the start of a clock hour to the end of a clock hour. The Commission's consultants determined that such a method tended to overestimate the busy hour and instead calculated a busy hour on a "quarter hour basis" from a quarter past the hour until a quarter past the next hour.

AE observed that the 2013 busy hour forecast was twice the relevant 2006 figure and was largely based on assumptions and flight scheduling of one airline, Aer Lingus. Rather small changes to assumption regarding Aer Lingus reduce the DAA's predicted busy hour by 25%.

Using a busy hour of 6.15 to 7.14 am, gives a lower concentration of early morning traffic within this hour than is the case in 2006. While it is reasonable for the DAA's proposed anchor tenant to want to schedule its flights to optimize the daily efficiency of its fleet, small adjustments to the departure time of a small number its early morning routes have a significant impact on the estimated busy hour.

AE's analysis on schedule reallocation concluded that by moving five of Aer Lingus' proposed 27 busy hour departures (all five of which are "leisure" or "non time sensitive" routes) to either just before 6.15am or after 7.14am reduced the busy hour estimate by 21.4% from 4,200 to 3,256.[70]

The DAA approach is also based on optimistic load factors and appears to be sensitive to small adjustments in predicted load factors. An adjustment to the DAA's estimated 2013 load factors from 93% to 90% for A321s and from 85% to 80% for A320s further reduces the busy hour number by an additional 6% from 3256 to 3062.

	Busy hour estimate (pph)	**Change in busy hour estimate**
DAA estimated busy hour	4,200	
Minor changes to departure time of 5 out of 27 Aer Lingus flights	3,256	- 21.4%
Minor adjustments to load factor	3,062	-6.0%

Table 3: Sensitivity of DAA estimate to minor changes in assumptions

Source:AE report contained as appendix to RR&V Report No.4.

The Commission agrees with the findings of RR&V and AE in relation to the selection bias in the choice of the "busy hour" and in the lack of clarity in the assumptions underlying the estimate. The Commission concludes that a T2 busy hour capacity of 3,062 would seem reasonable without disturbing Aer Lingus's operational performance compared with a capacity of 4,200. Therefore using the DAA's T2

[70] This also included an adjustment that AE made due to an error in the DAA's model which double counted the same busy hour Manchester departure.

processor rate for calculating an appropriate terminal size based on estimated departures in the busy hour, the Commission is of the view that an appropriate T2 size to meet the requirements of users would be 53,891 Sq/M rather than 74,555 Sq/M (see table 3 below).

	Busy hour estimate (pph)	**DAA T2 processor sq.m/busy hour departure**	**Approximate T2 terminal area (m^2)**
DAA estimate	4,200	17.6	74,555[2]
Commission estimate	3,062	17.6	53,891

Table 4: Commission estimates of T2 terminal sizing[71]

Source:Based on estimates presented in the RR&V Report No.4.

7.4. Conclusions from the analysis of the DAA's proposed investment costs

The conclusions the Commission draws from the RR&V analysis are as follows:

- Taking the project specifications in the CIP2006 as a given, the RR&V analysis of CIP costs indicates that the DAA's proposed costings are broadly in line with what might be expected from similar projects carried out elsewhere. After taking account of some exceptions to this general position, the Commission proposes to reduce the DAA's proposed costs by €61 million.

- On the traffic forecasts for T2, the DAA's passenger capacity design parameter for T2 in 2013 of 11.4 million may be an underestimate, given that it appears to be inconsistent with the DAA airport-wide traffic forecast for 2013.

- The RR&V projection for annual passenger numbers would indicate that T2 should expect to accommodate between 13 and 13.5 mppa by 2013, and in some scenarios as many as 14.4 million, albeit by 2016.

- In contrast to the traffic projection, other key design parameters presented by the DAA to justify the T2 project specifications, such as the 2006 busy hour (BHR) value (and the projections derived from it), load factors

[71] Values in Table 4are subject to rounding.

(passengers per ATM) and assumed schedule concentration in the busy hour, would all appear to be over-stated.

- An alternative and, in the Commission's view, more realistic set of assumptions for the latter key parameters, when applied to the larger traffic forecast, produces a busy hour traffic forecast for 2013 of around 3,000 passengers per hour, given annual passenger number of around 13 million. This figure is almost 30% lower than the corresponding figure of 4,200 passengers in the busy hour, as presented by the DAA to justify a T2 on the scale of 75,000m^2.

The Commission has concluded that it can best balance its statutory objective to protect the interests of airport passengers with its statutory objective to enable the DAA to remain financially viable while developing Dublin Airport, by adding an initial component (**Box 1**) of the allowed cost of T2 (€430 million out of €582 million) to the RAB from its date T2's opening, while allowing for the second component (**Box 2**) of €152 million of the allowed cost of T2, to be collected either at a later date from all passengers or sooner on a differential basis. This would reflect the Commission's belief that some of the demand risk in building such a terminal should be shared by the DAA. We discuss our approach to this is the following section which describes the Commission's proposed approach to the recovery of costs relating to the T2 project.

7.5. Proposed recovery of the costs of T2 Main Projects

For the purposes of this Review, the Commission must decide to what extent, if any, the costs associated with the proposed T2 should impact upon the maximum levels of airport charges within the current price control which runs to the end of 2009. However, given the scale and scope of the investment plans outlined in the CIP2006, and the potential implications for the financial viability of the DAA, the Commission is also conscious of providing a degree of regulatory commitment to the investment plan beyond the current price control.

The CIP2006 cost estimate for the 'T2 Main Projects' is approximately €607 million over the 2006 to 2009 period, with more than half of this (€337 million) accounted

for by T2 construction costs[72]. The combined costs of the T2 Main Projects account for just over half of the total cost of the CIP2006 of €1,178 million.

The Commission assessment of the T2 Main Project costs is that the overall costs be reduced from €607 million to €582 million. The proposed reduction is based on an assessment of the costs of the T2 projects in the CIP2006, as carried out by the Commission consultants RR&V.

The Commission has accepted the evidence presented in the RR&V reports. The reduction of €25 million in allowed costs for T2 – that is, for a T2 on the scale of that proposed in the CIP2006 – is based on the RR&V review of the non-construction costs of T2 (Report 2 by RR&V). The consultants observed that the overall level of project contingency budgeted for the T2 project is relatively high, at €99 million, or 20.8% of the construction cost of T2[73]. This is particularly the case considering that work on the project is so far along and is currently subject to planning.

RR&V also noted that without further detailed information on how the underlying risk register is constructed it is not possible to comment on the overall validity of the approach. The Commission notes however that there may be some over-estimation of contingency costs such that "some of the risks included in the overall risk register and overall project contingency should be deemed to be contained separately within the costs plan". [74]

As well as reviewing the non-construction costs of T2, RR&V also reviewed the DAA's benchmarking report. The benchmark analysis carried out by RR&V[75], which includes the DAA's projected contingency costs in the per unit cost calculations, indicates that the cost of the terminal 2 building is above the benchmark estimates for other similar projects reviewed by RR&V, whereas the opposite is true for Pier E. Table 5, which is based on the analysis in the RR&V report, illustrates.

Further costing evidence provided by Ryanair on the proposed costs for T2 also indicated that the DAA proposals, for the terminal building in particular, were

[72] Unless otherwise stated, all costs are at mid-2006 prices, as per the price basis used in the DAA CIP 2006 review.
[73] See page 11 of the Rogerson-Reddan report "Report 2 - Review Terminal 2 non-construction costs", May 2007.
[74] Ibid, page 12.
[75] Rogerson-Reddan report "Review of DAA Cost Benchmarks – Report 1", May 2007.

relatively high[76]. Ryanair's architects presented costings per square metre for a new T2 at Dublin airport of around €[…]/SqM. We note, however, that Ryanair's costs estimates for the Terminal Concourse part of the build, at around €[…]/SqM are much closer to the DAA's own cost estimates of €4,767/SqM. The major difference in the overall costing is attributed to a much lower cost per square metre on the Terminal Services Level side of the build, which Ryanair costs at €[…]/SqM.

	Cost € million*	DAA proposed cost (€/SqM)**	Benchmark (€/SqM)***	% difference
Terminal 2 terminal building (75,000m²)	310	4,767	4,018	19%
Pier E (23,000m²)	111	4,406	5,642	-22%[77]

Table 5: Cost benchmarks for T2 and related projects.

Source: Commission analysis based on RR&V reports. Notes: (*) The cost figures quoted here exclude contingency costs. For comparison purposes, RR&V have added the contingency costs back in for the unit cost comparisons. (**) The DAA proposed cost has been uprated by RR&V to include contingency costs. (***) The benchmark estimate shown in the table is the RR&V mean value benchmark based on similar projects reviewed by RR&V.

The DAA estimates of the total combined cost of T2 terminal buildings and Pier E is €421 million, consisting of €111 million for Pier E and €310 million for Terminal 2 terminal buildings[78].

The Commission notes, given the RR&V approach to estimating the DAA per unit costs, i.e. including the contingency allowance, the bulk of the difference implied by the benchmarks is already disallowed through the removal of €25 million from the overall capex costs.

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[76] Ryanair have requested that the full details of this submission remain confidential.

[77] This is the percentage difference between the DAA proposed cost per sq.m. and the relevant benchmark.

[78] Page 2, Davis Langdon PKS Cost Plan No. 1 on Terminal 2 & Pier E, Dublin Airport, 1 September 2006. In previous sections of this document the Commission has quoted construction costs for T2 of around €337 million. The total cost for T2 terminal buildings as quoted by Davis Langdon (€421), includes additional T2-related costs such as the project contingency, which, as noted above is between €74 million and €99 million according to the DAA costings.

