

**STATEMENT OF CASE**

**THE DECISION OF THE COMMISSION FOR AVIATION REGULATION ON  
8 DECEMBER 2006 TO HOLD AN INTERIM REVIEW OF THE DUBLIN AIRPORT  
CHARGES' DETERMINATION DATED 29 SEPTEMBER 2005**

**6 March 2007**

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## I. INTRODUCTION

### 1. CP1/2007

1.1 This paper responds to the Commission for Aviation Regulation's (the **CAR**) consultation paper CP1/2007 published on 9 February 2007 in the context of the procedure for an interim determination on the maximum level of airport charges at Dublin Airport<sup>1</sup> (the **Interim Determination**). The CAR has also requested and the DAA has provided significant factual information to the regulator and the DAA has also had numerous and extensive meetings with the CAR at which it presented various aspects of its 2006-2009 Capital Investment Programme<sup>2</sup> (the **2006 CIP**), specifically addressing the new terminal (**T2**) project at Dublin Airport. The DAA thought that it would be useful in this submission to tie all these factual pieces of evidence together and put them in context as well as respond to the detailed factual questions. This will allow a comprehensive response to the issues raised by the CAR in its consultation and put them in their proper context.

1.2 Thus this paper specifically addresses the issue of what constitutes a reasonable estimate of the cost to build the proposed new terminal at Dublin Airport, the reasons for allowing the DAA to start levying higher charges to enable it to fund its 2006 Capital Investment Programme in advance of the project being completed, the need to address capacity concerns at Dublin Airport, as well as other related issues. Appendix 5 contains a list cross-referencing CAR's questions to this paper.

1.3 The DAA is available for any clarification and would welcome the opportunity to meet with the CAR to discuss the matters set out in this submission. The DAA is keen to ensure that its submissions are as clear as possible and that the CAR has a good understanding of its positions and the factual circumstances prior to drafting the draft determination, as this is most likely to lead to an efficient and constructive process and the most optimal outcome. Such meetings and clarifications also assist the Statutory Objectives and procedure in that they help make the statutory consultation procedure as efficient as possible. If the draft determination to be published by the CAR is as accurate as possible so that the need to make fundamental changes between the draft and the final determination is minimised this makes the statutory consultation as useful as possible and gives all parties as good a picture of the likely final determination as possible. For these reasons, the DAA will contact the CAR to set up meetings at the CAR's earliest convenience.

#### (i) ***The Interim Determination Review***

1.4 Before commenting on the specific questions, it is useful to set out some context in relation to the Interim Determination review and the CAR's Statutory Objectives.

1.5 The DAA welcomes the CAR's decision to initiate a review of its Interim Determination. In CP9/2006, the CAR stated that the review "shall [...] consider the data and arguments before the Commission as of September 2005 *except that* the 2006 DAA

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<sup>1</sup> The interim determination refers to the determination published by the CAR on 29 September 2005, entitled CP3/2005 and available on the CAR's website, at [www.aviationreg.ie](http://www.aviationreg.ie)

<sup>2</sup> DAA/CIP04.

investment plan (and associated materials) will be substituted for the May 2005 DAA investment plan. In addition, it may be necessary, in order to maintain the internal consistency of the review assumptions, to adopt revised traffic forecasts for the review and to recognise the consequential impacts on operating costs and retail revenues. It may also be necessary 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” (at page 18).

1.6 The DAA has followed this approach and is therefore focussing on the 2006 CIP. The traffic forecasts and financial model which underpin the 2006 CIP have been used rather than those for 2005 as these are integral to the 2006 CIP.

1.7 In this context, the DAA considers that the questions of capex triggers, the time profile of charges, peak pricing and possible differential pricing are new elements, which raise important policy issues and thus do not fit within the CAR’s approach to its review of the Interim Determination as set out by the CAR in its statement from CP9/2006 quoted above. The DAA considers that the CAR’s statement in CP9/2006 implies that policy matters must be taken as set out in the 2005 Determination except where the Statutory Objectives need to be readdressed in the light of new circumstances. These new policy issues do not meet these conditions and so should not be taken into account in the Interim Determination.

1.8 The DAA will make a further detailed submission supplementing its response on “trigger pricing”, the profile of charges over time, peak load pricing and possible differential pricing between terminals (questions 2 to 7 and 11 to 15) by 10 March 2007.

***(ii) The context of the current procedure and background to the 2006 CIP***

1.9 This Interim Determination takes place within the context of significant growth and a serious shortage of capacity at Dublin Airport which needs to be addressed urgently and a new Government Aviation Action Plan. Both significantly change the context of the CAR’s review from previous determinations.

1.10 The need to address the current capacity deficit at Dublin Airport has been widely apparent for some time. Passengers have increased from circa 3 million per annum (*MPPA*) in 1982 to over 21 MPPA in 2006. Traffic growth projections in passenger numbers indicate that by 2025 Dublin Airport will handle some 39 MPPA.<sup>3</sup> Yet Dublin Airport has suffered from years of underinvestment. As shown at Section 4 of the 2006 CIP, Dublin Airport already currently exceeds its maximum capacity across a number of parameters today. For example, departing passengers are in some cases nearly double the terminal’s declared capacity in the peak morning flows, arriving passengers exceed declared capacity at several times of the day and customs, piers, check-in and baggage hall capacity is also currently exceeded, in many cases significantly. Not only is the passenger experience verging on the unpleasant at these times, it is also a barrier to competitive air services to and from Ireland. This has serious consequences for air transport to and from Ireland and the wider Irish economy.

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<sup>3</sup> See CIP 2006.

1.11 To address this urgent need for additional capacity, the Government announced the Aviation Action Plan on 18 May 2005.<sup>4</sup> This provided a clear plan to provide the new capacity necessary for the future and provided a clear break from the past “too little too late” investment programme. It mandated the provision of a new Pier for aircraft stands at Dublin Airport by 2007 and the building of T2 by 2009 by the DAA. This timetable is extremely tight and did not fit within the CAR regulatory timetable. By virtue of section 22(1)(a) of the State Airports Act 2004 (the **2004 Act**), amending section 32 of the Aviation Regulation Act, 2001 (the **2001 Act**), the CAR was required, as soon as practicable but not later than 12 months after the Dublin appointed day, to specify the maximum level of airport charges that could be levied by the DAA in respect of Dublin Airport. The Dublin appointed day was designated as 1 October 2004<sup>5</sup> and the CAR made its Interim Determination on 29 September 2005, within the statutory deadline of 30 September 2005. The DAA was not able to prepare a fully worked up capital investment programme before the CAR’s deadline to make its Interim Determination. It was able to deliver one on 19 September, ten days before the Interim Determination, but this was at best an interim document which, although building on Pascall & Watson’s Master Plan Study (June to September 2005) and the PM/SOM/TPS plan from 2003, was expressed to be no more than a high level overview. As a result, the CAR was unable to give this CIP more than cursory attention if it was to meet its statutory deadline.

1.12 In any event the September 2005 CIP was no more than a high level preliminary document and was no substitute for the fully worked up CIP that would form the basis of the DAA’s actual proposals to implement the Aviation Action Plan. This CIP was not able to be completed until October 2006 and represented the culmination of a long, sophisticated and intensive programme of consultation, planning and optioneering. This lengthy process was necessary to provide an investment plan that represented the best means of meeting forecast demand at Dublin Airport and addressing the need for extra capacity at the airport.

1.13 The Government was conscious that its Aviation Action Plan committed the DAA to a very significant CAPEX programme within a very short period of time. In particular, given that T2 had to be delivered by 2009, the DAA’s Capital Investment Programme would have to be finalised in 2006. To finalise the CIP in 2006, the DAA would need to undertake master planning work in 2005 to arrive at a clear capacity enhancement recommendation. This would take several months as it would need to involve a high degree of stakeholder consultation. The resulting recommendation would then need to be the subject of further detailed consultation and design work, as well as costing, before it could be turned into a detailed CIP. This meant that a fully detailed CIP would not be available until the second half of 2006 at the earliest. Planning permission would need to be sought at the same time. In order to actually deliver T2 by 2009, a team of experts would need to be appointed to review the master planning work and complete a fast track consultative and concept development process, whilst binding contracts needed to be entered into 10 months before publication of the CIP, such as those entered into for Design and Cost Management and overall Programme Management. The Government recognised that this would not allow the DAA and the CAR to proceed with an interim

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<sup>4</sup> See Speech delivered by Minister for Transport, Martin Cullen TD, on the adoption of the Government Aviation Action Plan, dated 18 May 2005.

<sup>5</sup> S.I. 531 of 2004; State Airports Act, 2004 (Dublin Appointed Day) Order 2004.



determination which would give the CAR the opportunity to consider the capex programme before it had to be committed to.

1.14 To ensure the appropriateness of the CIP given the very tight deadlines it imposed and the need to appoint a team of independent verifiers and to enter into binding contracts shortly thereafter, before the CAR could consider it as part of an interim determination, the Government put in place a “triple lock” to ensure maximum efficiency and cost effectiveness of the building of T2. The three safeguards set out by the Minister of Transport were as follows:

1.15 *Consultation:* T2 would be designed to meet the requirements of airlines serving Dublin Airport. To this end, the DAA would consult in detail with the relevant airline operators;

1.16 *Verification:* the Government would appoint aviation experts to independently verify the final specifications and costing of T2; and

1.17 *Regulation:* in setting airport charges, the CAR would ensure that charges reflected costs appropriate to the building of an efficient terminal.

1.18 The government mandated timetable has significant consequences for the scope of the CAR’s review of the DAA’s capex programme as set out in the October 2006 CIP. This is described in more detail below.

**(iii) Progress to Date**

1.19 The DAA moved with great purpose and speed to meet the requirements and deadlines imposed by the Government under the Aviation Action Plan. To that end, in June 2005 the new board of the DAA initiated a review of the master planning work carried out to date. To do so, the board called on the internationally renowned firm of Pascall & Watson architects. Pascall & Watson consulted extensively before issuing their Capacity Enhancement Recommendations in September 2005, recommending the early commitment to construct Pier D, capacity amelioration works to Terminal 1 and the early progress on the design of T2, all of which subsequently became part of the 2006 CIP. The DAA then assembled a wider worldclass team of advisers, including ARUP, Mace, Davis Langdon PKS, Turner & Townsend, as well as Pascall & Watson – international design, project management, commercial management and architecture consultancies, respectively. The DAA, in conjunction with its team of advisers, then progressed further consultation and detailed design and costing of T2 in the following months.

1.20 The Minister of Transport appointed an independent expert group on 22 March 2006 to verify independently the specification and costs to be incurred on the construction of T2 and, in September 2006, the appointed independent verifier BoydCreedSweett, in association with Parr Architects and FaberMaunsell, published its Report.<sup>6</sup> The verification team concluded that “the methodology, approach and execution of the planning objectives and considerations for passengers adopted by the DAA and its consultants accords with the best practice. [...] [...] the development of the structural

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<sup>6</sup> *Independent verifier’s report on proposed terminal two and associated works Dublin Airport for Department of Transport*, published in September 2006 by Boydcreedsweett, in association with Parr Architects and FaberMaunsell, available on the Department of Transport’s website at [www.transport.ie](http://www.transport.ie).

proposals is in accordance with best practice and the scheme chosen is comparable with that used in similar airport terminal buildings (at page 3). The verification team also examined the DAA's cost plan under the 2006 CIP and concluded that (at page 4):

*“[the] estimated cost of Terminal Two on a cost per square metre basis, lies at the mid point range of the UK terminal buildings benchmarking study carried out by the DAA's team of consultants. The verification team has independently verified the benchmarking exercise and the cost plan and conclude that the estimated cost is within industry norms for this type of project in a European capital city”.*

1.21 In summary, the verification team decided that:

- (a) The DAA's approach to sizing of the terminal and key systems followed very closely the guidance within the IATA (International Air Transport Association) Airport Development Reference Manual (the *IATA Manual*) and was in line with best practice;
- (b) The DAA's consultation with stakeholders followed the guidance within the IATA Manual for appropriate consultation between airport planners and stakeholders in the development of requirements for a passenger terminal facility, and therefore accorded with best practice;
- (c) The methodology adopted by the DAA on existing and new infrastructure accorded with best practice;
- (d) The DAA and its consultants' methodology, approach and execution of the planning objectives and considerations for passengers accorded with best practice;
- (e) The process for the analysis and simulation of the peak demand for passengers and bags from check-in, departures, and arrivals flows was in line with best practice and followed the best practice for IATA standards for baggage handling;
- (f) The total provision of retail outlets was within the IATA parameters and benchmarking; compared well with other international airports; and followed best practice as recommended by the IATA;
- (g) The consultation process on security strategy adopted by the DAA and its consultants accorded with best practice;
- (h) The objectives and considerations in respect of servicing and maintenance followed the guidance contained within the IATA standards;
- (i) The design option appraisal process adopted by the DAA and its consultants accorded with best practice; and
- (j) The total estimated cost of T2, calculated by the DAA and its consultants using a benchmarking exercise and cost plan was reasonable and within industry norms for this type of project in a European capital city.

1.22 Following the independent verifier's report, in October 2006 the DAA published its 2006 CIP. This CIP is obviously different from that submitted in September 2005

which of necessity was no more than preliminary. It is this fully worked up 2006 CIP which is the key focus of this Interim Determination.

1.23 The DAA applied for planning permission in August 2006. This was granted by Fingal County Council in October 2006. In order to actually deliver T2 by 2009, the DAA also had to commit to entering into binding contracts very shortly after publication of the CIP. Construction is well underway on Pier D which is scheduled to enter service in 2007 as per the Government's mandate. A critical services diversions and enabling works contract was awarded in mid January of this year and a range of T2 related contracts including logistics and builders work, substructure, steelwork and building envelope work on T2 will start immediately on receipt of planning permission from An Bord Pleanala (May 2007). Construction on T2 will start in April 2007 in order to allow delivery in 2009 as required and binding contracts are in place for ARUP and PKS, valued at over €50 million whilst over 80% of the works will need to be contracted by the end of 2007.