The Commission assessment of T2 Main Project costs of €582 represents the costs that the Commission believes an efficient airport operator would incur were it to build a T2 on the scale of that proposed by the DAA in CIP2006. However, as the Commission has made clear thus far, there are genuine doubts as to the demand for a second terminal on such a scale from many of the airports customers. As such, the Commission assessment of €582 million is not necessarily the level of allowed costs that the DAA could recover at future price control reviews. The recovery of such costs will, as outlined below, depend on whether demand evolves in such a way as to justify the build of T2 to scale of that presented by the DAA.

The Commission recognises that the DAA, in full consultation with all airport customers, is best placed to design and assess the potential demand for any new investment at Dublin Airport. The Commission's role is to evaluate, given all the information available at the time, whether such a project meets the needs or requirements of users, i.e. whether there is sufficient demand for a given investment, such that those airport customers wishing to use it are willing to pay for it on a long-term basis. The Commission does not currently believe that such the DAA has presented robust evidence to indicate that demand in the future will evolve in such as way as to justify a T2 project of the scale outlined by the DAA in CIP2006. The evidence collected by RR&V (Report No.4) supports this conclusion. However, the Commission proposals allow the DAA sufficient flexibility to recover the costs of such an investment, either early on through some form of differential charging mechanism, or further down the line through an airport-wide charge, should demand materialise to such an extent that it is clear that *all* airport users benefit from the scale of a T2 as built to the DAA's current plans.

Before presenting the Commission position, for the record, the DAA position is summarised below.

The DAA position

In the CIP2006 review, the T2 Main Projects are grouped under the heading of "Terminal Complexes". The other major investments under this heading are Pier D (€113 million) and the Terminal 1 extension (T1X, €54.8 million), the treatment of which in this Interim Determination are discussed below.

The T2 investment project is described in the CIP2006 as a project that will

- Provide additional capacity to handle 4,200 pph in the busy hour; and

- Improve customer service by providing additional processing capacity in a light and airy facility.

The size of the proposed terminal, which the DAA states will be approximately 75,000m^2, is primarily driven by the requirement to handle 4,200 passengers in the busy hour of the day. This compares with a proposed size for T2 in the May 2005 CIP of 47,000m^2. The May 2005 CIP did not include projected costs for either Pier E (€111 million in CIP2006) or T2 project contingency costs (€74 million). The proposed area of the combined T2 and Pier E is 98,000m^2.

In terms of the mechanism for the recovery of the investment costs in the CIP2006, the DAA's stated position is that average passenger charges going forward should be changed to reflect the significantly increased scale and scope of the revised investment programme. Specifically, the DAA has stated that

> "an average passenger charge of at least €7.50 in real terms over the [2006 to 2009] period is required to enable [the] company to finance the Capital Investment Programme that is now required."[79]

The proposed increase in charges to €7.50 represents an increase of 18.3% on the average charge of €6.34 (real 2004 prices) that currently applies following the 2005 determination by the Commission. The DAA's justification for the increase in the average passenger charge is based on the following line of argument (CIP2006, page 51):

- The scale and scope of the current Capital Investment Programme has changed significantly from that submitted in May 2005, on which the current Determination is based. Furthermore, the timing of many elements of the [capital expenditure] capex programme – "which is largely outside of the DAA's control" - have also been advanced;

- These changes in the CIP are "primarily due to changes required to facilitate strategic choices by key customer airlines"; and

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[79] Page 51, DAA (2006) "Capital Investment Programme 2006-2009", available from the Commission's website www.aviationreg.ie.

- The required airport infrastructure "cannot be delivered unless the airport authority is allowed to recover the costs which are incurred" and the current "average passenger charge of €6.34 […] is insufficient to finance the capital investment requirements of Dublin Airport".

The Commission position

In terms of the regulatory treatment of the T2 Main Projects, the two key issues for both this Interim Review and subsequent price control reviews are:

- for a given project specification, what is the appropriate *scale* of costs that the DAA is allowed to recover; and
- what is the appropriate *mechanism* for the recovery of these costs?

In coming to a view on both of these issues the Commission has been guided by its statutory objectives, including the principles of economic efficiency.

As per the consultation document published by the Commission in February 2007 (CP1/2007), the Commission's assessment on the funding of investment in airport infrastructure considers three issues:

- the start date for charges to fund allowed investment;
- the profile of such charges over time; and
- the timeframe for writing allowed investments into the RAB

We discuss the Commission position on each of these issues in turn. The Commission has also received a number of responses to the consultation on these issues, which have been taken account of in this determination

Start date for funding investment in T2 Main Projects

As stated in CP1/2007, the concept of 'user pays' is one of the Commission's guiding principles. The principle suggests that airport users should only commence funding investments in T2 after the facility opens. Such an approach also places the risks, and associated costs, of managing the T2 project build with the party best able to do so, namely the DAA.

The Commission envisages charges for recovery of allowed costs of T2 to begin from 2010 onwards; that is, the commencement of the next price control period. If there are delays to the commencement of operations at T2 (it is currently scheduled to open in late 2009), then the Commission will discuss the implications for charges during the consultation for the next price control[80]. The Commission is currently minded to link any further allowances for T2 costs from that date forward to the opening of the facility, i.e. to introduce an output-based trigger.

Subject to investment costs being incurred efficiently, the Commission agrees with the DAA statement in the CIP2006 that "[a]irport infrastructure cannot be delivered unless the airport authority is allowed to recover the costs which are incurred" (CIP2006, page 51). The Commission is also conscious that deferring recovery of investment costs of the scale and scope of those allowed for T2 could have implications for the financial viability of the DAA. The Commission is confident that the proposed start date of commencement of operations at T2 for recovery of investment costs associated with T2 Main Projects allows the DAA to continue to finance its functions, while at the same time raising funds for investing in new airport infrastructure.

The profile of charges for recovery of investment costs for T2 Main Projects

The CP1/2007 Consultation Paper presented three options for time profile of recovery of allowed investment in airport infrastructure:

- Straight-line depreciation basis – whereby the recovery of costs is front-loaded such that users in earlier years pay more than users in later years;
- Annuity depreciation basis – whereby the recovery of costs is back-loaded, such that users in later years pay more; and
- Unit cost-basis – whereby allowed investment costs are recovered equally across all forecast airport users.

[80] Assuming that the new T2 will be completed within the current time-table and commence operations in September 2009, then, according to the Commission's current proposals, this potentially leaves a period of between two and three months where T2 is in operation, but the DAA has not begun to recover its costs. In such circumstances the Commission would propose to adjust the 2010 – 2014 price cap to recompense the DAA for any such costs incurred in the time delay between operations beginning and the beginning of the recovery of investment costs.

For the purposes of this Interim Review and beyond, the Commission proposes that allowed investment costs be recovered on a unit cost basis from all airport users, although the charge will be calculated based on incremental airport passengers above 18.5 million. This represents, in the Commission's opinion, a reasonable and economically efficient approach to profiling the charges over time.

The difficulty with any proposed time profiling for recovery of investment costs is that it relies heavily on forecasts of passenger numbers for each of the years in the price control period. The impact of passenger numbers deviating from forecasts is apparent for the current price cap, where out-turns are currently running in excess of 10% above forecasts used to calculate the price cap. The result of this is that the DAA's total passenger and commercial revenues are significantly higher than those initially envisaged at the beginning of the current price control period. As has been the Commission's practice in the past, the policy is to allow the DAA to bear both the upside (in the current price cap) and the downside of the risks associated with deviations in passenger numbers from the underlying forecasts within each price control period.

Writing T2 Main Projects capital expenditure into the RAB

As with the building of any large infrastructure project, there will always be considerable uncertainty over whether demand for an asset, once it is built, will be in-line with the ex-ante expectations for the project. In a competitive market, where such risks would be borne by investors, the proponent of the investment project - in this case the DAA - would endeavour to ensure that project specifications are such that the potential costs associated with any demand risks are minimised. In this way, the potential for asset stranding and under-recovery of costs are also minimised.

The Commission believes that the DAA, in consultation with all airport users, is best placed to be able to project likely demand patterns going forward. However, in the case of CIP2006 it is not apparent to the Commission that the DAA has demonstrated that there is sufficient demand from the generality of users for a 75,000m^2 terminal, the size proposed in CIP2006. The evidence collected by the Commission's consultants (RR&V) indicates that the DAA's proposals for T2 to cater for 4,200pph in the busy hour results in a very large facility, given an envisaged annual throughput of 11.5 mppa.

Therefore, the Commission does not believe that the DAA should recover automatically all of the costs associated with the proposed T2, due to its very large size, which it is not clear meets the needs or requirements of users. Instead, the costs of building T2 will be recovered in two parts:

- **Box 1:** The Commission proposes to allow the investment costs associated with building T2 plus Pier E, which combined with T1 will provide an airport capacity of up to 30 million passengers per annum (mppa), to be incorporated into the RAB from commencement of operations at T2.

  This 30 million pax threshold is derived from the evidence presented in the RR&V report No.4, summarised in Section 7.4 above. Specifically, for 3,000 passengers in T2 in the busy hour in 2013, this corresponds to T2 capacity of 13 mppa, on the basis of the RR&V methodology. Taking the comfortable capacity of the current T1 at 18.5 million, this implies total airport capacity in 2013 of 31.5 million. However, the Commission considers that in order to achieve a balance between protecting users from potential over-payment and respecting the statutory obligation to enable the financial viability of the DAA, a lower threshold is potentially warranted. Hence the Commission proposes a threshold for Box 1 of 30 mppa.

  Given the proposed method to profiling depreciation, i.e. the unitised cost approach described above, this implies that a value of €430 million for T2 will enter the RAB on commencement of operations of at T2. The costs of this investment will then be recovered from customers through a uniform airport-wide charge on all passengers. The Commission notes that were it to adopt an approach that sought to scale back the allowed costs for T2 in line with the ratio of the RR&V estimated busy hour passengers (3,000) to the DAA forecast busy hours (4,200) in 2013, then this would produce an almost identical result[81] in terms of the Box 1 increment to be added to the RAB after T2 opens.

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[81] The ratio of 3,000/4,200 is equal to 0.72, multiplying this by the efficient costs of investing in T2 on a scale of that proposed in the CIP gives an alternative estimate for box 1 of around €420 million. The Commission favours the fully unitised approach described in the text as it provides for a smoother revenue stream for the DAA. The Commission further notes the conclusion in the RR&V report no.4, that reliance on AE's revised Aer Lingus 2013 schedule would also suggest a reasonable capacity for T2 similar to Vector Management's.

- **Box 2:** The Commission proposes that the DAA assumes the demand risk for the remaining €152 million of the construction costs of T2. It currently proposes that this sum will only be written into the RAB once annual passenger numbers reach 30 mppa. At that point, the incremental investment costs could be recovered on an airport-wide basis through a stable charging profile as given by the unitised cost approach.

The Commission acknowledges that the proposed two-box approach represents a significant departure from previous cost-recovery mechanisms used in the past[82]. However, given the unusual situation that has prompted this interim review – a more than doubling of costs in the airport investment plan, combined with lack of robust evidence on the demand for some of the major investments, such as a very large T2 – the Commission views this as a reasonable approach at the current time.

The Commission acknowledges that there remains some uncertainty around how the two-box approach will work in practice, and in particular, the potential sensitivity of the results to assumptions around some of the key parameters. Section 7 which discusses the implications of the Commissions proposals for airport charges, presents the results from the modelling which illustrate the profile for prices beyond 2009 that would allow the DAA to recover the costs associated with T2 box 1. Section 7 also presents the results from the Commission's sensitivity analysis which illustrates how charges, revenues and key financial ratios change according to changes in some of the key assumptions underlying the two-box approach.

However, given that the recovery of costs relating to T2 is not proposed to begin until the beginning of the next price control, the Commission is currently minded to use the consultation on the 2010 – 2014 price control to agree a final structure for the two-box approach with the DAA and other stakeholders. The Commission proposes to run a number of workshops with the DAA and other airport users at a suitable time, possibly over the remainder of 2007, to present the financial modelling, as well as to agree on a final structure for the two-box approach.

The Commission will share full details of the financial modelling underlying the two-box approach and the resulting price profiles with the DAA. The Commission will also

82 It is important to point out that the Commission is *not* proposing to make any changes to existing mechanisms for the recovery of capex that is already in the RAB. This is particularly important, given that the RAB *already* contains some allowance for T2 costs, as set out in the 2005 determination.

share a version of the regulatory financial model with other interested parties, subject to the removal of commercially sensitive DAA data in the model.

Finally, the Commission wishes to point out that it is willing to consider other pricing structures that would allow the DAA to recover the €152 million in Box 2, provided that the generality of current and prospective users are protected from the risks that there is no demand for a facility large enough to handle 4,200 passengers in the busy hour. For example, a proposal to charge T2 users a peak-hour charge may have merit, since it would recover the incremental costs associated with building the larger facility from the user(s) that value having such a large T2 now. Aer Lingus' support for a large facility suggests that it values having a busy-hour capacity in T2 of 4,200 passengers.

The Commission's proposal ties in with the conclusions from the cost-benefit analysis (CBA) the carried out by CEPA on behalf of the Commission, which looked at the timing of costs and benefits for T2 (and runway).[83] Some respondents to CP1/2007 queried aspects of that model:

- the **DAA** questioned whether the value of time should be higher;
- **Ryanair** queried whether all customers' value increased quality/lower congestion; and
- **The Portmarnock Community Association (UPROAR)** thought that land values had not been treated appropriately.

As the parameters of the CBA seem robust to a reasonable range of uncertainty, it can be concluded that:

- the benefits from building a second terminal will be greater in later years, because more passengers will be using the airport in those years; and
- The case for building a second terminal immediately is stronger, if the cost of the facility is lower.

[83] CEPA (2007) "Cost-benefit Analysis of Terminal 2 and Runway 2 at Dublin Airport", available from the Commission's website

The Commission's proposed approach to depreciating the costs of T2 on a unit-cost basis is consistent with an alignment of the costs and benefits. The two-box approach addresses the concern some parties have expressed that, notwithstanding the Aviation Action Plan, the proposed facility should not be built now because the costs exceed the benefits for a few more years.

If the DAA can reach agreement with users that benefit from access to a large T2, while protecting other airport users for whom the proposed facility seems unnecessarily large, the Commission would consider alternative pricing structures that allow the DAA to start recovering at an earlier date the costs currently envisaged for when airport wide demand exceeds 30 million passengers per annum.

7.6. Proposed recovery of the costs of T2 Associated Projects

The total cost associated with the various 'T2 Associated Projects' as outlined in the CIP2006 is €150 million. This covers the following project tasks or projects: the temporary forward lounge, utilities reconfiguring, Customs and Border Protection (CBP), landside roads reconfiguring, short-term car parking and programme management fees.

In terms of the quantum of these costs that will be written into the RAB on completion of these projects, the Commission is proposing to allow €141 million for the T2 Associated Projects. This represents a reduction of €9.2 million, or 6.1%, on the proposed capex figures in the CIP2006.

The proposed changes are based on evidence collected by RR&V, in this case "Report No.3 – Review of DAA Capital Investment Programme (CIP-04)", as part of its analysis of the costs in the CIP2006. The total reduction of €9.2m is accounted for as follows:

- A reduction of €9.2 million from the project designed to provide a dedicated facility within the airport to enable pre-clearance of US-bound passengers for US Customs, Immigration and Department of Agriculture. The proposed change brings the total cost for this project (€21 million) more in-line with the DAA's own cost benchmarks as presented in the T2 cost plan.

The Commission's proposed treatment of the allowed investment costs of T2 Associated Projects (€141 million) is very similar to the proposed treatment of T2 Main Project costs as outlined above, specifically:

- The allowed investment costs of T2 Associated projects will only be recovered from the period from which T2 commences operations;
- The costs will be recovered on a unitised costs basis from all airport passengers;
- However, in contrast to the proposed treatment for T2 Main Projects, the investment costs for T2 Associated Projects will *all* be written into the RAB immediately from the commencement of operations at T2.

The final bullet is the only difference from the Commission's proposed treatment of T2 Main Project Costs. The reason for the differential treatment is that the Commission is broadly satisfied that the scale and scope of these proposed investments would be approximately unchanged regardless of the size of the proposed T2 build. As such, there is no reason not to write such investments into the RAB all in one go.

7.7. Proposed Recovery of non-T2 related Costs

Treatment of T1X Project

The CIP2006 outlines costs of €55 million for the Terminal 1 Extension ("T1X") project (CIP7.002). The DAA has not presented evidence that users want to pay for the T1X project, presumably because the business case for the project does not require airport users having to pay for the proposed new facilities. One user, Ryanair, has stated that it has no willingness to pay for the project.

The Commission does not have a role in deciding whether the DAA proceeds with any particular project, but it has a mandate to protect the reasonable interests of users, for example from having to pay higher charges to fund projects for which they have not indicated any need. Should the DAA decide to proceed with the project, there are three ways that the Commission might treat the T1X project such that charges remain unchanged.

- Include the additional costs in the RAB when T1X opens, but with a treatment of forecast commercial revenues after that date sufficient to offset the costs, such that there is no impact on the airport charges that the DAA needs to collect to recover its costs.

- Exclude the additional costs from the RAB during this price control period, and include them after the 2009 review (along with a treatment of commercial revenues similar to that outlined in option 1).

- Ring-fence the costs and revenues attributable to T1X, and exclude them from the single till.

The Commission is reluctant to deviate from a single-till approach in its treatment of the T1X project. The problems with assigning costs and particularly revenues between the T1X till and the main till would impose a considerable regulatory burden. Moreover, it would deny users the chance of lower charges in the long run, should the T1X project be positive in net present value terms, as the DAA projects.

This leaves the first two options. Both seek to ensure that if the project proceeds, its effect on charges is as users were led to believe (zero), but in seeking to realise this regulatory goal there is some danger of creating regulatory uncertainty about the value of assets.

One approach the Commission has considered is to rely on the T1X gateway reports, which have a financial analysis of the incremental commercial revenues that the project generates. These could be added to the base forecast of commercial revenues for the period 2010-2014 (calculated in the absence of T1X). The commercial revenue forecast that the DAA has provided to the Commission does not currently have a step change in commercial revenues from the date when the T1X project has been completed.

An alternative approach, and the one that the Commission favours, is to only allow part of the T1X into the RAB at any date, so as to ensure that the project is charge neutral. The Commission would look for evidence that there has been a step change in commercial revenues after T1X has opened, and to the extent that such evidence does not exist, it would reduce the proportion of T1X capital costs that can be

included in the RAB. This approach has some relationship with the "used and useful" test many US regulators apply.

The maximum amount that the Commission would be willing to include into the RAB upon completion of T1X, subject to a minimum level of *fully* off-setting commercial revenues, is €52 million, and not the full projected cost in the CIP2006 of €55 million – a difference of just over 5%. This proposed reduction is attributed to the fact that the DAA had included an additional €3 million in respect of future (post 2006) inflation, which was deemed to be in appropriate in the context of the CIP.

Treatment of Pier D Project

The CIP2006 presents costs for Pier D in 2006 prices of €119.7 million, €6.5 million of which is for the now complete and operational temporary forward lounge facility. The Commission does not feel that it is consistent with CPI-X incentive regulation to revisit the costs of the Pier D project during this interim review.