## **2. The statutory framework and the scope of CAR's review of the 2006 CIP**

2.1 As noted above, the timetable mandated by the Government in its Aviation Action Plan as well as the processes put in place by the Government, including independent verification, have a significant impact on the scope of the CAR's review of the 2006 CIP in the context of this Interim Determination. In summary, the DAA submits that the CAR is required to give deference to the DAA's CIP taking into account the process followed by the DAA. The CAR is also required to give deference to the Government's independent verifier. The result is that the CAR should not examine in detail the DAA's CIP as regards the design, sizing and configuration of T2, Pier D and the other elements which respond to the Aviation Action Plan, nor should it examine in detail the costs estimated in the 2006 CIP. Instead it should accept these into the DAA's RAB. The CAR's focus should be on setting a maximum landing charge that will allow the DAA to deliver this CIP. This is explained in more detail below.

### ***(i) The Changes made to the 2001 Act***

2.2 The 2004 Act made a number of changes to the regulatory framework of the 2001 Act. In particular, Section 22(4) of the 2004 Act substitutes a new Section 33 into the Act. Section 33 sets out the regulatory objectives of the CAR in making a determination (the ***Statutory Objectives***) as well as certain factors to which the CAR must have due regard when making a determination (the ***Statutory Factors***).

2.3 Prior to this amendment, the Statutory Objective was set out in Section 33 by way of a single sentence, namely that in making a determination "the [CAR] shall aim to facilitate the development and operation of cost-effective airports which meet the requirements of users". Subsection (1) now sets out the following three separate Statutory Objectives:

2.4 In making a determination the objectives of the [CAR] 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; and
- (c) to enable [the DAA] to operate and develop Dublin Airport in a sustainable and financially viable manner.

2.5 Section 33 previously set out ten factors from (a) to (j), to which the CAR had to have due regard when making a determination. Section 33(2) now sets out the following 9 factors:

- (a) the restructuring including the modified functions of [the DAA];
- (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;
- (c) the level of operational income of [the DAA] from Dublin Airport, and the level of income of [the DAA] from any arrangements entered into by it for the purposes of the restructuring under the [2004 Act];
- (d) costs or liabilities for which [the DAA] is responsible;
- (e) the level and quality of services offered at Dublin Airport by [the DAA] and the reasonable interests of the current and prospective users of these services;
- (f) policy statements, published by or on behalf of the Government or a Minister of the Government and notified to the [CAR] by the Minister, in relation to the economic and social development of the State;
- (g) the cost competitiveness of airport services at Dublin Airport;
- (h) imposing the minimum restrictions on [the DAA] consistent with the functions of the [CAR]; and
- (i) such national and international obligations as are relevant to the functions of the [CAR] and [the DAA].

**(ii) *The CAR's duty under Section 33 of the 2001 Act, as amended***

2.6 Section 33 of the 2001 Act in line with the language of that statutory provision imposed a single positive duty on the regulator. However, the subsequent amendments to the 2001 Act by the 2004 Act had the effect of replacing the CAR's previous single duty with three clearly defined positive Statutory Objectives and, in addition to these, in making the determination, the CAR is required to have "due regard" to nine specifically listed Statutory Factors. It is clearly to these Statutory Objectives and Statutory Factors that any court would now have to have regard in assessing the duty of the CAR.

2.7 The rationale for these amendments to the 2001 Act was to bring the legislation into line with current Government policy, in particular the need to restructure the State airports to best equip them "to deal with the new challenges and opportunities facing the

whole aviation sector”,<sup>7</sup> to ensure the prompt implementation of the Government’s Aviation Action Plan (including the construction of T2 at Dublin Airport),<sup>8</sup> to develop cost competitive services and to safeguard the interests of Dublin Airport’s stakeholders: “[t]hose stakeholders include the State as shareholder, the airlines and other aviation companies, the aviation regulator and the public at large and the business and tourism interests, which rely on Dublin Airport for their essential links to a range of locations in European and North American markets and elsewhere”. Significantly, the CAR is under a specific obligation to have “due regard” to these Government policy objectives pursuant to Section 33(2)(f) of the 2001 Act, as amended.

2.8 In CP3/2005, the CAR, in interpreting its statutory duty, states that it does not consider that its duty under the new statute differs from that imposed under the previous legislation so that, “[a]ccordingly, economic efficiency continues to be the driving principle of this Determination as it has been for the first Determination in 2001 and the subsequent review in 2004”. Thus, according to the CAR, Statutory Objective (a) can be “seen as a replacement of the previous Section 33(b) of the 2001 Act, which required the [CAR] to have due regard to the regulated company earning a reasonable rate of return on capital employed”; Statutory Objective (b) can still be interpreted “with regard to allocative efficiency” (and is, in any event, “closely linked” to Statutory Objective (a)); whilst Statutory Objective (c) is met given that “providing for the regulated firm to earn a reasonable rate of return on capital employed in investment, should enable the sustainable and financially viable operation and development of the airport and is thus in the interest of users”.<sup>9</sup>

2.9 The DAA submits that the CAR has erroneously in effect subsumed Statutory Objectives (b) and (c) into Statutory Objective (a). Furthermore, although the CAR recognises that “[a]ll the Statutory Objectives must be read together and in light of each other” – in other words, the three Statutory Objectives are cumulative – it proceeds by attaching a far greater importance to Statutory Objective (a) to the exclusion of the other Statutory Objectives which is wholly unjustified by the clear intent of the legislation.

2.10 Whilst aiming to maximise economic efficiency is undeniably an important goal, it is clear from the language of Section 33 of the 2001 Act (as amended), that it is not the only goal that the Government sought to achieve. Instead, an appropriate determination must be “based on [the CAR’s] new mandate” which, as stated by Minister Brennan, is “to weigh up the need for long-term investment against the promotion of operational efficiency at Dublin Airport” in order to “strike an appropriate balance between the interests of the various stakeholders in the airport”.<sup>10</sup>

2.11 Minister Brennan continued:

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<sup>7</sup> Minister Brennan, Seanad Éireann – Volume 588 – 24 June, 2004 State Airports Bill 2004: Second Stage.

<sup>8</sup> See Speech delivered by Minister for Transport, Martin Cullen TD, on the adoption of the Government Aviation Action Plan, dated 18 May 2005.

<sup>9</sup> CP3/2005, Determination on Maximum Levels of Airport Charges, dated 29 September 2005, p. 24-27.

<sup>10</sup> Minister Brennan, Seanad Éireann – Volume 177 – 13 July, 2004. State Airports Bill 2004: Second Stage.

*“Dublin Airport requires dynamic effort by the new authority so that the airport can invest to realise its growth potential and also to maximise operational efficiencies [...]. The reforms provided for in the Bill are focused on developing Dublin, Cork and Shannon Airports, increasing airline business and significantly growing passenger traffic levels and jobs. The only sensible way to provide sustainable jobs going forward is to grow the business at the three State-owned airports [...]. The new Dublin Airport authority, combining international and national aviation expertise with proven financial and business acumen will focus on meeting the urgent need for increased capacity at the airport”.*

2.12 The DAA submits that the CAR’s exclusive focus on economic efficiency obscures its real Statutory Objectives. Economic efficiency is but one of three specific Statutory Objectives. The CAR must give equal weight to safeguarding the DAA’s sustainability and financial viability as it does any other objective. At the same time, it is clear that the CAR must likewise ensure that the DAA delivers the urgently needed additional capacity at Dublin Airport that the Government (and all other stakeholders) have so clearly identified. Thus the DAA submits that the CAR’s Statutory Objectives should be interpreted as follows:

- ensuring the delivery of adequate capacity at Dublin Airport to accommodate reasonably foreseeable future passenger numbers and user requirements;
- ensuring the efficient and economic delivery of such capacity and efficient and economic operation of existing capacity; and
- safeguarding the DAA’s sustainability and financial viability.

**(iii) *The Role of the DAA in the new statutory context***

2.13 The 2004 Act gave a new and very different statutory duty to the DAA. The combination of this and the CAR’s new Statutory Objectives leads to a very significant difference in the CAR’s ability to consider the DAA’s capital expenditure programme.

2.14 The 2004 Act gave legislative effect to the change from Aer Rianta c.p.t. to Dublin Airport Authority Plc and provided the legislative basis for the establishment of the DAA as an independent airport authority. Following the Government decision to effect this restructuring, a number of amendments were made to Section 33 of the 2001 Act. In particular, Section 33(2)(a) now provides that the CAR must have due regard to “the restructuring including the modified functions of the DAA”, and Section 33(2)(h) provides that the CAR must have due regard to “imposing the minimum restrictions on the DAA consistent with the functions of the CAR”. Subsection (4) provides further that:

*“the [CAR] shall, not later than 6 months or such lesser period, after consultation with the [CAR], as the Minister decides [...] have due regard to the restructuring, including the modified functions of [the DAA]”* (emphasis added).

2.15 “Restructuring” is defined by Part II, section 4, of the 2004 Act as “the doing of all things necessary for the purposes of giving effect to this Part, and, in particular to sections 7 and 8, in providing for **full legal autonomy and independence of [...] [the DAA]**” (emphasis added).

2.16 These new provisions reflect the legal status of the DAA as an independent authority with full legal autonomy. The 2004 Act was, in fact, “carefully designed to deploy the necessary mechanisms under company law to provide maximum flexibility to effect the restructuring in conformity with the capital maintenance provisions of the Companies Acts” in order to ensure that the DAA would be able to provide the “necessary services and facilities at its airports”. Furthermore, it was perceived that the establishment of an independent entity would allow major issues “to be addressed in a focused way with fresh ideas, a clearly defined capital pool allocated to each airport and an autonomous approach pertinent to the business priorities of each airport”. The Government’s policy position was, therefore, that independence provided “the best chance for each of the airports to be viable entities, responding effectively and efficiently to the business opportunities in their regions”.

2.17 Thus, by creating a body that was capable of making independent business decisions and of managing itself (albeit within the limits imposed by company law and corporate governance), the Government increased the extent to which the DAA should be entitled to take independent business decisions. This necessarily had the opposite effect of “amend[ing] the [CAR]’s current remit” so as to decrease the extent to which it could intervene to regulate on the Government’s behalf. This is also consistent with Section 33(2)(h) of the 2001 Act (as amended) which requires the CAR to impose only “the minimum restrictions on the DAA” and is now reinforced by Section 33(2)(a) which requires the CAR to have due regard to the DAA’s “modified functions”.

2.18 By making these changes, the Government clearly sought to ensure that the CAR would no longer review the DAA’s decisions to the level of detail it had previously done. Instead, the clear intent behind the Act and of the wording of Sections 33(2)(a) and (h) is for the CAR to adopt a role similar to that adopted by the Civil Aviation Authority (the CAA) in the UK whereby it gives due deference to BAA’s individual capital expenditure programmes, particularly as regards matters of design and configuration, and instead focuses on encouraging greater efficiency going forward, reviewing operational performance and quality of service for areas of improvement going forward and to set an appropriate airport charge in that light.

2.19 This interpretation of the CAR’s amended Statutory Objectives found favour with the Aviation Appeal Panel which concluded that the CAR should not question the design and configuration of new facilities. The DAA notes that the CAR disagreed with this interpretation in its revised Determination based on its interpretation of the High Court judgment in *Aer Rianta cpt v. The Commission for Aviation Regulation* [2001] No. 707 J.R. However, that case related to the “old” statutory objectives and the issue would need to be addressed *de novo* given the fundamental revisions to the CAR’s Statutory Objectives. The DAA would also note that the High Court case related to a capital expenditure programme for which at the time there had been substantially less stakeholder consultation and significantly less justification put forward than is the case for the 2006 CIP and that these factors were important in the Court’s reasoning. The fact that the 2006 CIP has been subject to extensive consultation as is well supported in the documents significantly changes the basis for the CAR to review any capital expenditure programme.

*(iv) The impact of the Aviation Action Plan on the CAR's Statutory Objectives*

2.20 As previously stated, the Minister of Transport only announced the Aviation Action Plan in May 2005 – a decision which contained significant revisions to the Government's policy approach in relation to airport capacity. In particular, the Aviation Action Plan mandated the building of T2 by 2009, subject to the "triple lock" criteria. As noted above, to meet the T2 delivery deadline of 2009 (let alone the Pier D deadline of 2007), the DAA was required to review the previous master planning work in 2005 with a view to a clear recommendation as to capacity enhancement. This would need to be followed by detailed design work in 2006 leading to an application for planning permission in summer/autumn 2006 and a finalised Capital Investment Programme over the autumn. Binding contracts would then need to be awarded very shortly thereafter.

2.21 The Government recognised that this would not allow sufficient time between finalisation of the Capital Investment Programme and the award of binding contracts for the CAR to review the 2006 CIP. That is why the Government introduced independent verification as part of its triple lock in order to ensure the size proposed is appropriate and costs are reasonable. The Government's intention in so doing was to verify the plans and costs before commitments were to be entered into and if the plans and costs were endorsed by the independent verifier, that should provide persuasive evidence to the CAR that the plans represent the capacity needed by current and prospective users in the most efficient way possible so that the capital expenditure should be added to RAB in its entirety. Any other result would run counter to the statutory duty to ensure the DAA's financial viability given the need to commit to contract prior to the CAR's Interim Determination.

2.22 It will be shown below that the DAA complied with all the Government's requirements. It engaged the world-class team of advisers ARUP, Pascall & Watson, Turner & Townsend, Davis Langdon PKS and Mace to manage the DAA's consultation process with the relevant airline operators. These firms represent "best in class" advisers with a track record of leading on many of the world's recent major airport projects, such as Heathrow's Terminal 5, Beijing's new Terminal 3, Hong Kong's Chek Lap Kok International Airport and Naples Capodichino Airport. They are considered to be a programme management team of international renown with specific, contemporary experience in the delivery of complex transportation solutions to the most exacting standards of time, cost, quality and governance: Pascall & Watson has an internationally renowned reputation in international Aviation Building Design; ARUP is a global firm of designers, engineers, planners and business consultants that provides a diverse range of professional services to clients around the world; Turner & Townsend provides a full range of construction and management consultancy services, supported by all the resources of a global company with over 2,000 staff and more than 50 offices worldwide; Mace is a project management consultancy with a proven track record in delivering unique and comprehensive management consultancy services; and Davis Langdon PKS is Ireland's leading quantity surveying practice and is a member of Davis Langdon & Seah International providing it with access to a world wide practice with enormous experience and resources which are available to clients for projects in Ireland and abroad.

2.23 The team engaged in extensive user consultation in 2005 and 2006 – a consultation process which the independent expert group, appointed by the Minister of Transport, endorsed as according with best practice later that year. This is described in more detail in Section III below.



2.24 The DAA's plans were verified by the independent verifier in 2006 and endorsed by the independent verifier as described above. The independent verifier's report to the Government coincided with the DAA's submission of the planning application for the project to Fingal County Council in August 2006. Given the positive response from the independent verification consultants to the effect that they had confirmed that the process, methodologies, specifications and costs were in keeping with best international practice, the DAA published its full Capital Investment Programme in October 2006. Given the very tight timetable to meet the Government's imposed timetable of delivery of T2 by 2009, the DAA contracted in ARUP and PKS.

2.25 Given that the DAA complied with all the Government's requirements set out in the Aviation Action Plan, it would run counter to the CAR's Statutory Objectives for the CAR not to accept the entire 2006 CIP capital expenditure into the DAA's RAB. The CAR's focus in this Interim Determination is to set a level of airport charges that will allow the DAA to deliver this capital expenditure programme at this projected cost.

(v) ***This interpretation of CAR's remit is consistent with international best practices***

2.26 The approach outlined above not only conforms to the CAR's Statutory Objectives but is also consistent with international best practice regarding capital expenditure. In this regard, it is instructive to review the approach followed by the UK CAA in relation to BAA's capital expenditure. Essentially, the CAA gives deference to BAA's capex programme and generally adds the amount set in BAA's Capital Investment Programmes for future expenditure to RAB with an eventual adjustment for actual expenditure over the period compared to their forecast. Whilst it will review the overall expenditure to ensure that costs are in reasonable cost benchmark parameters, it does not review design and configuration and, in its review of costs, gives deference to BAA's and its experts' cost proposals. The CAA in its 2003 decision remarked that "providing BAA follows best practice management and operates pro-actively the enhanced information disclosure and consultation agreement, consulting effectively with well-informed users, the CAA sees no good reason for disallowing capital expenditure at the next review" (at 15.4).<sup>11</sup>

2.27 The CAA's focus is on ensuring that any much needed capacity can be and is delivered, not on questioning design and configuration. In its Decision dated October 1996, in relation to the price caps for the BAA London Airports for the following five years, the CAA stated that, in setting the price cap for Heathrow, it believed "that its single most important objective in setting the formula this time round must be to encourage and enable BAA to achieve its capital investment programme [namely, the construction of Terminal 5] [...]. It is thus essential that the obligations inherent in RPI-3 in terms of BAA's commitment to its investment programme should be formalised in a way which avoids the sort of detailed intervention which RPI-X is specifically designed to prevent but gives users real assurance that they will obtain the benefits which the new formula is expressly designed to deliver" (page 38 of the 1996 Decision).

2.28 In its 2003 Decision relating to price caps at the BAA London Airports, the CAA determined the price cap for Heathrow Airport in light of the costs of building Terminal 5

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<sup>11</sup> Airports Price Control Review, containing initial proposals for Heathrow, Gatwick and Stansted, published by the CAA in December 2006.

which had increased dramatically since the last review. The CAA concluded that “as there is insufficient capacity at Heathrow, reducing BAA’s investment programme and hence the price cap would not be consistent with the CAA’s Statutory Objectives and would not be in the interest of users” (page 53 of the 2003 Decision).

2.29 In December 2006, the CAA published its Airports Price Control Review, containing initial proposals for Heathrow, Gatwick and Stansted for the period 2008-13. In this review, the CAA confirmed its preference for retaining key elements of the existing regulatory framework at Heathrow, including RAB regulation, through which the airports would be rewarded for investment. The CAA assessed BAA’s performance against best practice project management and consultation (but did not review design and configuration) and proposed that all of the capital investment, of some £6 billion (2006/07 prices), undertaken at Heathrow from 2003 to 2008 should be passed into the RAB and remunerated. Furthermore, pending further discussions between the airports and their airline users, the CAA’s indicative price cap ranges were based on BAA’s full proposed capital expenditure programme to 2013.

2.30 As amply demonstrated above, the DAA has followed best practice management and followed a best practice consultation process. In this light, it would be inappropriate for the CAR to review and possibly disallow any capital expenditure proposed as part of the 2006 CIP.

### **3. CP1/2007 – Preliminary comments on questions 1, 8, 9 and 10**

3.1 Detailed answers to these questions are set out in the remainder of this submission. However, before engaging on the detail the DAA has a number of preliminary comments.

#### ***(i) The CAR’s focus on agreement between all parties is unrealistic and inappropriate***

3.2 The introduction to CP1/2007 states effectively that the CAR’s focus is to explore a structure and level of charges “that would be acceptable to all parties and be consistent with the CAR’s Statutory Objectives”. As explained in more detail in section III below, such an approach is both unrealistic and contrary to the CAR’s Statutory Objectives. Seeking agreement among all parties is unrealistic in the context of users with very different commercial objectives and agendas. It is also unnecessary in the context of the CAR’s Statutory Objectives. At its most simple, the DAA is required by the Government to build T2. The CAR must set a level of airport charges that allows the DAA to fulfil its obligations to build T2 without compromising the DAA’s financial viability and sustainability. As it transpires, there is broad user buy in to T2 as described below. However, the CAR should not focus on user agreement but instead purely on its Statutory Objectives when setting the level of airport charges. Indeed, to do otherwise would amount to an abdication of its responsibilities and dereliction of its statutory duties. As mentioned above, different users have different commercial objectives and the DAA has to perform a balancing act. Requiring agreement takes away the DAA’s right and obligation to manage Dublin Airport independently. It is also unrealistic. As the UK CAA recently observed in relation to the breakdown of constructive engagement at Stansted, it is difficult to achieve a consensus when the parties effectively view the regulatory process as a negotiation and adopt an adversarial approach. Thus the CAA had to terminate the

constructive engagement process and proceed using “regulator led working” for the ongoing Stansted price review.

3.3 Equally fundamentally, question one of CPI/2007 relating to the DAA’s investment plan, is inappropriate for another reason. The CAR should not, as a matter of principle, be seeking to establish now, nearly five months after publication of the 2006 CIP, whether there is user agreement for the 2006 CIP. Rather its focus, if any, should be on whether the DAA followed an appropriate user consultation procedure leading up to the 2006 CIP and that the Capital Investment Programme took due account of user contribution on passenger and aircraft numbers and terminal requirements. To introduce an effective right of veto after the finalisation of the 2006 CIP runs contrary to good administration and would make the DAA’s processes, established by world class consultants and run in accordance with international best practices, meaningless.

3.4 Likewise CAR should not be looking for agreement between the DAA and users on charges. It is CAR’s role to set the maximum level of charges. Clearly users will want charges to be as low as possible even if there is general agreement on all other matters and approach the CAR process with a “negotiating” hat on. It is CAR’s role to act as final decision maker in this process. It should not be looking to the DAA to reach agreement on charges with users.

**(ii) *Presentation of information in CPI/2007***

3.5 In relation to question one in CPI/2007, the DAA has serious concerns over the presentation of its 2006 CIP in chapter 2 of CPI/2007. The way in which the information is presented gives a distorted and inappropriate impression of the development of the 2006 CIP and leads the reader to conclude that the CAR has already formed the view that the 2006 CIP is over-inflated. Chart 2.1 compares the 2006 CIP with the May and September 2005 CIPs. This comparison is completely inappropriate. The May 2005 CIP was developed prior to the Government’s Aviation Action Plan and so is irrelevant. The September 2005 CIP was, as explained in detail below, no more than a high level and preliminary document which preceded the appointment of the T2 design team and the subsequent consultation and optioneering processes leading to the T2 proposition submitted for planning in August 2006.

3.6 Furthermore, and fundamentally, the question of whether the 2006 CIP is an improvement on the May 2005 CIP is irrelevant and contrary to the CAR’s Statutory Objectives. The May 2005 CIP is not a response to the Government’s Aviation Action Plan. The 2006 CIP is. The DAA is obliged to implement the Aviation Action Plan and the CAR is required to set a level of airport charges to allow it to do so without compromising its sustainability and financial viability. Only the Aviation Action Plan and the 2006 CIP are relevant. Consideration of the May 2005 CIP is contrary to the CAR’s Statutory Objectives and phrasing question one in terms of an “evolution” is inappropriate.

3.7 By effectively setting the baseline as the May 2005 CIP (“The CAR is keen for feedback from users on the extent to which the DAA’s revised investment plan represents an improvement on the programme and associated costs contained in the May 2005 CIP”), the CAR is following a path which will lead to skewed (and irrelevant) feedback which will distort the CAR’s record.

*(iii) Questions 2 to 7 and 11 to 15*

3.8 The DAA will respond to questions two to seven and eleven to 15 in a separate submission by 10 March 2007. However, one comment on paragraph 3.2.2 is appropriate at this stage. These paragraphs imply that the CAR might adopt a determination that is not consistent with the DAA's sustainability and financial viability. If so, this would be unlawful. As explained in more detail below, the CAR can never compromise the DAA's sustainability and financial viability. This is a self-standing Statutory Objective the CAR must comply with at all times. The CAR has no power to relegate this Statutory Objective below any other Statutory Objective. Rather it must at all times comply with it.

*(iv) Questions 8 to 10*

3.9 These are answered in detail in the remainder of this submission. However, it should be noted that the DAA has serious concerns about the way in which questions 8 to 10 (on the T2 project) have been asked. As with question one, the CAR's focus should not be on establishing whether there is user agreement now but whether the DAA followed an appropriate consultation process and the T2 design took due account of user contributions made during that process.

3.10 Question eight is addressed in more detail in sections III and IV below which describe in detail the processes undertaken by the DAA and in particular the consultations and forecasting and projections which led to the forecast busy hour rate of 4,200 passengers per hour and how that links to the size and design of T2. However, the DAA would note at this point that the question is inappropriate for the same reasons as given in relation to question one. The appropriate question is whether the DAA is following proper processes and taking due account of the views expressed by users leading up to the finalization of the October 2006 CIP. Asking users several months after the finalization of the CIP whether they agree with these forecasts and design parameters equates to giving users an ex post facto right of veto over the CIP which is neither good administration nor conducive to the development of any terminal, let alone T2.

3.11 Questions nine and ten are answered in more detail in sections V and VI below which describe in particular and in detail the cost-benchmarking exercises undertaken and the fact that the cost estimates were verified in the ARUP Gateway 2 Report, as well as by the independent verifier BoydCreedSweett and found to be in line with international best benchmarks. However, the same reservations the DAA expressed above in relation to question eight apply equally to question nine.

3.12 These questions, as well as section 4 of CP1/2007 more generally, have been written in a way which give the reader the impression that the CAR has already formed a view, e.g. paragraph 2 of section 4.1: "for much of the day a smaller terminal would suffice". This is a purely gratuitous statement. Every airport terminal in the world is built to meet the demands of the peak flows. For a well-designed terminal the statement quoted is axiomatically true. Its context though gives users a misleading impression of the CAR's thinking which will lead to distorted consultation and to a skewed record.

3.13 Likewise the statement on page 19 that "[t]he CAR has assumed solely for the purposes of this paper that a new terminal built to provide the same standards of service as T1 would cost €350 million, and that the additional €259 million is to provide users of T2 with a higher standard of service" is highly inappropriate and, in any event, incorrect.

The CAR should not be assuming that the cost of T2 should be €350 million. That is a conclusion to be reached after review of detailed cost information and giving due deference to the various cost benchmarking exercises undertaken, including by the independent verifier. It is incorrect to even imply it might be prejudged. Finally, the statement that €259 million is to provide T2 users with a higher standard of service prejudices the outcome of the differential pricing consultation. Phrasing the sentence in this way resembles a leading question and will lead to distorted consultation on the issue. It is doubly inappropriate because there is no justification for assuming that the €259 million does represent the cost of giving T2 users a higher level of service or that there will be a higher level of service given that there will be improvements to T1.

(v) ***The Cost Benefit Analysis***

3.14 With regard to the cost benefit analysis, the DAA considers the exercise undertaken by CEPA is inappropriate and contrary to the CAR's Statutory Objectives. The exercise ignores the fact that the Government's Aviation Action Plan, which is binding on the DAA, requires the DAA to deliver T2 by 2009. Any paper which purports to analyse the optimum timeframe for building T2 therefore at best serves no useful purpose. At worst it implies to other consultees that the whole concept and timing of T2 are not as set out in the Government's Aviation Action Plan. This may lead to responses to the consultation which may seek to advance an argument that T2 should not be built at all or not within the Government's timeframe or may lead to contamination of responses by such propositions.

3.15 To give an example, paragraph 3.1 of the CEPA paper states that "a very broad feasible period for the delivery of T2 can be proposed." The straight answer is that it cannot. 2009 is the mandated delivery date. The statement "[i]t could range from as early as 2009 until as late as 2020 – although the core period of 2013 to 2017 is more precise" leads the CAR into a breach of its statutory duty. The DAA is required to deliver T2 by 2009 and the CAR is required to set an airport charge reflecting this so as not to compromise the DAA's sustainability and financial viability. Consideration of factors such as alternative delivery dates is therefore extraneous and in breach of the CAR's statutory duty. The cost benefit analysis should therefore be abandoned without delay.

## **II. THE 2006 CIP WAS SUBJECT TO AN EXTENSIVE USER CONSULTATION AND THE INTERESTS OF PASSENGERS AND AIRLINES WERE GIVEN DUE CONSIDERATION**

### **1. Introduction**

1.1 This section will show that the DAA carried out a thorough and genuine user consultation with all users and that clear user support for the finalised programme emanated from this process. In particular:

- (a) In the spirit of the "Triple Lock" policy, the DAA carried out a full and proper consultation, which shows an agreed finalised proposal. This provides strong support for the proposition that it should be included, in its entirety, in any RAB calculation.

(b) A full and detailed consultation process was carried out in, at least, three distinct stages. Proper and prudent airport planning is an absolute necessity for any airport authority. Accordingly in 2002 the Airport Authority was consulting with users on the first Master Plan for the proposals in relation to a T2. Then, following the announcement by the Government of the Aviation Action Plan in May 2005, which mandated the now DAA to build T2 by 2009, the DAA commissioned Pascall & Watson to review the PM/SOM/TPS Master Plan and to present revised and updated recommendations on terminal design. Finally, a third period of consultation began in January 2006, which dealt with the specifics of the Capital Investment Programme and the T2 proposal, and intended to lead to the detailed design of T2 for inclusion in the 2006 CIP.