As indicated in previous documents and elsewhere in this report, for capital expenditure projects the Commission believes that the DAA should enjoy the benefits (bear the costs) of completing an investment project at a lower (higher) cost than was forecast by the Commission following consultation in making a Determination. These benefits should accrue to the DAA for a number of years, although ultimately consumers should share in the benefits (in much the same way that in a competitive market a firm that realises a cost-saving innovation can earn large profits until such time as its rivals are also able to copy the innovation and price according to a lower cost base). The appropriate time to consider updating the RAB to reflect the actual costs of Pier D is at the time of the next Determination, in 2009.

The Commission notes, however, that were it to accept the need to revise the costs of the Pier D project from the 2005 Determination, it would be reluctant to write into the RAB the full costs as outlined in the CIP2006. Based on the assessment carried out by RR&V, the Commission would propose to reduce the Pier D costs to €112 million, a difference of over €7.6 million to take account of the apparent duplication of some costs associated with the Central Immigration project in Pier D and a certain amount of the contingency costs.

Treatment of Other Capacity Projects

The main tasks that are classified by the Commission as 'Other Capacity Projects' are: *Other T1 Capacity Projects, Long-term car Parking,* and *'Other' Enhancements*. The latter covers a wide range of project tasks, however the bulk of the costs are attributed to airport-wide IT-related projects, and more general "Airport Development" works (CIP8.003). The DAA describes Airport Development works as:

> "[A]n ongoing programme of works designed to facilitate the significant passenger growth, alleviate congestion within operational areas and meet changing business needs of customer airlines/commercial tenants whilst improving the operational environment of Dublin Airport".[84]

The total cost for these Other Capacity Projects, as set out in the CIP2006, is €93.8 million. Following the RR&V review of the major CIP projects included under this heading, the Commission assessment of the total costs of these 'Other Capacity Projects' is to allow the DAA to recover all the costs associated with these projects.

Some of these projects, such as investments in long-term parking facilities, have already been completed or are near completion, and as such are already in the RAB. Assets associated with investing in Other Capacity Projects will be depreciated on a straight-line basis from the time at which they are written into the RAB. The Commission proposes to allow these costs to be written into the RAB over the 2006 to 2009 period.

Treatment of Runway Project

The CIP2006 outlines costs over the 2006 to 2009 period relating to the Runway Project of €7.4 million which covers "Parallel Runway Fees" (CIP6.018). The outputs of the project are described as "planning application … and supporting documentation" and "detailed design and tender evaluation". However, based on correspondence with RR&V, the DAA stated that this project included

> "…enabling works associated with the runway plus any works required as part of any potential planning award… [and] [t]hese works are not currently defined"[85].

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[84] CIP Project Sheet 8.003, Airport Development, DAA, October 2006

[85] RR&V report "Review of DAA Capital Expenditure Programme – Report 3", pages 13 and 14.

RR&V noted that of the €7.4 million allocated for the 2006 – 2009 period, only 11% of this had been tendered, although the DAA has yet to provide any evidence of these tender documents to RR&V. Notwithstanding the issue raised by RR&V as to whether the DAA would be in a position to actually carry out these projects before 2009, the Commission proposes to allow these costs up to the end of 2009. Should the DAA not invest in the listed Runway Projects, the capex will be removed from the RAB in 2009.

Treatment of Airfield Projects

The project groups classified by the Commission as 'Airfield projects' includes work on *Phase 5 & 6 Apron Stands* and *'Other' Airfield Works*. The total costs for these projects as set out in the CIP2006 is €103 million. The Commission assessment of the total costs of these 'Airfield projects' is €86 million – a reduction of €16.5 million, or 16.1% The bulk of this reduction relates to works on the Phase 5 & 6 apron stands.

Evidence collected by RR&V indicates that the tenders for general runway-, apron- and taxiway-related works are currently more competitive then expected. The particular example given by RR&V is project CIP6.030, "Taxiway P2 bypass for Phase 6 – MIKE 2". RR&V note that the net cost per square metre for this project based on tenders received, is currently over 30% lower than the equivalent mean rate based on the initial DAA benchmarking report.[86]

Therefore, while there does appear to be significantly greater value to be obtained at the tender stage for some of these projects, relative to the costs envisaged at the planning stage, the Commission does not believe that, going forward, such savings are likely to be of the scale of 30%, as in the CIP6.030 example above. The Commission therefore proposes to reduce the allowed capex for general airfield projects by 16.1%. Should the DAA manage to outperform the target it will retain the benefit of this out-performance to 2014.

Finally, the Commission proposes to allow these costs to be written into the RAB over the 2006 to 2009 period, and to depreciate the costs on a straight-line basis thereafter.

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[86] RR&V report "Review of DAA Capital Expenditure Programme – Report 3", pages 15.

Treatment of General Projects

The grouping 'General Projects' covers 40 individual projects in the CIP2006, ranging from relatively small projects with a value of less than €100,000, to a very small number of much larger projects with values in excess of €5 million. The total costs for these projects, as set out in the CIP2006 in terms of repairs, safety and compliance and cargo capacity projects is €42.6 million

Only two of these projects have been reviewed in detail by the Commission's consultants RR&V, 'Retail refurbishments' (CIP5.013) and 'Airside operations' (CIP8.005). RR&V compared the projected costs with the planned works, as well as comparing the costs from similar projects in CIP2005. The result of this analysis led RR&V to conclude that "When adjusted for inflation, the variances between the 2005 CIP and the current CIP are not significant in the context of the nature and extent of work involved." (RR&V Report 3).

The Commission is proposing to allow the total capex for these general projects. These costs are to be written into the RAB over the 2006 to 2009 period. The Commission intends to depreciate the costs on a straight-line basis thereafter.

8. IMPLICATIONS FOR AIRPORT CHARGES

8.1. The Current Determination

The DAA's revised CIP entails significantly more capital expenditure than was allowed for when the Commission made its Determination in September 2005. If the model that generated the current price cap was changed solely to include the new forecast capital expenditure levels, this would lead to a much higher maximum level of airport charge for the remainder of the current control period. This would be true whether using the DAA's estimates in its CIP, or the levels of capital expenditure that the Commission considers appropriate based on the work by RR&V. In both cases, the estimated prices for 2008 and 2009 would exceed the price path that the DAA has sought in its Statement of Case.

For the reasons outlined in the preceding sections, the Commission does not propose to adopt such a mechanistic change to the calculation of the price cap in 2005. For the purposes of recovering the costs associated with investing in T2 the Commission has concluded that the profile of charges should be one that more closely aligns with user benefit; for T1X the Commission has sought to ensure charge neutrality; and for Pier D the Commission has decided to treat the revised estimates as it would a cost overrun in circumstances where there was no interim review.

Second, traffic levels are substantially higher than forecast in 2005. Clearly, using the latest traffic forecast to estimate the appropriate price cap results in a lower price charge, all else equal. The Commission considers that the objectives of incentive regulation require that the DAA should assume the risks, both upside and downside, associated with deviations in traffic levels. Hence, it is reluctant to use revised traffic forecasts to reset an existing Determination. But the proposed new CIP is in part motivated by the higher traffic levels now projected at Dublin Airport. It would be logically inconsistent to accept the need for some increased capital expenditure to meet the needs of higher passenger volumes while assuming lower numbers of passengers for the purposes of setting the price cap.

Given that the increase in forecast passenger numbers largely neutralises the impact of the increase in forecast costs on the charges that the DAA requires, the Commission concludes that it should not amend the existing price cap. In exercising its discretion about the volume of traffic to assume for the remainder of the current Determination, the Commission is of the firm view that the DAA should not receive a

lower price cap because traffic has outperformed forecast levels. Conversely, the Commission does not consider that there is a strong enough case for raising the cap on airport charges in the existing Determination, given that had it been presented with CIP2006 at the time of the original Determination its treatment of the key components, particularly T2, would probably have been different because of its scale and consequent implications for charges.

8.2. Future Determinations

As indicated elsewhere in this report, the Commission is aware that potential investors purchasing DAA-issued debt will be influenced by expectations about future Determinations. The plans of the DAA and airport users will also be helped by an indication of how the Commission proposes to set future price caps.

The previous section outlined the intended approach to recovery of capital expenditure for the projects in CIP2006. In particular, the Commission intends to include €430 million in the RAB; a further €152 million will be added if annual passenger numbers exceed 30 million. Once an asset is included in the RAB, the DAA would continue to face demand risk within each control period, but at subsequent Determinations the cap would be revised to ensure that the remaining value of these assets can be recovered from airport charges assuming traffic volumes follow the revised forecast.

The chart below illustrates as a guide only how the price cap might evolve in the next Determination. Clearly such an outcome would be subject to consultation and evaluation at the appropriate time prior to making the next Determination.