1.2 The DAA's process met international "best practice" standards. The Government's Independent Verifier reviewed the consultation process and concluded:

*"The approach [engaged by the DAA] follows the guidance within the IATA Airport Development Reference Manual for appropriate consultation between airport planners and stakeholders in the development of requirements for a passenger terminal facility, and therefore accords with best practice".<sup>12</sup>*

1.3 Further, a comparison with the UK CAA's recommended consultation standard and "constructive engagement" policy shows that the level of consultation the DAA engaged in clearly meets these standards.

1.4 The consultation process shows "genuine user consultation". Significant and comprehensive consultation with users was carried out by the DAA from the inception of the T2 planning process in January 2002. The DAA actively sought feedback from users and other stakeholders and this feedback informed much of the T2 design ultimately adopted in the 2006 CIP. If taken in its entirety, this cannot be reasonably said to be anything but "genuine user consultation".

1.5 The consultation process shows user support for the proposals. To the extent that was reasonably possible, particularly given the stance taken by certain users from the outset and the conflicting commercial needs of users, user support was achieved for the T2 model. Airlines accounting for the vast majority of passengers at Dublin Airport (and an ever greater proportion of projected future passengers) either explicitly support the proposals or chose not to engage in the consultation process.

## **2. The Relevance and Parameters of Consultation**

2.1 As a preliminary point, it is worth noting that the DAA was not under any statutory obligation to carry out consultation on the proposals for the finalised programme.

2.2 The DAA would also observe that it is unrealistic to expect total support across all users for the plans envisaged for T2. The plans for T2 cannot be "everything to everyman" by virtue of the fact that each individual user has, by their very nature, conflicting commercial objectives. Accordingly, the CAR must take into account the fact

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<sup>12</sup> See paragraph 6.3.4 of the Independent Verifier's Report.

that the DAA consulted each user and accommodated the majority of views during the process and has achieved user “buy-in”, whilst recognising that the DAA has an inevitable balancing act to play.

2.3 Finally, it is important to note that users will make their assessment of the options based on the criteria that are important to them, but ultimately the decision on which option to proceed with was made by the DAA Board having had regard to all the views of users.

2.4 The DAA carried out its extensive consultation process for a number of important reasons.

- (a) *First*, the DAA wanted to ensure that the planning for such a key national project was carried out in full accordance with the Government’s “Triple Lock” policy. The DAA has made extensive strides to ensure the fulfilment of this key national policy.
- (b) *Second*, the consultation carried out by the DAA is of particular relevance as it shows that all users were adequately engaged in the process and, in the main, in agreement with the DAA’s proposals. Accordingly, the CAR cannot and should not superimpose its own ideas and policies on the calculation of, in particular, RAB as these have been clearly agreed and set out between users and the DAA. In the UK, the CAA, referring to its 2003 decision, remarked that “providing BAA follows best practice management and operates pro-actively the enhanced information disclosure and consultation agreement, consulting effectively with well-informed users, the CAA sees no good reason for disallowing capital expenditure at the next review”.<sup>13</sup>
- (c) *Third*, the DAA would also observe that consultation is a two-way process, which involves users responding adequately and in a timely manner. As will be apparent below, several airlines were given extensive opportunities to participate in the consultation process but chose not to or simply ignored the process. The DAA’s process cannot be said to be inadequate or insufficient on the basis that airlines had failed to respond to the DAA’s clear and structured consultation.
- (d) *Fourth*, the general business and tourism community in Ireland, as representative of the ultimate users, is strongly in favour of the DAA plans.

### **3. The Consultation Process Engaged by the DAA**

3.1 The DAA has undergone a substantial and detailed consultation process on the 2006 CIP options and, more generally, T2, which engaged users at the earliest opportunity.

3.2 The chronology of consultation engaged in by the DAA is set out below and this shows the extent to which the DAA discussed the T2 programme with users which took into account work commenced in 2002.

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<sup>13</sup> Airports Price Control Review, containing initial proposals for Heathrow, Gatwick and Stansted, published by the CAA in December 2006 and available on the CAA website at [www.caa.co.uk](http://www.caa.co.uk).

(i) ***Consultation Period 1: January 2002***

3.3 Consultation on Airport development began as far back as January 2002. Over an 18-month period, the DAA consulted users, both on-airport and external stakeholders. Project Management/Skidmore Owings & Merrill had been mandated by the Company to prepare a “Dublin Airport Terminal and Piers Development Study”, which was intended to serve as the Master Plan for the development of Dublin Airport, and in particular the development of a second terminal.

The objectives of the consultation process were to –

- (a) familiarise stakeholders with the methodologies and approaches used to appraise and design T2;
- (b) agree a common understanding of acceptable levels of service standards and functionality metrics for designing new facilities;
- (c) establish a common basis of fact and knowledge about the capacity and service level capabilities of existing facilities; and
- (d) determine the requirements of stakeholders and elicit their comments through specific, structured questionnaires and through centralised discussion and debate at meetings.

3.4 Consultation was envisaged as being inclusive of all stakeholders, transparent and effected in a timely and certain manner. Accordingly, it commenced with a general meeting in January 2002 and was subsequently followed by separate one-on-one meetings with stakeholders and more general meetings with stakeholders according to certain groupings –

- (a) Airlines and handlers: including Aer Lingus, Ryanair, Aer Arann, BMI, British Airways, Cityjet, SAS, Continental, Delta, Lufthansa, Iberia, Aeroflot, Air Canada, Air Malta, Alitalia, CSA Czech Airlines, Finnair, Flybe and AOC.
- (b) Ground Handling: including Servisair, Aviance, Cityjet Handling.
- (c) Industry Associations: including IATA, IALPA.

3.5 The relevant sections of the Project Management/Skidmore Owings & Merrill – “Dublin Airport Terminal and Piers Development Study” list the schedule of meetings undertaken by the DAA and highlight the scope and scale of the exercise that was undertaken.



### 2.7.3 Schedule of Meetings

Initially, the meetings with the Airline/Handlers grouping were held on a fortnightly basis for the first 6 months. The frequency was reduced as the optioneering and short-listing process neared its completion. Sixteen meetings in total were held with the Airline/Handlers grouping of stakeholders.

Table 2.2 – Schedule of Meetings

SCHEDULE OF MEETINGS			
Meeting No.	Airline and Handlers	External Stakeholders	Cargo
Joint Kick-off Meeting	30/01/02	30/01/02	30/01/02
1	7/02/02	27/03/02	10/05/02
2	21/02/02	09/05/02	13/06/02
3	7/03/02	17/07/02	14/01/03
4	21/03/02	15/10/02	
5	11/04/02	21/08/03	
6	02/05/02		
7	23/05/02		
8	20/06/02		
9	27/06/02		
10	01/08/02		
11	5/09/02		
12	19/09/02		
13	20/11/02		
14	29/05/03		
15	21/08/03		
Special	02/10/02		

The meetings with the External Stakeholders were generally held on a bi-monthly basis. Six meetings in total were held with the External stakeholders.

Four meetings were held with the Cargo grouping of stakeholders.

The one-to-one meetings were held on an as-required basis as issues arose in the course of the general consultation process.

8 meetings were held with SR Technics (SRT- formerly FLSA)  
 7 meetings were held with An Garda Siochana  
 5 meetings were held with IATA  
 3 meetings were held with the fuel companies  
 3 meetings were held with the Railway Procurement Agency  
 2 meetings were held with Department of Transport representatives  
 2 meetings were held with the Assessment Panel on the Independent Terminal  
 2 meetings were held with Heritage Groups  
 2 meetings were held with Fingal County Council  
 1 meeting was held with the Dublin Transportation Office  
 1 meeting was held with contiguous land owners  
 1 meeting was held with Iarnrod Eireann

Table 2.3 – One to One Formal Meetings

ONE TO ONE FORMAL MEETINGS						
SRT	Fuel Co's	Gardai	IATA	RPA <sup>1</sup>	SAC <sup>2</sup>	DTO <sup>3</sup>
01/05/02	17/04/02	08/02/02	01/03/02	16/10/02	20/12/02	3/12/02
08/05/02	15/07/02	24/09/02	18/06/02	25/11/02	28/01/02	
12/06/02	23/08/02	10/10/02	18/07/02	17/12/02		
04/07/02		18/10/02	15/10/02			FCC <sup>3</sup>
31/07/02		17/01/03	19/11/03		CLA <sup>4</sup>	05/11/02
25/09/02		20/02/03		Heritage	22/04/02	13/03/03
24/10/02		08/05/03	DOT <sup>5</sup>	19/07/02		
29/11/02			18/09/02	FMD/10/02		IE <sup>7</sup>
			21/10/02			25/11/02

<sup>1</sup> Railway Procurement Agency  
<sup>2</sup> Special Advisory Committee on Independent Terminal  
<sup>3</sup> Dublin Transportation Office  
<sup>4</sup> Contiguous Land Owners  
<sup>5</sup> Fingal County Council  
<sup>6</sup> Department of Transport  
<sup>7</sup> Iarnrod Eireann

3.6 Further, various inputs were solicited from stakeholders throughout the consultation period:

- Three separate written questionnaires were sent to users: Questionnaire 1 (7 February 2002) asked for inputs that would help the team develop a brief for terminal and pier expansion; Questionnaire 2 (28 February 2002) asked for inputs that would help the team establish precise future airline requirements of a Pier D and to resolve key questions regarding capacity; and Questionnaire 3 (12 April 2002) was circulated to develop a new design for Pier D. Aer Lingus, Ryanair, Aer Arann, Cityjet, Delta and BMI responded to all questionnaires.
- Key Discussion Elements at Meetings: key inputs were discussed throughout. Aer Lingus and Ryanair attended all meetings.
- The result was the PM/SOM report referred to above and which recommended the development of a second terminal and where it is proposed to build T2, catering for a “mixed use” (i.e. short haul and long haul operations).

(ii) **Consultation Period 2: June 2005**

3.7 Following the announcement by the Government of the Aviation Action Plan in May 2005, which mandated the now DAA to build T2 by 2009, the DAA commissioned Pascall & Watson to review the PM/SOM Master Plan and to present revised and updated recommendations on terminal design.

3.8 Pascall & Watson engaged in this second period of consultation, which began in June 2005 with home-based carriers in relation to capacity enhancement. The objective of this project, the “Capacity Enhancement Study”, was to engage in multi-lateral consultation to establish key principles to underpin a capacity enhancement plan and to then build a consensus around a “best fit” solution. Their action was that this report would then serve as a framework for the development Plan from which the detailed T2 design proposals would be established as part of the CIP necessary to implement the Aviation Action Plan.

3.9 Pascall & Watson consulted extensively following initial briefings with the DAA and the four major home-based airlines (Ryanair, Aer Lingus, Cityjet and Aer Arann). Further briefings/reviews were held with a wide range of other key stakeholders (including CAR, RPA and Fingal CC) to ensure that a wide range of views had been canvassed. Subsequently, and after a thorough review of previous studies including the Master Plan undertaken in 2002, initial proposals were prepared for review with the DAA and the four major home-based airlines. These proposals sought to provide a Capacity Enhancement Plan that:

- established and protected long-term potential development needs including, for example additional stands, piers, terminal facilities and metro station;
- established acceptable service levels with reference to agreed benchmarks; and
- established an incremental development plan that could be introduced in a phased manner without interim loss of capacity.

3.10 The table below lists the schedule of meetings undertaken by Pascall & Watson and highlights the scope and scale of the exercise that was undertaken:

	<b>Date</b>	<b>P+W meeting with</b>	<b>Subject</b>	<b>Attendees</b>
<b>Briefing</b>	15-Jun	DAA	Briefing	Declan Collier; Bob Hilliard; Mark Foley
	20-Jun	DAA	Airside & OCTB Review	Airport Operational Staff
	23-Jun	Ryanair	Briefing	Michael O’Leary; Michael Cawley; David O’Brien
	28-Jun	Aer Arann	Briefing	Padraig O Ceidigh; Peter McKenna; John Halpin; Ian Sheridan
	29-Jun	Cityjet	Briefing	Geoffrey White; Damian Manly; Hugh Rodgers; Michael Maher; Paula Dunne; Karen O’Gorman; Philippe LeNaour; Conor Furey
	29-Jun	Aer Lingus	Briefing	John Sharman; Dick Butler; Niall Walsh; Brian Wheatley

<b>Review</b>	29-Jun	DAA	Roads & Runways	Barry Drinan; Aidan Fidgeon; Liam Gaffney
	07-Jul	Aer Lingus	Operational Review	Dick Butler; Ray Bulger
	07-Jul	RPS McHugh	Planning Review	Christopher McGarry; Richard Hamilton
	07-Jul	Dublin Airport	Planning Review	Bob Hilliard; Elaine Jones
	08-Jul	DAA	Progress Report	Declan Collier; Oliver Cussen; Mark Foley
	08-Jul	Commission for Aviation Regulation	Process Review	Bill Prasifka; William Hynes; Oliver Hogan; Miriam Ryan
	13-Jul	RPA	Metro Review	Frank Allen; Rory O'Connor; Declan Collier; Mark Foley
	13-Jul	DAA	Progress Review	Declan Collier; Mark Foley; Bob Hilliard
	14-Jul	Fingal Planning	Process Review	David O'Connor; Ann Marie Farrelly; Mark Foley; Barry Drinan
	14-Jul	DAA Property	Asset Review	Michael Murphy
	14-Jul	US Immigrations	Operational Review	Barbara McCall
<b>Workshop</b>	18-Jul	DAA Planning Team	Workshop	Barry Drinan & Team
	18-Jul	Airport Team	Workshop	Elaine Jones & Team
	19-Jul	P+W	Deliver Model	
	20-Jul	Cityjet	Workshop	Geoffrey White; Damian Manly; Hugh Rodgers; Michael Maher; Paula Dunne; Karen O'Gorman; Philippe LeNaour; Conor Furey
	20-Jul	Aer Arann	Workshop	Padraig O Ceidigh; Peter McKenna; John Halpin; Ian Sheridan
	22-Jul	Aer Lingus	Workshop	Dick Butler; Niall Walsh; Brian Wheatley
	22-Jul	Ryanair	Workshop	Michael O'Leary; Michael Cawley; David O'Brien
<b>Response + Clarifications</b>	26-Jul	Aer Lingus	Response to Workshop	Email correspondence
	26-Jul	Aer Arann	Response to Workshop	Email correspondence
	27-Jul	Cityjet	Response to Workshop	Email correspondence
	05-Aug	Aer Lingus	Workshop Clarifications	Dick Butler; Niall Walsh; Brian Wheatley (Alan Lamond)
	17-Aug	D5	Short-Term Provisions	Ian Saunders
	17-Aug	Ryanair	Workshop Clarifications	Michael O'Leary
	18-Aug	Ryanair	Workshop Clarifications	Email correspondence
	23-Aug	DAA	Workshop Clarifications	Elaine Jones; Mark Foley; Paul Cumiskey; John Hughes; Ciaran Scanlon

3.11 As part of their work, Pascall & Watson considered a wide variety of different options for the capacity enhancement of the terminal facilities as detailed in their report. This resulted in consideration of four primary options (see Appendices 5 of the Pascall & Watson report), from which the final location of T2 was recommended.