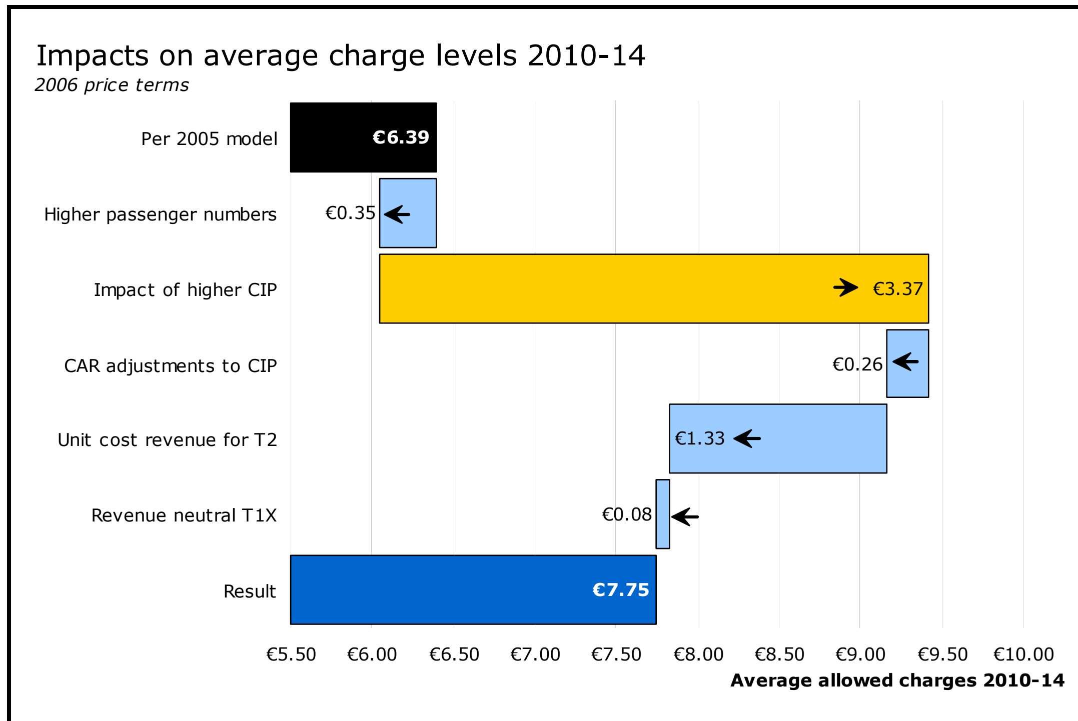

Figure 9: Illustration of average charges 2010 - 2014

Source: IMR

Corresponding to the data in Figure 9, the following table shows, on the basis of assumptions stated below, the average charge for the regulatory period 2010 to 2014 and its related FFO:debt ratio:

High level statistics	
CPIiy2006 - 115.7	*2010-14*
PV revenues	**€877.1m**
Average price in period	**€7.75**
Average FFO: debt	**17.6%**

The base scenario assumes that the outturn passenger numbers, operating and capital expenditure and commercial revenues are broadly in line with the Commission's centre line assumptions set out in this Draft Decision. The assumptions are:

- passenger numbers are in line with the DAA's latest forecast;
- capital expenditure is set according to the Commission's assessment of the 2006 CIP;

- operating expenditure and commercial revenue outturns remain in line with the growth and efficiency drivers modelled by the Commission for the 2005 determination, updated for the latest forecast for passenger numbers;
- airport charges profiled as proposed in this Draft Decision, notably using a unit cost methodology for the recovery of the costs of T2 (this results in a maintained amount of depreciation and cost of capital per unit of use for its expected useful life, as anticipated at the time of this Determination); and
- a continuation of CAR's main policy decisions and assessments, including allowances for a real, pre-tax cost of capital of 7.4% per annum.

Under this base scenario, the FFO:debt ratio is projected to remain significantly above the target level of 15% with a positive outlook towards the end of the next control period (2010-14) and beyond, as can be seen in Figure 10.

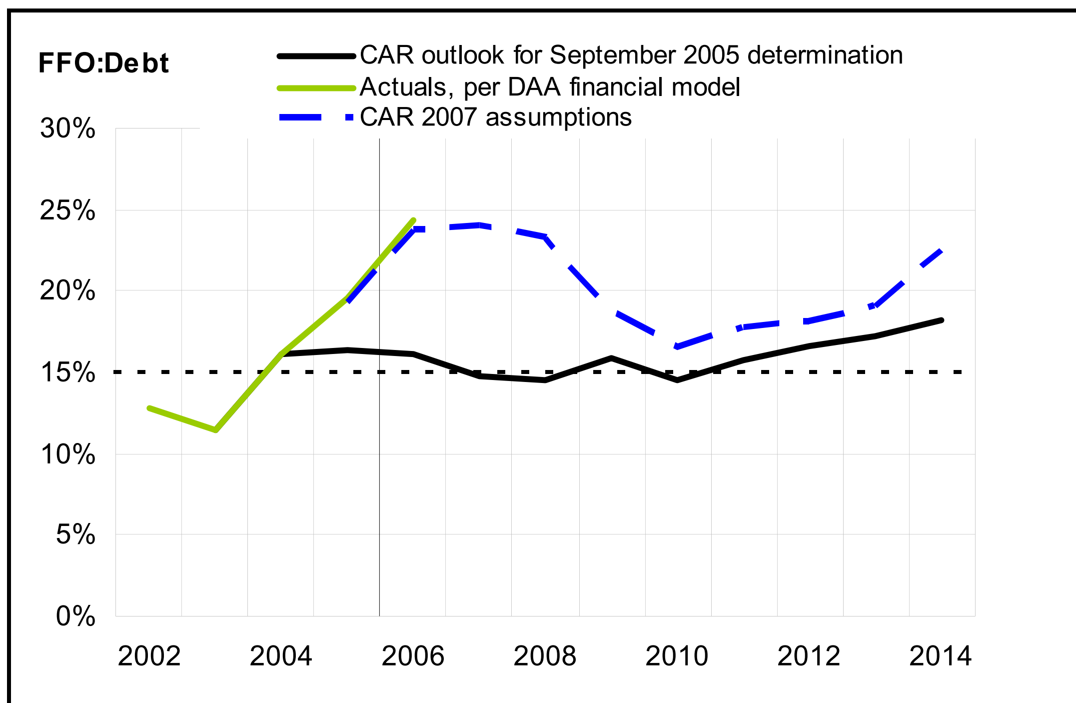

Figure 10: Illustration of trends in FFO:debt ratio to 2014

Source: IMR

This positive outlook arises because of the significant differential between the cost of capital allowance and the cost of debt and the expectation that investment activity will fall once T2 is completed. Also, the Commission's proposals imply a rising

revenue profile as the expanded terminal capacity is projected to be more fully used. The breakdown of the various components that impact on the average FFO:debt ratio over ther 2010 – 2014 period is shown in Figure 11

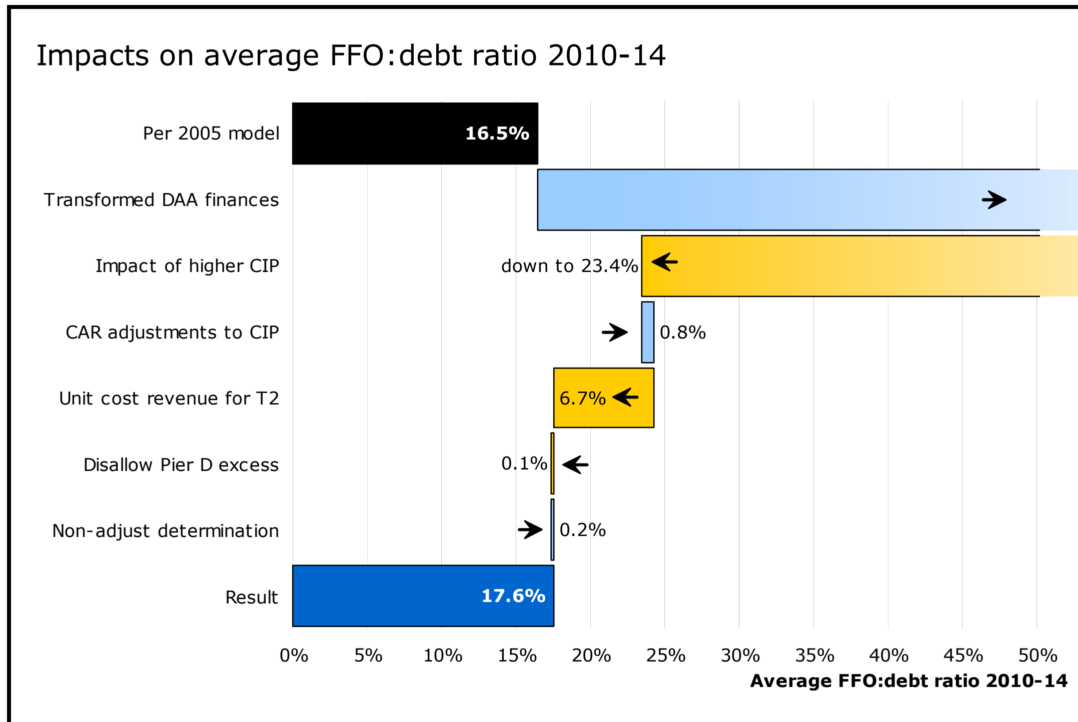

Figure 11: Breakdown of the impact of CAR proposals on average FFO:debt

Source: IMR

The Commission's proposals include an incentive mechanism to encourage the DAA to procure the necessary investment more cost effectively than the Commission currently assumes. The DAA would gain if it outperforms and suffer losses if it underperforms. There would, necessarily, be a detrimental impact on financial indicators if the DAA underperforms. However, as Figure 12 illustrates, the key FFO:debt ratio would not consistently fall below the Commission's expectations under the existing Review even if the full costs of the CIP were to be incurred.