3.12 The discussions and airline input culminated in the “Dublin Airport Authority: Capacity Enhancement Recommendation Report for Dublin Airport” dated September 2005, which updated the position reached in 2002 and made recommendations based on user input. It is this report, which formed the basis for the location of T2 and other capacity enhancement projects, which was in turn the basis of the 2006 CIP.

**(iii) Consultation Period 3: January 2006 onwards**

3.13 The third period of consultation began in January 2006. This period of consultation was carried out with on-airport and external stakeholders in relation to the specifics of the Capital Investment Programme<sup>14</sup> and the T2 proposal<sup>15</sup> (intended to lead to the detailed design of T2 for inclusion in the October 2006 CIP).

3.14 The DAA and its experts recorded in excess of 500 individual stakeholder (both internal to DAA and users) activities for 2006 including major events, workshops, design meetings, bi-laterals etc<sup>16</sup>. Consultation with users continues today.

(a) In 2006, eight Major Events with Airlines<sup>17</sup> and Ground Handlers took place:

<b>Date in 2006</b>	<b>Event</b>
24 March	1 <sup>st</sup> Consultation Meeting with Airlines and Handlers
21 April	2 <sup>nd</sup> Consultation Meeting with Airlines and Handlers
26 May	3 <sup>rd</sup> Consultation Meeting with Airlines and Handlers
23 June	4 <sup>th</sup> Consultation Meeting with Airlines and Handlers
10 August	5 <sup>th</sup> Consultation Meeting with Airlines and Handlers
28 September	6 <sup>th</sup> Consultation Meeting with Airlines and Handlers
26 October	7 <sup>th</sup> Consultation Meeting with Airlines and Handlers
21 November	8 <sup>th</sup> Consultation Meeting with Airlines and Handlers

3.15 Consultation with airlines and ground handlers has continued in 2007. On 1 February and 1 March additional meetings were held.

(a) Nine consultations with CAR;

<sup>14</sup> Please see the Capital Investment Programme – DAA/CIP04, Section 20.

<sup>15</sup> Please see the ARUP – Stakeholder Management Report.

<sup>16</sup> Details of which are set out in ARUP’s Stakeholder Management Report at Appendices A and B.

<sup>17</sup> Which included, amongst others, Aer Lingus, Ryanair, Aer Arann, BMI, Cityjet, Continental, Delta, Lufthansa, Air Canada and IATA.

(b) 208 meetings and bi-laterals with external stakeholders, including:

<b>Dates in 2006</b>	<b>User</b>	<b>Meeting Detail</b>
27 January	Aer Lingus	Aer Lingus Requirements
7 February	Aer Lingus	CBP Strategy & Location Options
15 February	Aer Lingus	Baggage Workshop
9 March	Aer Lingus	Baggage
15 March	T2 Airlines	Questionnaires sent to Other T2 assigned airlines prior to one-to-one meetings being held. Questionnaires and meetings address Airport Planning, Baggage Handling and Architecture.
15 March	Non-T2 Airlines	Questionnaires sent to non-T2 assigned airlines prior to one-to-one meetings being held. Questionnaires and meetings address Airport Planning, Baggage Handling and Architecture. Meetings held at airline request.
24 March	All Airlines	Airlines Presentation No.1
30 March	Aer Lingus	Baggage Workshop
4 April	Cityjet	Planning parameters and user requirements with Cityjet
7 April	Aer Lingus	Aer Lingus Meeting – T2 Peak Planning Flow & Facility Sizing Proposition
8 April	IATA	Meeting with IATA – General update on Design Options
11 April	Aer Lingus	Presented Options
11 April	Continental	Meeting with Continental to discuss questionnaire
11 April	Ryanair	Meeting with Ryanair to discuss questionnaire
20 April	Aer Lingus	To Discuss Facility Requirements
21 April	All Airlines	2 <sup>nd</sup> Consultation Meeting with Airlines and Handlers
24 April	Delta	Meeting with Delta to discuss questionnaire
27 April	Aer Lingus	Presentation of Options 5, 6 and 7
3 May	All Airlines	Airlines Focus Group
3 May	All Airlines	Focus Group
5 May	IATA	Letter from IATA
18 May	Aer Lingus	Baggage Hall Operations & Late Baggage
18 May	All Airlines	Feedback on Consultation Process
24 May	Aer Lingus	G2 Options and Evaluation
25 May	Ryanair	Meeting with Ryanair
25 May	IATA	Update on Options Evaluation
26 May	All Airlines	Airlines Presentation No.3

<b>Dates in 2006</b>	<b>User</b>	<b>Meeting Detail</b>
26 May	All Airlines	3 <sup>rd</sup> Consultation Meeting with Airlines and Handlers
31 May	Aer Lingus	Review Development of Options 6 & 7 (with DAA GPCP also)
13 June	All Airlines	Airlines Presentation No.4
16 June	Aer Lingus	Review Options at Aer Lingus Meeting
23 June	All Airlines	4 <sup>th</sup> Consultation Meeting with Airlines and Handlers
14 July	Aer Lingus	Single Baggage Solution Meeting with DAA, Aer Lingus
19 July	Aer Lingus	Single Baggage Solution Meeting with Aer Lingus & Servisair
20 July	T2 Airlines	Floor Area & Location in DT2
21 July	T2 Airlines	Stakeholder Consultation on T2 Airlines and Handling Agents
21 July	Air Canada	Air Canada consultation
25 July	All Airlines	Airlines Events Preparation Meeting No.1
27 July	Aer Lingus	Aer Lingus Concerns in relation to Baggage
31 July	All Airlines	Airlines Events Preparation Meeting No.2
9 August	IATA	Meeting with IATA – Airline Industry Standards and Operational “Best Practice” Principles
10 August	All Airlines	5 <sup>th</sup> Consultation Meeting with Airlines and Handlers
18 August	Aer Lingus	Presentation to Dick Butler
21 August	Aer Lingus	Design Briefing
23 August	Aer Lingus	Status of Planning Drawings
4 September	All Airlines	Agenda setting
5 September	IATA	Letter from IATA
6 September	Aer Lingus	Stakeholder meeting with Aer Lingus
12 September	All Airlines	Airlines questionnaire
28 September	All Airlines	Airline Presentation No.6

- (c) 305 meetings and bi-laterals with internal stakeholders;
- (d) 10 presentations;
- (e) Five workshops; and
- (f) One exhibition.

3.16 Stakeholder input has been sought from a diverse range of user groups. This process, and the feedback from the stakeholders, has been recorded in various documents

– from meeting minutes and event handouts to the consolidated summaries of user comments.

3.17 Questionnaires were sent out to users as a means of gaining input from them into the planning process, including gaining information from users on requirements in context of facility planning and terminal positioning. Questionnaires were sent to:

<b>Airline</b>	<b>First name</b>	<b>Surname</b>	<b>Date sent</b>
Aer Arran	Padraig	O’Ceidigh	21/03/2006
Aer Lingus	Numerous		Various Dates
Air Canada	Pierre	Charbonneau	15/03/2006; 27/03/2006
Air Canada	Lindsay	Vollaire	11/04/2006
American Airlines	Sheila	Murphy	15/03/2006; 27/03/2006
American Airlines	Don	Langford	15/03/2006; 27/03/2006
Aviance	Darran	Allen	10/04/2006
Aviance	Ray	Caesar	10/04/2006
BMI	Jane	Irving	21/03/2006
British Airways	Willie	Walsh	15/03/2006; 27/03/2006
Cityjet	Hugh	Rodgers	21/03/2006
Continental	Beatrice	Cosgrove	15/03/2006; 27/03/2006
Delta	Angela	Coleman	15/03/2006; 27/03/2006
Finnair	Jukka	Hienonen	15/03/2006; 27/03/2006
Futura	Santiago	Ameguel	21/03/2006
Futura	Val	Osborbe	30/03/2006
Futura	Juan	Munos	06/04/2006
Iberia	Carlos	Sobrino	15/03/2006; 27/03/2006
Malev	Geraldine	Ahern	15/03/2006; 27/03/2006
Ryanair	David	O’Brien	21/03/2006
SAS	Dympna	Dwyer	21/03/2006
Servisair	John	Murphy	10/04/2006
Servisair	Bernard	Farrell	10/04/2006
Sky Handling	Richie	Copeland	10/04/2006
US Airways	Tina	Ghiladi	15/03/2006; 27/03/2006
US Airways	Therese	Jager	06/04/2006

3.18 The primary objective of the questionnaires was stated as: “establishing the optimal use of space available and to ensure that all stakeholder requirements are appropriately considered”. As can be seen from the sample Questionnaires for Aer Lingus and Iberia attached at Appendix 7, the questions detailed user requirements and future aspirations in order to fully take into account user needs.

3.19 In addition, further questionnaires were sent out to gauge the satisfaction with the consultation process – attached at Appendix 8 is the covering e-mail, which shows that the questionnaire was sent to all users. The DAA only received three responses, but all three responses agreed that, at September 2006, there was satisfaction level of consultation to date.<sup>18</sup>

3.20 Eight major consultation events took place with airlines and ground handlers. Representatives from all parties involved in the T2 process attended these meetings (i.e. DAA; ARUP; Pascall & Watson; Turner & Townsend) and were available to answer all questions of users.

3.21 The meetings covered all relevant aspects of the T2 process including planning and design, the various T2 options and the evaluation criteria. The meeting minutes clearly show that specific focus was also placed on the issue of costing. The level of consultation on costing is evidenced by the following:

- (a) The cost plan was made available to all stakeholders.
- (b) A presentation setting out the costings on three of the T2 options was provided by Deirdre Chapman (PKS) on 26 May 2006 and all meeting attendees had the opportunity to ask questions.
- (c) A CIP workshop was held on 26 October 2006 and this gave users a further opportunity to both understand the costing of T2 and to ask any questions they considered pertinent.
- (d) Finally even after the publication of the CIP, users were continuously consulted on all aspects of costings.

3.22 Minutes and presentation material from nine consultation events with CAR.

3.23 Further, high-level contacts between senior DAA management and the based carriers management were ongoing throughout 2006 in relation to the development of T2 and the main elements of the Capital Investment Programme. These interactions were, by their very nature highly confidential, but remain a key pillar of engagement and consultation. Through this continuous engagement, all of the cost elements of T2 were visible prior to the publication of the CIP and accordingly users were fully aware from an early date of the vast majority of the costing elements of T2.

3.24 Finally, the DAA also met with the Irish Tourist Industry Confederation (the *ITIC*) as part of the external stakeholder consultation during 2006. It should be noted that

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<sup>18</sup> See copies of responses, which are attached at Appendix 16.



ITIC presents itself as the representative body for the diverse tourism industry and the only meaningful voice for the portion of traffic represented by overseas residents (and made representations to the CAR supporting the capital programme in this capacity) and the DAA respect their credentials in this context.

3.25 The result of this comprehensive consultation process, which was founded on the previous two consultations, was the detailed T2 design, which was the basis of the 2006 CIP.

#### **4. The DAA's Consultation met International Best Practice**

4.1 The DAA's consultation process was considered against the standards set out in the Manual by the Independent Verifier in its report: "Proposed Terminal Two and associated works Dublin Airport" for the Department of Transport dated September 2006 (the **Report**). In the Independent Verifier's view:

*"The approach [engaged by the DAA] follows the guidance within the IATA Airport Development Reference Manual for appropriate consultation between airport planners and stakeholders in the development of requirements for a passenger terminal facility, and therefore accords with best practice"* (emphasis added).<sup>19</sup>

4.2 In addition to meeting all reasonable consultation requirements, the DAA's process went beyond what would have reasonably been required and strove to meet International Best Practice. The DAA's process met and achieved the requirements of other Aviation Authorities' consultation standards.

4.3 As an example of international best practice, if the DAA's consultation is benchmarked against that of BAA, it is clear that the DAA has met international best practice. The UK CAA in its February 2003 decision on 2003-8 price caps at Heathrow, Gatwick and Stansted, set out at Annex 4 of its report the criteria for consultation, which it expected BAA and users to adhere to. The CAA stated that if these criteria were adhered to then the CAA would have no reason to second-guess BAA's CAPEX (Annex 4 is set out in Appendix 9 below):

*"The plan should form the basis of an effective consultation process, designed to provide airport facilities to best meet the needs of future airport users. Within this process, BAA should ensure that the business planning document is provided to, and consulted with, all major users at the individual airports, including low cost and charter operators at each airport. Failure by BAA to produce sufficient information to allow the plan to effectively assume this role, or evidence that BAA has not consulted on the information provided with major users at all airports, or demonstration that BAA has consistently ignored the reasonable requests of users in the consultation process without good reason, and contrary to the interests of airport users generally, could jeopardise the sustainability of the regulatory framework.*

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<sup>19</sup> See paragraph 6.3.4 of the Report.

*The CAA also recognises that for this process to be effective, airlines would need to cooperate in the provision of relevant information on the costs and benefits of projects to them. They would also need to allocate sufficient resources to engage in the process. The CAA considers that it is incumbent on BAA, as the regulated entity, to progress the process via effective consultations in such a way as to ensure airlines can make the necessary contributions”.*

4.4 The DAA clearly met these standards in its consultation process.

- (a) *First*, the consultation process undertaken by the DAA outlined above involved the stages of engagement required by the UK CAA – an opening phase of discussion between airlines and airports on the approach they will take and then a series of meetings and/or consultations at which those charged with taking the work forward pursue the elements of constructive engagement.
- (b) *Second*, the DAA engaged users at the appropriate senior level – consultation attendees at workshops and meetings were generally senior user staff and on occasion – particularly at one-to-one meetings – were attended by board level participants.<sup>20</sup>
- (c) *Third*, the process for negotiation was sufficiently flexible to enable different forms of discussion between airports and airlines, including at different levels of seniority and on both a bi- and multi-lateral basis. Indeed, the DAA was careful to accommodate user consultation requirements by, for example, establishing “focus group” sessions in order to facilitate user input in a non-DAA environment, at the request of airlines.
- (d) *Fourth*, the DAA consultation allowed users to discuss and comment on a range of broad strategic choices – including size, capacity, location and tenants – for T2. The Project Management/Skidmore Owings & Merrill– Dublin Airport Terminal and Piers Development Study, Pascall & Watson’s Capacity Enhancement Recommendation Report for Dublin Airport and ARUP’s Stakeholder Management Report at Appendix B, clearly show the level of detail and variety of options discussed with users throughout the process.

## **5. Genuine User Consultation**

5.1 On the evidence presented to the CAR,<sup>21</sup> it cannot be reasonably said that the consultation carried out by the DAA was not “genuine user consultation”.

- (a) *First*, as the documents clearly show, the DAA – including through its use of expert consultants – went beyond what would be seen to be reasonable user consultation and carried out extensive and detailed discussions with users to ensure that they were engaged and played an important part in the T2 planning process.

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<sup>20</sup> See attendee details set out in ARUP’s Stakeholder Management Report at Appendices A and B.

<sup>21</sup> Both here and in previous submissions sent to CAR.

(b) *Second*, the outputs from the consultation process clearly were taken into account and formed the basis of the Capital Investment Programme. Most fundamentally, the key sizing decision for T2 was taken following significant consultation with the airlines. As mentioned elsewhere, T2 sizing was driven in large part by the expansion plans of Aer Lingus and in particular plans to base a significantly increased number of aircraft at Dublin. It was also following consultation with Aer Lingus and Ryanair about their expansion plans that the DAA was able to finalise its projections for overall airport traffic requirements.

(c) *Third*, at every point during the process, users were invited and encouraged to offer their views and suggestions for the finalised programme. The process outlined above was one of *genuine consultation* where interested parties were clearly engaged and views assessed and accommodated into the final plans.

(i) Much of the design was influenced by actual input from users. Questionnaires were sent out to users as a means of gaining input from them into the planning process – see above;

(ii) The DAA made it clear that the T2 project was dependant on meeting airline capacity requirements and it would be guided by users on what those capacity requirements were. In addition to the questionnaires referred to above, see for example the Minutes of the 1<sup>st</sup> Consultation Event with Airlines & Handlers (24 March 2006):

*“[Q:] Capacity for T2 is 10-15 mil, that’s a huge gap. How will this be resolved?”*

*Response: “This is a key issue that will need to be addressed by the end of Gateway 1. Airline input will be needed to assist in this decision therefore it is vital that you communicate information to us re. business strategy etc. as requested in the questionnaires circulated”.*

(iii) The DAA invited comments at meetings – rather than merely presenting findings to users – for example see the Minutes of the 8<sup>th</sup> Consultation Event with Airlines & Handlers CIP Workshop 2 (21<sup>st</sup> November 2006):

(A) “[Mark Foley] also stated that comments and responses in relation to DAA/CIP04 had been limited in number and he emphasised that [the] **DAA was looking for feedback** and that users could [send] their comments/responses/suggestions to Gabrielle O’Donovan....” (emphasis added).

(B) [Mark Foley] clarified that **the agenda was driven by users**...noted that the nine projects formed the bulk of the spend and the discussion should centre on these projects and their phasing” (emphasis added).

(iv) It is clear that the DAA acted upon the feedback from the consultation.

(v) As stated above, not only did the DAA engage users but it was also keen at every stage to accommodate users process requirements – for example the

airlines requested more informal one-to-one meetings and the DAA responded by establishing “focus group” sessions in order to facilitate user input in a non-DAA environment.

- (d) *Fourth*, the documents recording the process clearly show that users agreed consultation was taking place:
- (i) During a meeting on 27 January 2006, Dick Butler (Aer Lingus) indicated to the DAA that: “Aer Lingus would be taking a positive approach to the **consultation process**”.
  - (ii) During a meeting on 8 April 2006, between Pascall & Watson, Colin Spear of IATA states: “he **welcomed the consultation process** being adopted”.
  - (iii) At the 8<sup>th</sup> Consultation Event with Airlines & Handlers CIP Workshop 2 (21<sup>st</sup> November 2006) – the Minutes record that Ryanair acknowledge that the consultation is occurring, but have chosen to “opt out of the consultation with regard to the proposed second Terminal but were **committed to consultation** on the wider programme” (emphasis added).

5.2 *Fifth*, the questionnaires sent to users, clearly show the level and detail that the DAA was willing to engage in during its three separate consultation periods. In some instances, the DAA received few responses – particularly in relation to the status of the consultation process. A low level of response should not infer that users were in opposition to the process or planning. Rather, it is clear that users who did not respond believed that their views had been accounted for and that the process adequately addressed their needs.

5.3 *Sixth*, the decision on the anchor tenant for T2 was widely consulted on, particularly during the 2<sup>nd</sup> consultation phase with Pascall & Watson (see details provided above). As part of the Capacity Enhancement Study a range of airline configurations across alternative development options were considered (see extract from the Capacity Enhancement Study at Appendix 10). With regard to the expansion of passenger processing capacity in new Terminal facilities, Option A was deemed the most appropriate. The configuration with the two primary carriers, Aer Lingus and Ryanair, at either end permitted both to be able to expand their requirements independently, with facilities optimally suited to their needs. Investigations into potential alternative users for Terminal 2 (as per Option C) revealed that the facility would deliver no significant benefit at the early morning peak and would therefore not alleviate any congestion within Terminal 1; indeed such a configuration would constrain both Ryanair and Aer Lingus. Furthermore the context of Dublin’s traffic is almost unique; it is rare to experience two such disproportionately important carriers sharing such a large proportion of the overall traffic between them – any other anchor tenant would be unfeasible. The resulting recommendation of Option A was chosen following careful consideration of the other options informed by the consultations with the airlines.

## **6. Extent of User Support**

6.1 Under any reasonable analysis of the outcome of the consultation process, it is clear that user support was achieved. Taking some key airlines in turn –

(i) ***Aer Lingus***

6.2 Aer Lingus, as one of the key users was clearly engaged in the process from the commencement of the consultation in 2002. The evidence shows that it engaged with the DAA in the key principles, for example rejecting the CAR's suggestion that it be split between Terminal 1 and T2, as well as providing input into the detail of the finalised programme: for example, Aer Lingus engaged a consultant during the first half of 2006 to work in-house and alongside the DAA's own consultants, Turner & Townsend and ARUP, on the T2 project. This consultant was charged with ensuring that the development of the T2 proposition was in line with the requirements of the Aer Lingus business plan and fully optimised for all airline users of T2.

6.3 In addition, Aer Lingus explicitly shows support for the T2 proposition in its comments on the Pascall & Watson Workshop Presentation on 22 July 2005 in relation to the "New Master Plan for Dublin Airport", received by e-mail on 26 July 2005:<sup>22</sup>

*"In general Aer Lingus is supportive of the proposals".*

(ii) ***Ryanair***

6.4 Ryanair was invited to and attended all the major consultation events from the beginning of the process in 2002. It was given every opportunity to contribute and participate fully in the discussions with the DAA. Ryanair was thus fully engaged in the process and one can only conclude that it has been effectively using the DAA's good-faith consultation process as a means of trying to "hold the DAA to ransom" to try to achieve its own commercial objectives. See for example the comments of Ryanair taken from the minutes of a meeting on 11 April 2006.<sup>23</sup>

*"[David O'Brien] stated...that it was meaningless to be asking Ryanair planning questions on a facility that they wouldn't be using".*

6.5 The attitude of Ryanair to the transparent process of the DAA will inevitably lead to a less than 100% acceptance of the plans. However, this should not have an impact on a process and plan that is agreed amongst the majority of users.

6.6 Further and importantly, Ryanair, the State and the DAA entered into a legally binding agreement whereby Ryanair would not object to the development of T2 at Dublin Airport as per the Government's Aviation Action Plan and Ryanair then expressed support for the development proposals. Any statements by Ryanair to the contrary cannot obscure the fact that it is on record as supporting the proposals and has committed not to challenge them. The DAA will not hesitate to enforce this agreement should Ryanair breach it.

(iii) ***Cityjet***

6.7 Cityjet was clearly engaged in the process from the commencement of the consultation in 2002. The evidence shows that it engaged with the DAA in the key

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<sup>22</sup> Appendix 11.

<sup>23</sup> Attached at Appendix 12.

principles as well as providing input into the detail of the finalised programme. In addition, Cityjet explicitly showed support for the T2 proposition, during a meeting with the DAA on 13 September 2006,<sup>24</sup> where it indicated that it “would be prepared to approach the Regulator in support of the T2 proposition in general”.

*(iv) Continental Airlines*

6.8 As with all airlines, Continental Airlines was consulted on the programme from its inception in 2002. Explicit support for the finalised programme can be evidenced by the minutes of a meeting with the DAA on 14 April 2006,<sup>25</sup> where Continental Airlines indicated that it was “[i]n support of T2...”.

*(v) IATA*

6.9 IATA was a key source of input for the DAA, particularly as it was in a unique position due to its overall representation of the airline industry. Accordingly, the DAA strove to and clearly achieved significant engagement with IATA in the process from the commencement of the consultation in 2002. The evidence shows that it engaged with the DAA on the key principles as well as providing input into the detail of the finalised programme and IATA was in agreement from the beginning:

*“Colin Spears (IATA) noted...that [the] DAA should strive to implement the Master Plan for Dublin Airport”.*<sup>26</sup>

6.10 Further, IATA was clearly happy with the overall process: during a meeting on 8 April 2006 with Pascall & Watson, Colin Spear of IATA states: “he **welcomed the consultation process** being adopted”.

*(vi) Others*

6.11 A whole host of other airlines were engaged and consulted with during the course of the three stages of the process, including Aer Arann, BMI, British Airways, SAS, Delta, Lufthansa, Iberia, Aeroflot, Air Canada, Air Malta, Alitalia, CSA Czech Airlines, Finnair, Flybe and AOC. The CAR should not draw negative inferences from the fact that these airlines did not provide positive support in writing to the finalised programme. What is clear is that they were fully engaged and given every opportunity to comment on and influence the T2 proposals. The fact that these airlines failed to respond to, for example questionnaires, should not be seen as a negative against the DAA’s consultation process.

6.12 Further, there is additional evidence to show user support for the proposals.

(a) *First*, users were engaged in the detail of the finalised programme, which must infer their agreement to it in principle. It is utterly inconceivable that users would

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<sup>24</sup> Attached at Appendix 13.

<sup>25</sup> Attached at Appendix 14.

<sup>26</sup> See Minutes of the 6<sup>th</sup> Consultation Event with Airlines & Handlers dated 28 September 2006. Attached at Appendix 15.

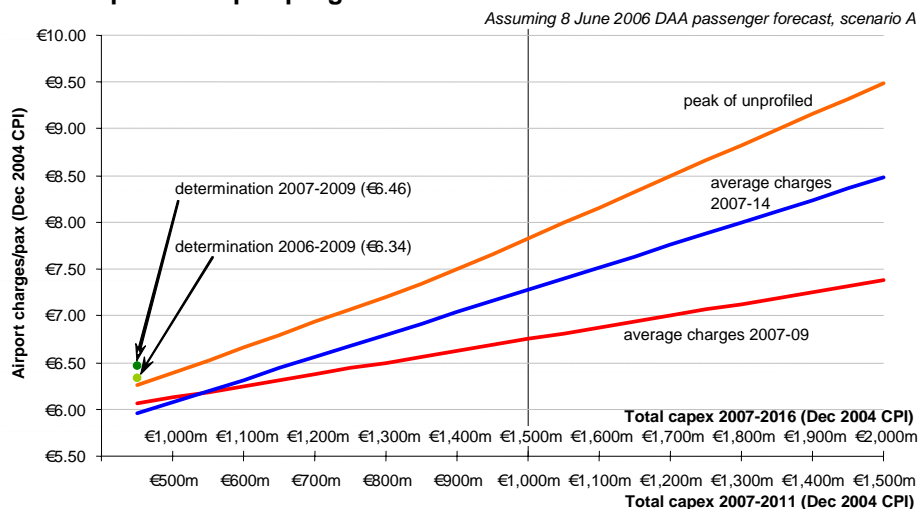
engage in the level of detail shown by the evidence<sup>27</sup> – which details discussions on the minutia of the T2 development – without agreeing to the finalised T2 plan in principle.

- (b) *Second*, user “buy-in” was achieved from the time in which the DAA had drafted and consulted on the Master Plan drawn up in 2002. The evidence shows that users were keen for the DAA to remain close to the “agreed” Master Plan, as stated above: “Colin Spears (IATA) noted ... that [the] DAA should strive to implement the Master Plan for Dublin Airport”. Later consultation and debate on the details of T2 options, clearly shows that the overall principle of the programme was agreed.
- (c) *Third*, users accounting for approximately three quarters of all passengers at Dublin Airport have explicitly supported the proposals and in some cases entered into legally binding arrangements in relation to them. Further, users accounting for much of the balance of passengers were given extensive opportunities to participate actively and chose not to, from which it can be inferred they too do not oppose the proposals (or if they did, their failure to raise concerns at the time means these are effectively time barred).
- (d) *Fourth*, It is also clear that any user concern occurred only after the CAR publicly announced in September 2006 that Dublin Airport’s price cap may need to be as high as €9.50. In a presentation given by Cathal Guiomard: “Interim Price Review – What can the CAR contribute? What can the aviation industry contribute?” dated 11 September 2006, a slide was presented showing potential price cap forecasts.

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<sup>27</sup> See for example see ARUP’s Stakeholder Management Report at Appendix B.