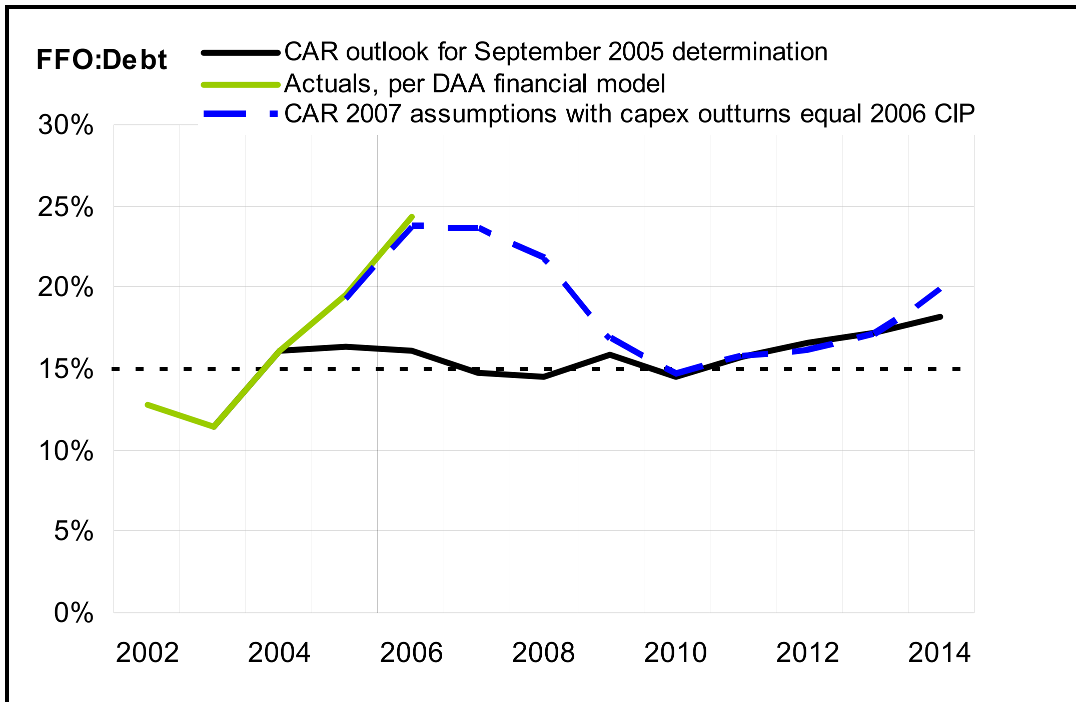

Figure 12: The DAA's FFO:debt ratio, 2002 - 2014

Source: IMR

The effect of adopting the DAA's centreline traffic forecast is illustrated in Figure 13. This graph shows the base case scenario with an FFO:debt ratio in excess of 15% and the likely pattern of airport charges.

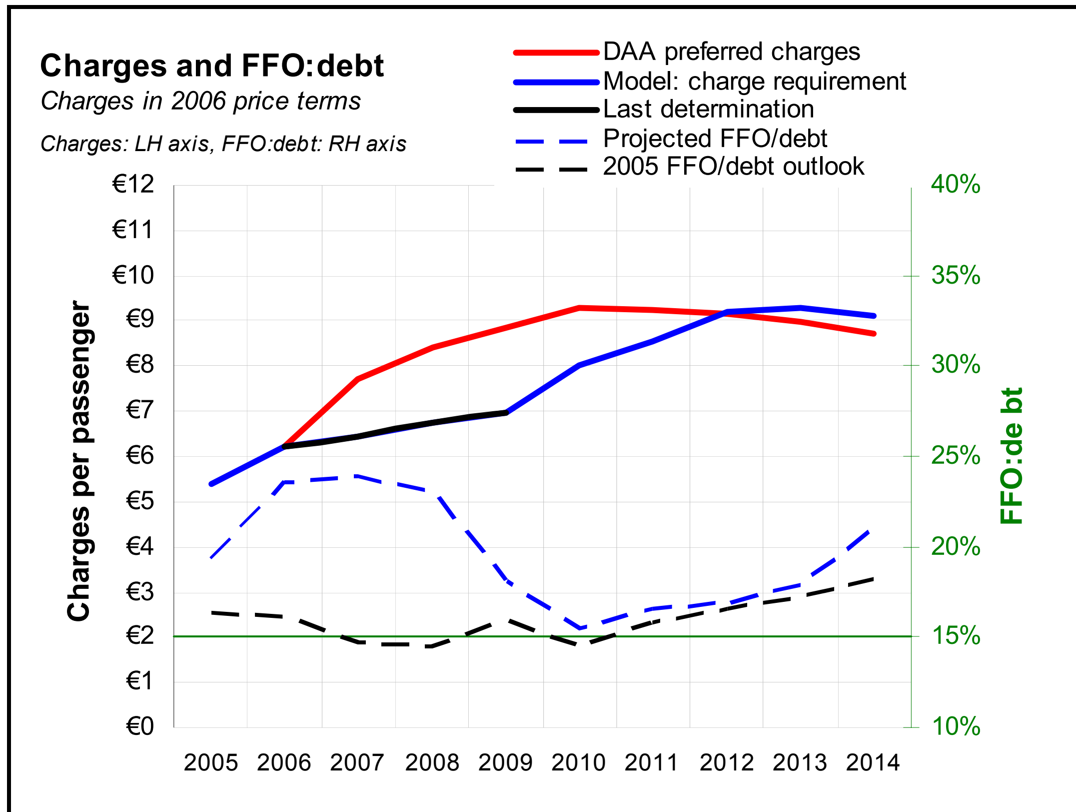

Figure 13: The relationship between passengers and the DAA's FFO:debt ratio, 2005 - 2014

Source: IMR

<u>*Sensitivity Analysis*</u>

The Commission has considered a number of sensitivities that might affect the price profiles. The two that seem to have the biggest material implication are deviations in the assumed levels of traffic or the allowed cost of capital.

The following charts show the affects of a 10% increase in the volume of traffic in 2010, followed by annual growth of 3.3% thereafter;

In this scenario, the finances have improved slightly from the base case due to an acceleration of revenue from the T2 'box 2' methodology, reflecting the achievement of a 30mppa threshold in 2013 instead of the anticipated year of 2016. The average airport charge of €6.93 through out this period could result in an FFO:debt ratio of 17.8%

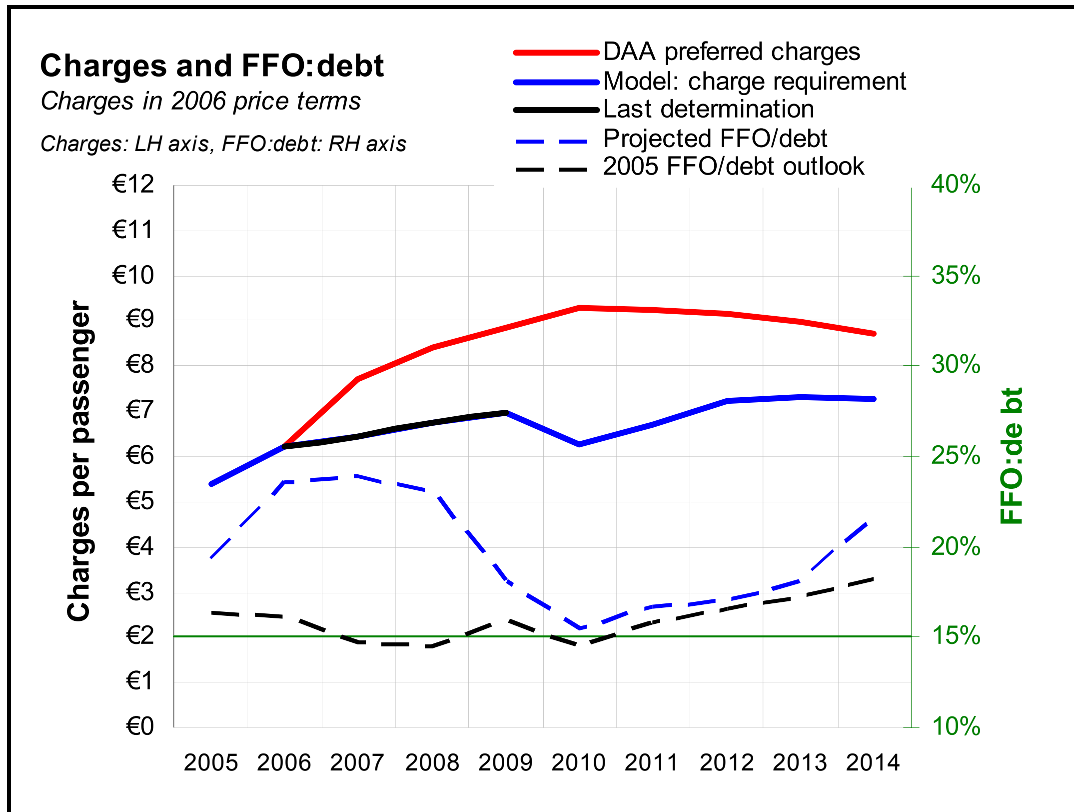

Figure 14: Sensitivity analysis – passenger numbers up 10% in 2010
Source: IMR

High level statistics	
CPIiy2006 - 115.7	*2010-14*
PV revenues	**€808.5m**
Average price in period	**€6.93**
Average FFO: debt	**17.8%**

We have also considered the sensitivity of the modelling results to a scenario where outturn passengers are 10% lower in 2010 than is currently anticipated (Figure 15). The present value (PV) of aeronautical charges revenues rises as passenger numbers fall because the reduction in retail income is greater than the reduction in opex, meaning that aeronautical charges have to increase to compensate, aggravating the increase in passenger charges caused by there being fewer passengers. None the less, the FFO:debt ratio averages at the investment grade level of 17.6% over the 2010 to 2014 period.