## Price impact of capex programmes



6.13 However, the DAA has been told by users that the CAR indicated at consultation meetings that airport charges could be in the €11-12 range. The DAA believes that the basis of much of the user concern stemmed from such information and related to a misunderstanding of what the CAR intended. It is the DAA's understanding that it appears that it was not made clear to users that the CAR was referring to an outturn unprofiled peak price as compared with the €7.50 submitted by the DAA in its 2004 pre-Determination submission to the CAR. Users have raised concerns, as they believe that potential caps may be as high as €11.00-12.00 per passenger. The DAA itself has always said it needs a charge of only €7.50 (2004 prices).<sup>28</sup> The CAR must take account of the timing of any opposition to the DAA's proposals when assessing the extent of user support. The DAA submits that the limited opposition only arose as a result of a misunderstanding in September 2006 and must be accounted for in that light. The opposition was well after the extensive user consultation referred to above, during which many airlines were supportive or neutral. Any later change in attitude cannot obscure this earlier positive approach.

6.14 Finally, both the business community and the tourism sector have expressed their support for an additional terminal at Dublin airport. Indeed the IATC has already made clear to CAR that "it is essential for the travelling public, for Irish tourism and business generally that the facilities and infrastructure required for the Nation's main airport are

<sup>28</sup> Average charge in real terms over the regulatory period, which represents an approximate increase of €1.50.



put in place effectively, efficiently and absolutely no later than the dates already announced.”<sup>29</sup>

## **7. Conclusion**

7.1 It has been shown above that the DAA followed a world-class consultation process which involved extensive consultation on detailed aspects of the plans with users. This has been recognised by the independent verifier as according with international best practices. It also resulted in significant user buy-in to the 2006 CIP. In this light, CAR should not question the 2006 CIP but ensure that it is appropriately incorporated and remunerated within the RAB.

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<sup>29</sup> See the submission of the IATC to CAR in response to Commission Paper CP6/2006.

### **III. THE NEEDS OF PRESENT AND PROSPECTIVE PASSENGERS AND AIRLINES FOR MORE CAPACITY AT DUBLIN AIRPORT JUSTIFIES THE INVESTMENTS IN THE 2006 CIP**

#### **1. Introduction**

1.1 The overwhelming majority of planned spending in the 2006 CIP (87%) is driven by capacity expansion. This section will show that these projects are justified by the needs of passengers and airlines.

1.2 It will be shown that the forecast of demand was reasonable and done on the basis of reliable methodology and an appropriate range of realistic scenarios. The planning process itself and the use of expert consultants with a strong international reputation ensures that the best alternatives for meeting the overwhelming need for more capacity have been chosen. It will be shown that an appropriate Master Plan has been developed to create a framework to enable demand to be satisfied in an optimal manner; that there was due consideration of alternative locations and designs for T2; that the sequencing of the investments is optimal and in compliance with Government's Aviation Action Plan and finally, that the key projects in the CIP have been subject to independent verification and found to be in line with international best practice.

1.3 On this basis, the investments in the 2006 CIP are justified by the need to expand capacity in line with the Statutory Objectives and the deadlines set by the Government for project completion.

#### **2. The forecasts of demand used by the DAA are reasonable**

##### ***(i) Introduction***

2.1 This section will show that the forecasts followed tested, accepted and reliable methodology, which DAA has used over many years. It will also be shown that the projections for future demand were based on an appropriate range of scenarios. From the forecasts, peak day schedules were derived which were then used to establish the peak hour planning flows.

##### ***(ii) The forecast methodology is reliable***

2.2 The number of passengers in the peak hour (PHP)<sup>30</sup> is the key metric used when developing terminal capacity.

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<sup>30</sup> The peak hour value chosen for capacity design purposes is normally the busiest hour in the 95% busy day in terms of aircraft movements. In 2004, the 95% busy day was Friday 30<sup>th</sup> July. In 2005, the corresponding day was Saturday 30<sup>th</sup> July. Because of the profile differences between Saturday and Friday, it was decided that to avoid any skewing of the capacity requirements in the context of the higher charter activity on Saturday it was preferable to use the previous day (Friday), which had, after all, been the 95% day in the previous year. Since the actual number of movements on this day in future years is still based on applying the busy day ratio to the forecast year, it is immaterial to the outcome. It is worth noting that Ian Rowson has unfortunately misinterpreted the methodology used in his High Level Analysis paper, and we regret that he did not seek to clarify the methodology with us in advance of drawing the conclusions that he did.

2.3 The forecasts used as the basis for the 2006 CIP were derived using a very robust and reliable methodology, and are reasonable when compared with suitable benchmarks. Full details of the methodology underlying the DAA's forecasts of mppa and PHP for use in sizing the 2006 CIP investments can be found in DAPF06/01 and GS07/01 [see Appendix [4]] as well as the presentation on Long Term Passenger and Movement Forecast Methodology submitted to CAR on October 5<sup>th</sup> 2006.

2.4 The key points are as follows.

- (a) The DAA produces annual forecasts of passenger numbers and aircraft movements. The methodology underlying these is very robust and reasonable.

The approach adopted is a combination of statistical and judgemental methods:

Traffic growth projections are constructed based on a consideration of a range of drivers. The most important of these drivers are listed below.

Primary Driver	Secondary Driver
Economic Growth	Exchange Rates
Yield	Fuel prices
	Population and Demographic changes
	Tourism
	Modal Competition
	Market Fragmentation
	Airline Route Mix
	Airline Fleet
	Airport Capacity
	Airline Strategies

Projections are moderated in the short term based on local market knowledge about such issues as planned new routes or frequency/capacity changes. This information is based both on internal market knowledge and on consultation with airlines about their plans.

The DAA's methodology has also been reviewed and endorsed on a number of occasions: in 1999 by SH&E, as part of the Warburg Dillon Read review of the Aer Rianta Strategy for the Minister of Public Enterprise; in 2005 by Mott MacDonald for the CAR, who concluded that the process was "*considered to be appropriate for the purposes for which it is intended and represent the application of "best practice"*"; by consultants hired by Fingal County Council (as part of its review of the DAA plans for building a parallel runway) and in 2006 by ARUP as a preliminary step for its work on the T2 Report.<sup>31</sup>

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<sup>31</sup> See "Preparation and Evaluation of Dublin Airport Traffic Forecast", Mott MacDonald (May 2005), the T2 Report.

- (b) These forecasts of passenger numbers and aircraft movements are used to create peak day planning schedules, from which peak hour planning flows are derived. The DAA's method is robust, and uses all available information.
- (c) From a consideration of the annual aircraft movements profile, and the relationship between the annual movements and the peak day movements in previous years, flights are added to a current year base schedule to create a future peak day schedule for each year of interest or planning horizon.

2.5 Thus from the historical 95% peak day, a future peak day is created, which in turn is used to derive forecasts of peak hour flows using assumptions about load factors on aircraft and the aircraft size.

***(iii) The level of service (LOS) assumptions are in line with international best practice***

2.6 The internationally accepted standard for airport design is to have facilities, which at least provide for a given level of service (LOS). This approach has most recently been endorsed e.g. by the UK's CAA in its December 2006 review of the plans for Stansted Generation 1 Extension and by the independent report from I. Rowson dated 9 February 2007 to the CAR. It is generally regarded that the minimum acceptable industry standard for a new terminal facility is IATA Level of Service standard C, which IATA define as providing: a "good Level of Service (with) conditions of stable flow, acceptable delays and good levels of comfort". Indeed IATA recommends Level of Service C as "the minimum design objective, as it denotes good service at a reasonable cost".

**3. The planning process and the use of expert consultants with a strong international reputation ensures that the best alternatives have been chosen**

***(i) Introduction***

3.1 The constituent projects in the 2006 CIP are the result of an extended planning process, all in the context of maintaining a coherent long-range development plan for Dublin Airport. A long-range plan - over a twenty to thirty year horizon - is vital to ensure that Dublin Airport can expand and evolve with the growth of its traffic. Only in this way can approaches to runways be kept free of inappropriate development, adequate drainage and sewerage services be assured and allowances made for access and public transport, and so on.

3.2 At each step in this planning process the DAA has made high quality decisions by combining its own expertise and in-house knowledge of Dublin Airport with the input of consultants with a strong international reputation in the field, and by following best practice planning and consultation processes which reviewed many alternatives and chose the best. The key elements are described below.

***(ii) The Master Plan***

3.3 During 2002/2003 a consortium comprising Project Management Group (PM), Skidmore Owings Merrill (SOM) and TPS Consult (TPS) developed a Master Plan for Dublin Airport covering specific proposals for Terminal, Pier and Airside facilities. The different options that were considered, and the reasons for the final recommendation, are

documented in “Dublin Airport Terminal and Piers Development Study” (the Master Plan). These recommendations are reliable because they are based on appropriate experience and expertise, extensive consultation, and a thorough review of reasonable alternatives in light of clear assessment criteria.

(a) The consortium was well qualified to develop the Master Plan:

- (i) Project Management Group was established in 1973. Its team of 1,600 highly qualified professionals delivers world-class project and construction management, design and a range of technical and consulting services to clients, including many leading blue-chip companies, in industry, commerce and the public sector. The company has worked on many large-scale, complex, fast-track capital projects and consultancy studies.
- (ii) Skidmore, Owings & Merrill LLP (SOM) is one of the world’s leading architecture, urban design, engineering, and interior architecture firms. Since its founding, SOM has completed more than 10,000 architecture, engineering, and planning projects in more than 50 countries around the world. SOM is responsible for the design and construction of America’s tallest building, the 4,600,000-square-foot, 109-story Sears Tower in Chicago; 100-story, 2.8 million square-foot John Hancock Tower in Chicago; and the 1,000,000-square-foot Bank of America World Headquarters in San Francisco. The firm has had an international reputation for design excellence for over 65 years.
- (iii) TPS is a part of Carillion that is one of today’s leading infrastructure, building and business services companies, with 40,000 employees and an order book worth over £9bn. TPS provides comprehensive consultancy services for a wide range of commercial and public sector clients including Carillion, BAA, Tubelines and the FCO. Key sectors include aviation, defence, education, law and order, roads, rail and regeneration. Its projects include multi-million euro developments including Heathrow T5, GCHQ and Madrid Airport. It employs 500 professionals including civil, structural, geotechnical and building services engineers and architects.

**(iii) *The Gateway Process***

3.4 Building on the recommendations in the Capacity Enhancement Report, the DAA commissioned a range of consultants and engineers to develop the recommendations into specific investment projects, within the DAA’s Capital Project Gateway process. This is a structured process for building key elements of capital investment, which ensures that projects are optimally chosen and delivered to meet well-specified business needs. The process is documented in the “Response to Issues Raised in Letter of 10 May 2006” presented to CAR on 31<sup>st</sup> May 2006.

3.5 The workings of the Gateway process mean that:

- (a) projects must proceed through well defined stages. The key stages are:

Gateway	Stage	Purpose
Gateway 1	Inception	Select the strategic option which best delivers the business need
Gateway 2	Feasibility	Optioneer the best construction solution
Gateway 3	Outline design	Develop the concept
Gateway 4	Detailed design	Detail the integration of systems and components
Gateway 5	Construction	Construct and deliver the new asset to the business

- (b) At each stage the requirements, for example the need to consider reasonable options, are set out in a pro-forma document.
- (c) A clear approval process ensures that a project only progresses to the next stage when the requirements for the current one have been met. The application of the Project Gateway Process is driven by the total project value. Higher value projects have more approval stages, and final approval is delegated to higher authorities within the DAA, as summarised below.

Project size	Approval	G 1	G 2	G 3	G 4	G 5
€75,000 – 500,000	Gateway Committee	√			√	√
€500,001 – 3,000,000	Capital Approvals Committee	√	√		√	√
€ > 3,000,001	DAA Board	√	√	√	√	√

3.6 At the time the 2006 CIP was submitted, different constituent projects were at different stages in the Gateway process. The table below highlights some of the largest constituent projects and summarises information contained in the individual project sheets that were submitted along with the 2006 CIP Report.

Project	Design Stage	Sizing and Design consultants	Report on sizing and design
Terminal 2 Projects	Detailed Design – Gateway 3	ARUP, P&W	Capacity Enhancement Report, G2 Report for T2
Pier D	Construction – Gateway 4	PM and HOK	Capacity Enhancement Report
Aprons and stands	Various	Burks Green	Various
Terminal 1 – Extension	Feasibility (Gateway G2 Complete)	ADPi (Aéroport de Paris International), RPS	Capacity Enhancement Report, G1 Report for T1: “Value Management Workshop Report”.
MSCP Short-term Car-Parking	Master planning- Pre Gateway 1	P&W	2005 CIP report
Customs & Border Protection	Feasibility	Arup, P&W	T2 Report
Car Hire Facilities Eastlands	Gateway 01- Feasibility	White Young Green and Douglas Wallace (D&B solution scheme).	

3.7 The table highlights two Gateway Reports on sizing and design: for T2 and for an extension at terminal 1. A review of these reports confirms the reliability of the process.

- (a) In both cases the consultants appointed by the DAA are very well qualified, with a wealth of relevant experience and international reputations.
  - (i) P&W's credentials are described above.
  - (ii) ARUP is a global firm of engineers, designers and planners established in 1946 and employing more than 7,000 people worldwide. It has 76 permanent offices in 33 countries and it has been involved in major airport projects such as Beijing Capital International, Central Japan International, Terminal 5 Heathrow, Zurich Airport and the JetBlue Terminal at JFK International Airport.
  - (iii) Turner and Townsend (T&T) is a construction and management consultancy with a global network of 50 offices around the world. In the air transport industry, T&T has been involved in major projects such as the expansion of the Sydney International Terminal, the redevelopment of the domestic terminal at Cairns International Airport (Australia), Heathrow Terminal 5 and the domestic terminal expansion at the Johannesburg International Airport, among others.
- (b) The reports document an extensive consultation of stakeholders as described in section II above.
- (c) They also highlight the range of different options considered, and the reasons for the final recommendations.
- (iv) ***The Utilities Master Plan***

3.8 Many of the constituent projects within the 2006 CIP are small projects related to infrastructure and utilities. To ensure a coherent development of the utilities needed to support the expansions in the 2006 CIP, the DAA commissioned Turner & Townsend (T&T) to construct a strategic plan for expanding and upgrading electricity, gas and communications infrastructure at Dublin airport. Their analysis and recommendations are set out in the "Utilities Master Plan" published in May 2006. Their recommendations are reliable because:

- (a) T&T is a company with very strong credentials (see above);
- (b) T&T's recommendations incorporate the views of key internal and external consultants (as described in section III); and
- (c) Their strategic plan is based on a comprehensive review of numerous national, regional and local documents, and options, and benefits from the decision to have all the projects coordinated under a single plan.