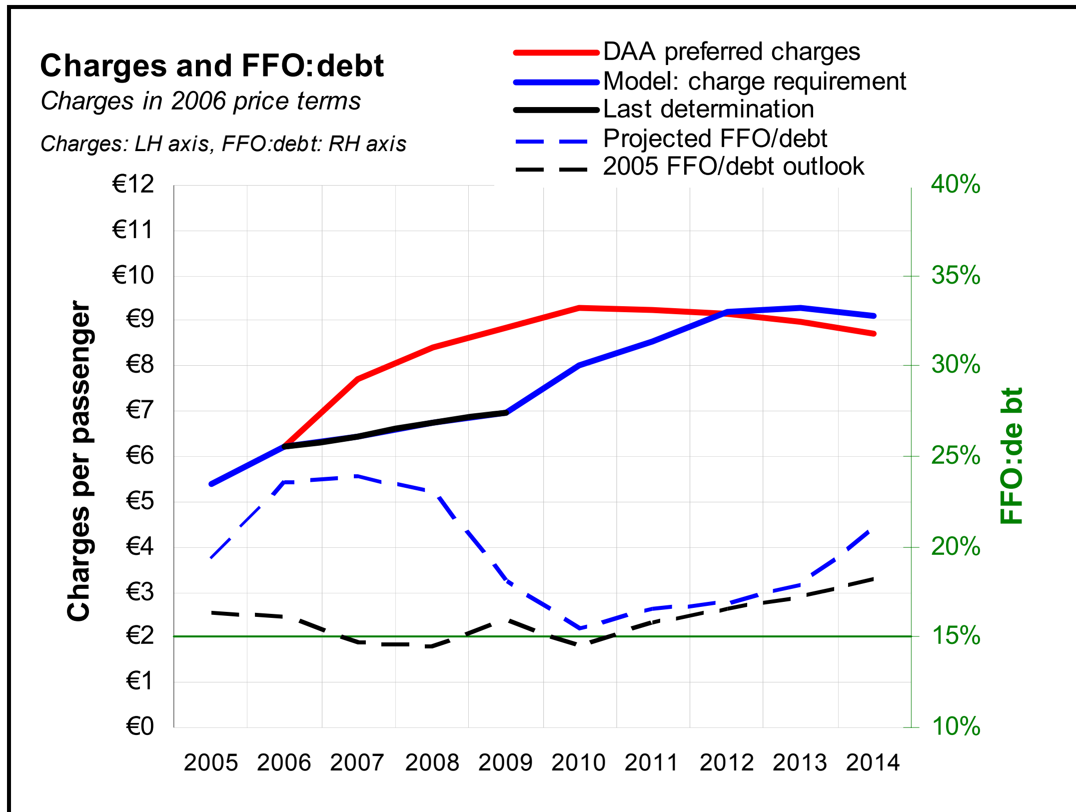

Figure 15: Sensitivity analysis – passenger numbers down 10% in 2010
Source: IMR

High level statistics	
CPIiy2006 - 115.7	*2010-14*
PV revenues	**€900.2m**
Average price in period	**€8.81**
Average FFO: debt	**17.6%**

We have also run a number of scenarios to illustrate the sensitivity of results to changes in the cost of capital. The following two graphs (Figure 16 and Figure 17) show the effects of the Commission concluding that the appropriate cost of capital is (a) 6.4% and (b) 8.4%, at the next Review.

A reduction in the Cost of Capital to 6.4% causes the FFO:debt ratio to decrease from the base case level from 17.6% to 15.1%. However, this ratio is still at investment grade, albeit marginally so.

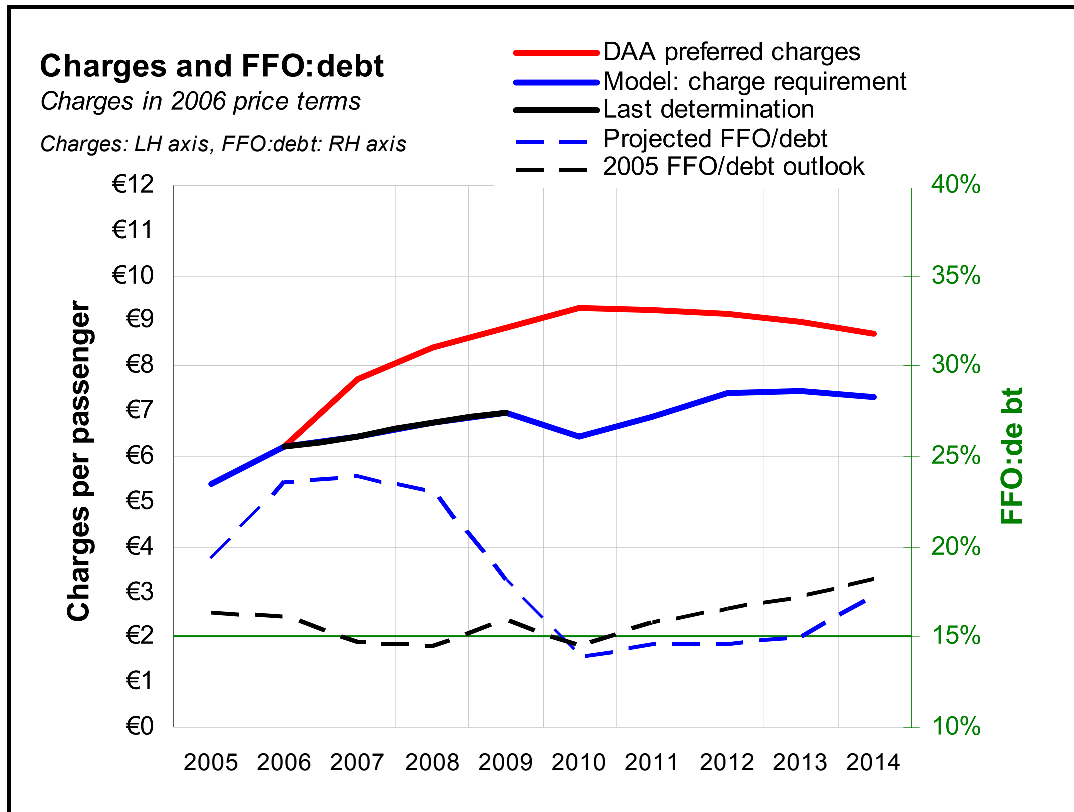

Figure 16: Sensitivity analysis – decrease in the Cost of Capital to 6.4%
Source: IMR

High level statistics	
CPIiy2006 - 115.7	*2010-14*
PV revenues	**€820.2m**
Average price in period	**€7.08**
Average FFO: debt	**15.1%**

As illustrated below, an increase in the cost of capital to 8.4% will improve the FFO:debt ratio from the base case scenario to 20.3%, given an average airport charge of €8.41 over the regulatory period.

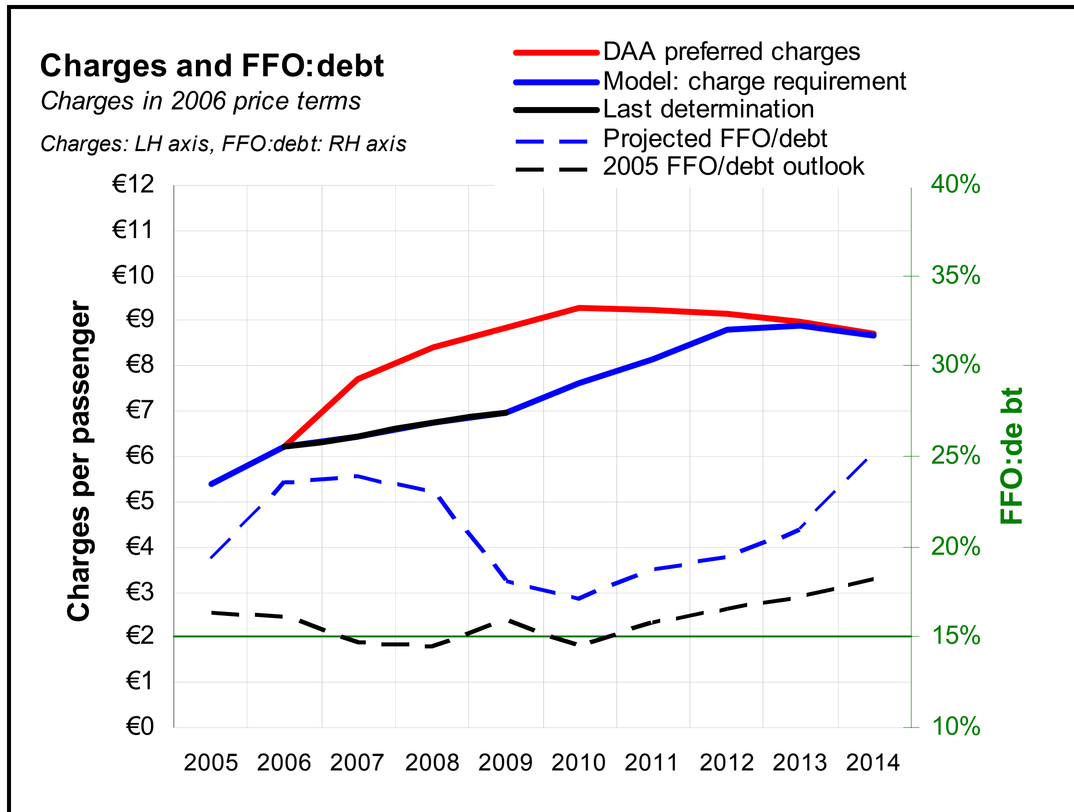

Figure 17: Sensitivity analysis – increase in the Cost of Capital to 8.4%
Source: IMR

High level statistics	
CPIiy2006 - 115.7	*2010-14*
PV revenues	**€930.7m**
Average price in period	**€8.41**
Average FFO: debt	**20.3%**

A fall in forecast traffic volumes or the allowed cost of capital could, if nothing else changed, result in a charging profile that would threaten the 15% FFO:debt ratio that the DAA has identified as necessary to realise an investment grade rating. In this event, the Commission would consider the possibility of changing the charging profile, effectively depreciating the assets in the RAB more quickly than currently intended, if it concludes this is necessary to secure the DAA's ability to operate the airport in a sustainable and financially viable manner.

9. COMPLIANCE WITH LEGAL REQUIREMENTS

9.1. 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 has previously set out its interpretation of its statutory objectives, originally in a 2004 consultation paper.[87] For reasons set out in section 3 of CP3/2005, economic efficiency continues to be the driving principle in the 2005 Determination, as it was for the first Determination in 2001 and the subsequent review in 2004. The Commission has not varied its approach in this Review.

The Commission remains of the view that all the statutory objectives must be read together and in light of each other. The Commission has adhered to its view that with reference to subsections (a) and (b), the objective to promote efficiency has been strengthened and that subsection (c) seeks to promote a viable airport.

The Commission concluded in September 2005 that the availability of adequate finance to DAA does not depend 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. This remains the Commission's view.

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[87] Commission (2004) "Commission for Aviation Regulation's Conclusions on the Impact of the Amendments to the Aviation Regulation Act, 2001, on the Regulation of Maximum Levels of Airport Charges in Ireland", Commission Paper CP9/2004.

Furthermore, the Commission published in February 2007 a consultancy report[88] by its advisors CEPA, on how financial commitments or guarantees from airlines can be expected significantly to reduce the risk faced by an airport when investing in new assets with uncertain demand.

As stated in the report of the 2005 determination, 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. At future determinations the Commission will respond to any deviations and take appropriate actions to enable the DAA to continue operating the airport in a sustainable and financially viable manner.

9.2. Ministerial Direction

Section 3 describes the two Ministerial Directions that are relevant for the purposes of this Interim Review.

The Commission is satisfied that it continues to comply with the 2005 Direction by virtue of its Draft Decision in this Interim Review. In particular, it is satisfied that its conclusions will enable the DAA to add additional capacity at Dublin Airport in an efficient and timely manner. It has considered the implications for sustainability and financial viability of the capital expenditure programme for the DAA and is satisfied that the DAA will be able to finance the programme. Moreover, the existing Determination makes sufficient allowance to meet the financing needs during the current Determination period, while the Commission's proposed approach to CIP2006 will allow the DAA to continue work on meeting the capacity needs of prospective users after 2010.

The Commission has complied with the 2007 Direction in the following manner.

It has made a Draft Decision that provides for infrastructure capacity increases in line with growth in air services at Dublin Airport, as sought by the NDP 2007-2013. The Commission's specific proposals are set out in this report.

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[88] "Airline Involvement", CEPA Ltd, available from Commission website.

The Commission has also comprehensively reconsidered the sustainability and financial viability implications of the capital expenditure programme, and in particular the impact of providing a second terminal. The Commission's analysis is contained in Sections 4 and 7 of this report. As a result, the Commission is fully satisfied that the DAA would be able to fund its proposed investment programme. Accordingly, the Commission considers that it has complied with the 2007 Direction.

Concerning the restructuring of the State Airports, which was also referred to in the Minister's 2007 Direction, the position remains as it was at the time of the 2005 Determination, and thus the proposals arising from the Interim Review also comply with the Minister's direction in regard to the restructuring of the State Airports.

9.3. Statutory Factors

The Commission has to have due regard to eight of the nine factors cited. It has complied with this requirement in the following way.

(a) *"the restructuring including the modified functions of Dublin Airport Authority."*

The amendments to the Act inserted by the State Airports Act 2004, required that no regard of this factor need be had in respect of the first Determination made after the 2004 Act, consequently it has not been addressed for the purposes of the review, and reference to restructuring in the 2007 Ministerial Direction is addressed elsewhere in this Paper.

(b) "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".

As the Commission stated in the determination of September 2005, an assessment of the DAA's capital expenditure programme and its efficiency is 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 Commission has carefully considered the DAA's CIP2006. In February 2007, the Commission published a high-level initial assessment of CIP2006 by its consultant IMR Solutions in order, *inter alia*, to facilitate user responses to CIP2006. The

Commission also commissioned from CEPA Ltd, and published in February 2007, a cost-benefit assessment of key projects of CIP2006. More recently, the Commission asked consultants RR&V to benchmark the proposed levels of capital expenditure and to assess T2 including with respect to how much of its costs might be related to meeting specific airlines' requirements. The resulting consultancy reports are published as annexes to this report . The Commission's analysis of CIP2006 and its pricing proposals are set out fully in Section 7 of this report.

(c) "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. 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. In this manner, the Commission has 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.

The Commission does not yet have to have due regard to any income arising from the restructuring, since this has not yet occurred.

The treatment of operating expenditure remains the same as in the 2005 Determination. At that time, Booz Allen Hamilton (BAH), on behalf of the Commission, carried out a bottom-up efficiency study of the DAA's operating costs and concluded that the targets that BAH deemed appropriate provided a reasonable basis for setting the Determination

(d) "Costs or liabilities for which Dublin Airport Authority is responsible."

The Commission carefully considered the costs and liabilities that the DAA is responsible for in its 2005 Determination. This Interim Review has focussed on the costs associated with the capital expenditure programme and policy towards the adding of capital expenditures to the regulatory asset base (RAB) in the future.

(e) "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 considering the CIP2006, the Commission has been mindful of the need for additional capacity at Dublin Airport. Alleviating the crowding at the airport will improve the level and quality of service that prospective users receive.

The Commission has accepted that T2 built to an IATA level of service C will in all likelihood meet the needs of users. However, based on current user input, the Commission does not expect that T1 will necessarily need additional expenditure to improve its service offering. Prospective T1 users have indicated that they would prefer a lower airport charge rather than improved facilities.

"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."

No notifications under this particular factor (other than the separate Ministerial Direction) were received by CAR for the purposes of the Review.

(g) "the cost competitiveness of airport services at Dublin Airport."

The 2005 Determination had due regard to the cost competitiveness of airport services at Dublin Airport. This topic has not been revisited during this Review.

(h) "imposing minimum restrictions on Dublin Airport Authority consistent with the functions of the Commission."

As stated in CP3/2005, pursuant to 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". The current determination is in the form of a revenue cap based on a per passenger yield. In this manner, the Commission affords a large measure of discretion to Dublin Airport Authority. Likewise, in considering, in Section 5 of this report, the different airport pricing options set out in CP1/2007, the Commission had regard to the need to minimise as far as possible the restrictions that it places on

Dublin Airport. It will continue with such an approach for so long as it is satisfied that this approach is sufficient to protect the interests of users and prospective users.

(i) "such national and international obligations as are relevant to the functions of the Commission and Dublin Airport Authority."

The Commission view on such obligations remains as stated in CP3/2005.

9.4. Responding to the Consultation Paper

The Commission requests interested parties submit responses to this consultation paper no later than **12 noon, 21 June 2007.** This date gives parties one month to respond.

In response to CP9/2006 the DAA and Aer Lingus considered that a one month consultation period would suffice and was appropriate given that the T2 project had to be completed in 2009. The DAA also thought it would suffice given the limited scope of the Interim Review. Ryanair argued for at least a two-month consultation period to allow the issues underlying the CIP to be solved.

The Commission has decided that one month allows parties sufficient time to comment on the proposals for the current price cap and for initial reaction to the general policy direction suggested going forward. More detailed discussions and policy refinements in time for the 2009 Determination will still be possible thereafter.

Submissions should be in electronic form either on floppy disk or by e-mail to **info@aviationreg.ie** and should be either in Microsoft Word (".doc") or portable document format ("PDF"). Submissions should be addressed to:

Mr. John Spicer
Commission for Aviation Regulation
Floor 3
Alexandra House
Earlsfort Terrace
Dublin 2.
Submissions may be made;

(ii) by fax to 00-353-1-6611269

(iii) by post to the Commission's offices at the above address.

The Commission requests that all written submissions be typed.

The Commission intends to place any submissions received on its website. Ordinarily, the Commission does not edit this material. As a result, the content of any submission is solely a matter for the submitting party, and in that regard, interested parties are referred to the declarations below dealing with legal notice and indemnity concerning use of the Commission's website.

9.5. Legal Notice and Indemnity

The Commission is subject to the provisions of the Freedom of Information legislation.

While the Commission at all times uses its best endeavours to ensure that all information on its website is up to date and accurate, the Commission accepts no responsibility and expressly excludes any warranty or representations in relation to the accuracy or completeness of the contents of its website.

Any party submitting information to the Commission in response to a document inviting submissions acknowledges that the Commission intends to publish that information on the website of the Commission, in reports of the Commission and elsewhere as required or appropriate. Parties submitting such information to the Commission consent to such publication. Any party submitting information to the Commission shall have sole responsibility for the contents of such information and shall indemnify the Commission in relation to any loss or damage of whatsoever nature and howsoever arising suffered by the Commission as a result of publication or dissemination of such information, either on its website, in its reports or elsewhere.

CONTENTS OF ANNEXES

The following is a list of the Annexes to CP5/2007 that are published separately.

- Annex 1: Extract from O' Sullivan Judgement, April 2003;
- Annex 2: Ministerial Direction, 18 August 2005;
- Annex 3: Ministerial Direction, 3 April 2007;
- Annex 4: DAA Airline Consultation;
- Annex 5: Review of Dedicated Low-Cost Airport Passenger Facilities, Jacobs Consultancy, 11 May 2007;
- Annex 6: Correspondence between the Commission and BoydCreedSweett;
- Annex 7: Review of DAA Cost Benchmarks, Report No. 1, Rogerson Reddan & Vector, 10 May 2007;
- Annex 8: Review of Terminal 2 Non Construction Costs, Report No. 2, Rogerson Reddan & Vector, 10 May 2007;
- Annex 9: Review of Capital Investment Programme (CIP), Report No. 3, Rogerson Reddan & Vector, 10 May 2007;
- Annex 10: Terminal Capacity, Report No. 4, Rogerson Reddan & Vector, 16 May 2007;
- Annex 11: Cost Allocation and CIP2006 Project Codes;