(v) **Conclusion**

3.9 In conclusion the recommendations that underpin the key investments in the 2006 CIP are reliable because they are the result of a well managed, extensive and comprehensive planning and consultation process that has drawn on the experience and expertise of the DAA as advised by a range of highly qualified and internationally experienced consultants; been responsive to the views of stakeholders; and been based on an explicit comparison of a range of different options.

**4. The documents set out a clear and well reasoned case that the CIP 2006 projects optimally meet forecast demand**

(i) **Introduction**

4.1 The documents produced during the planning process for the 2006 CIP clearly set out the case that the various constituent projects optimally meet forecast demand. Whilst the CIP document provides details on all projects (120) within the CIP, over 80% of the spending is accounted for by just nine projects, and we focus on these here.<sup>32</sup> The list is:

<b>Project</b>	<b>Cost</b>
Terminal 2, Pier E, Landside Surface Access, Pier E Aprons	€609 million
Other Aprons and Stands	€120 million
Pier D	€113 million
T1 related projects, including T1X	€100 million
Utilities	€50 million
Multi-storey car park	€27 million
Customs and Border Protection	€30 million
Relocation of car hire	€12 million
Retail Refurbishments/ Distribution Centre	€15 million

(ii) **Terminal 2**

4.2 The second terminal, T2, accounts for over half of the forecast spending in the 2006 CIP and consequently it is appropriate to consider Terminal 2 in some detail. The final size, design and cost reflect a series of decisions, each described in the supporting documentation, and each one designed to ensure that the chosen investments are the best ones for meeting the requirements placed on the DAA by the need to meet forecast demand and to meet government and planning requirements.

<sup>32</sup> DAA Capital Investment Programme – 2006 to 2015.



4.3 Below the key decisions underpinning the recommendations for T2 are described in several categories. In the first category is the key issue of the optimal location for the terminal. Next are the other factors that affect the size of T2, including the airlines that will be tenanted there, the phasing and degree of modularity in the way that capacity will be expanded and the type of customer experience that T2 should deliver. The ultimate size of the Terminal is described together with the rationale that defines the initial phase and the forecasting and capacity analyses that underpin these decisions. Finally there is a description of the processes undertaken to ensure that the most appropriate design was selected.

**(a) Location of Terminal 2**

4.4 The single most important conclusion arising from the Capacity Enhancement Recommendation Report was the location of Terminal 2. The previous Master Plan study undertaken by PM/SOM/TPS had suggested two potential locations for a second terminal: to the north or south of the existing terminal and had concluded that the southern location was optimal using quantitative multiple criteria analysis approach. The Capacity Enhancement Plan set out a clear recommendation that the southern location was the most suitable, and this recommendation was subsequently adopted by the Board of the DAA. There were several reasons for the Board's decision:

- The southern location proved to be the best option in terms of strategic long-term planning in that it enabled passenger processing facilities to be provided adjacent to not only the landside surface access systems but also to additional airside facilities with the associated development of Pier F, the future expansion of Pier B and the safeguarded development of a future Pier F. The southern location was the only credible option for providing a mix of wide and narrow body stand capacity, while safeguarding for an efficient terminal configuration, passenger walk distances, etc. In its IPO, Aer Lingus has announced plans to expand its home-based long-haul fleet, indeed to double it. Moreover, with the potential signing of the Open-Skies agreement over the coming years, the demand from long-haul carriers could rise significantly in the coming years. Low-cost carriers will benefit first from Pier D in 2007 – to develop additional passenger processing facilities in a northern location would not address capacity demands across the airport community in a balanced manner. Other reasons militating in favour of the southern option included:
- Proximity to T1 in terms of airside and landside connectivity;
- The opportunity to provide a rational landside access scheme (which would have been difficult with the constraints inherent in the “horseshoe” campus shape at a northern location); and
- The location of substantial existing assets such as maintenance hangars and other airport support facilities at the northern location.

4.5 An important additional factor was the deadlines set by the Government in the AAP, instructing T2 to be opened in 2009 and Pier D in 2007. The southern location had the significant advantage of being much more accessible for construction activities; a significantly more “open” site with far fewer impacts on existing operations and physical assets and consequently was a considerably easier location to develop and deliver by

2009. In addition, the southern alternative would not interfere with the building of Pier D, which made it easier to finish the project in 2007. The Northern location would, by contrast, have posed fundamental, perhaps impossible challenges in reaching the strict timetable in the AAP.

4.6 For these reasons, the Board of the DAA took the rational and cost-efficient choice, both in the short-term and long-term perspective, by choosing the southern location.

**(b) Factors Influencing the Size of Terminal 2**

4.7 Notwithstanding the detailed analysis of the need to meet the specific demand requirements as represented by the forecasts the size of the terminal is conditioned by a number of factors including the tenancy, the service level, and the phased response to capacity demands. These have all been examined in great detail and are explained below.

4.8 **Tenancy** A key decision affecting the demand for and sizing of T2 was the identity of the tenants. The proposed anchor tenant for T2 is Aer Lingus. In addition it is proposed that transatlantic carriers American Airlines, Continental, Delta, US Airways, United Airlines and Air Canada, will be based there; the oneworld alliance carriers British Airways, Finnair, Iberia and Malev; and Cityjet. The reasons for this choice are discussed in the Capacity Enhancement Plan, and again in the T2 Gateway 2 Report.

- (a) The key determinant of the choice of tenants is that T2 (together with Pier E and Pier B) will have capacity to handle significant numbers of wide body aircraft, making it the natural base for airlines with significant long haul traffic.
- (b) That choice dictated Aer Lingus, rather than Ryanair, as the anchor tenant for the new terminal, because of the high proportion of Aer Lingus transatlantic traffic (approximately 60% of all transatlantic traffic) and other long haul routes serving proposed destinations such as Dubai and Cape Town.
- (c) The decisions to have wide body aircraft at T2, and Aer Lingus at T2, logically meant basing other transatlantic carriers there as well, so that US pre-clearance could be provided in one single consolidated facility.
- (d) It is common practice to base alliance/codeshare partners at the same terminal and the oneworld alliance carriers have been based at T2.<sup>33</sup> This is consistent with practice at other airport and indeed the emerging trend for different terminals to be dedicated to different alliances e.g. at London Heathrow (T5 is oneworld, T1 is to be Star and T4 SkyTeam).

4.9 All proposals on tenancy assume that no airline will be required to split its operations between the two terminals. No airport in Europe requires an airline based there to split its operations (except for Heathrow where BA's split between T1 and T4 is about to be ended by the move to T5 which is very much encouraged by BA) for good reason.

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<sup>33</sup> Although subsequent to this work being completed, Aer Lingus announced its decision to withdraw from oneworld this year, it has nevertheless indicated that it will maintain its codeshare arrangements with key oneworld airlines.

4.10 From an airline perspective there is an inevitable, extensive and expensive duplication in operational resource in any split facility. Split operations also limit an airlines capacity to respond to disruptions such as cancelled flights.

4.11 The government requirement that T2 be capable of independent operation emphasises the importance of avoiding split operations: an airline would face enormous difficulties coordinating services across two terminals operated by different companies.

4.12 From a passenger experience perspective split operations would lead to confusion about where to check in, and where their friends and relatives should go to meet them off flights.

4.13 **Service level.** The forecasts of demand for T2 (which depend on choices about which airlines will be tenanted there) are an important driver of its size but other decisions affect size as well. First is the decision about the quality of customer experience the terminal is supposed to deliver. The Capacity Enhancement Report recommended that extensions to capacity at T2 should aim to offer service standards which equate to IATA LOS C. This recommendation was endorsed and adopted in the T2 Report. Not only is this the IATA recommended standard the choice is dictated by the preferences of users.

- (a) The Capacity Enhancement Report recommendation is based on significant user consultation.
- (b) The authors of the T2 Gateway 2 Report endorse the use of LOS C, noting that, in their experience, LOS C is “*generally regarded as the minimum acceptable industry standard for any new facility planning*”.
- (c) The DAA notes in the 2006 CIP Report that this service level “*has been endorsed by the majority of users*”. The record of user opinion on this point can be found in Section III.

(c) ***Ultimate Size of Terminal 2***

4.14 Recommendations about the size of T2 covering both the terminal building itself and the requirements for the associated piers were made by ARUP and P&W, and they set out their reasons in detail in the T2 Gateway 2 Report. In making their recommendations they have used standard industry practice. The analysis proceeds in stages.

4.15 After assessing the potential airside capacity offered by the maximum development of the Southern apron areas, including a future Pier F as identified in the Capacity Enhancement Recommendation Report the ARUP team identified that an ultimate peak hour throughout capacity in order of 5,500 passengers/hour could be possible on that part of the site. Further studies identified that the future build out of the landside surface access systems would also probably be limited at this level of throughput. Beyond that, aircraft stand and surface access constraints were likely to become the constraint for further growth – taking the annual throughput on the eastern site as a whole (including Terminal 1) to around 35mppa in the 2020-2021 timeframe.

(d) ***Initial Phase for Terminal 2***

4.16 Having determined the ultimate capacity of the Southern Apron site, the next key decision was on the appropriate scale of the initial development of Terminal 2 and this is

addressed by reference to planning horizons as described in the T2 Gateway 2 Report. The scale for the initial development is determined, to a large part, by the point at which additional capacity is delivered in a subsequent phase.

4.17 The decision on the appropriate size of the terminal has to reflect the opening demand, how rapidly this demand is expected to grow, and the associated service standards. The terminal size is usually set midway along the demand curve for a specific terminal lifetime, so that for a number of years demand will be below the planning capacity (i.e. there will be a higher level of service than the target), and for a number of years demand will exceed the planning capacity (i.e. there will be a lower level of service than the target).

4.18 If airport capacity were delivered on a “just-in-time” basis, there would be a constant series of relatively small capacity development programmes underway. However, given the complex nature and scale of airport development, this would neither be a practical nor cost-efficient manner of delivering large-scale capacity. Hence a key decision for an airport is how much headroom is required. The available headroom is determined by reference to the forecasts as described in detail below but it is wholly appropriate to ensure that an appropriate window is provided between major construction phases. Given the a likely design and construction duration of between 2 and a half and 3 and a half years for Phase 2 the minimum acceptable period before T2 would require additional operational capacity was deemed to be 2015.

4.19 **Phasing and the degree of modularity.** The recommendations for the initial investment in T2 require a clear understanding of how the phasing and degree of modularity is incorporated into the expansion plans. In the work documented in the T2 Report ARUP adopted an assumption that T2 capacity would be built in (at least) two phases. The capacity built in the initial phase should be sufficiently large that it has a “clear” period of operation of approximately 5 to 7 years before phase two capacity needs to be brought online, depending on how demand evolves. The initial capacity is set to accommodate the projected peak hour demand expected to occur approximately mid way along that period of operation and to satisfy the operating demands of the airlines to be based in the new terminal.

- (a) P&W, in the Capacity Enhancement Report, recommended that T2 should be phased. It also suggested that consideration be given to building a large envelope but not fitting it all out initially.
- (b) In ARUP’s view the 5 to 7 year period strikes the right balance between two factors. If capacity is added in smaller increments then on the one hand there will be less risk that capacity will run ahead of demand; while on the other hand there will be more frequent, costly disruptions to the airport. The cost of adding capacity in many small increments is much higher than when adding it in one go. All construction projects are faced with significant “start up” costs associated with mobilising a wide array of specialists, and setting up facilities for the contracting team. Moreover the inherent aggravation associated with the development of terminal buildings is compounded by the fact that airports are particularly complex building types for two particular reasons. Firstly, airports contain a large number of specialist systems, such as baggage systems, security systems, flight information and data systems. Secondly, there is a plethora of stakeholders present in any typical international terminal, including airlines, handling agents, a variety

of governmental departments, concessionaires etc. Any interaction with such disparate groups is a major undertaking which further serves to discourage, small, frequent developments – the norm is for airport expansions to entail substantial (but appropriately sized) increases in capacity.

- (c) The degree of modularity assumed for T2 is in line with that adopted at other recent airports, notably Stansted and the Gatwick North Terminal.
- (d) A comparatively recent example of a highly acclaimed modular airport development is the London Stansted Airport Terminal building. The initial Terminal building was planned as being capable of being expanded in 36m wide modules. The first phase was opened in 1991 and following a dramatic surge in the growth of low-cost carriers in the late 1990s an extension was added in 2001. The extension was constructed as a 72m wide facility; as this footprint was in excess of what was required at the time areas were left to be “fitted out” at a later date, such as the fifth check-in island. A further 36m wide extension is now planned, in accordance with the original maximum planning permission, with an anticipated delivery in 2009.
- (e) An alternative method of the delivery of capacity in a phased manner is the London Gatwick Airport North Terminal building. At the outset the main terminal building was constructed to its full anticipated extent; when it was first opened in 1988 the envelope of the main terminal building was fully completed but only two thirds of the interior of the building was fitted out and only two thirds of the baggage system was installed”.

(e) *Detailed Capacity Analyses*

4.20 As noted earlier, the fundamental assumption underlying the sizing of airport terminals is the forecast peak hour planning flow. ARUP developed the core peak hour demand profile using the number of based aircraft implicit in the range of peak day schedules provided for each forecast scenario described below. The peak hour planning flow was established by assuming a certain percentage of the based fleet departing in the peak hour, applying an agreed aircraft load factor (85%), growing the peak hour at an agreed rate (4% annually from 2010 to 2016 and then at 3.8% thereafter), taking the average of the peak hour demands so calculated, applying a 5% and 10% tolerance to allow for forecasting uncertainty and then selecting a figure in the mid to upper range. At the midpoint of the initial phase (which allows for the “clear” period of operation of approximately 5 to 7 years referred to earlier), this equates to a peak planning flow of 4,200.

4.21 The other core inputs into the analysis, and described in detail in the T2 Gateway 2 Report were the processing standards, service level agreements and the space requirements per passenger laid out by IATA for different processes (for example check-in queue, baggage reclaim area) that terminal facilities must have to achieve a particular target level of service.

4.22 The various areas of the terminal were then planned to provide sufficient space for passengers at each stage, using various assumptions about how long passengers would wait at each process point, etc.

(f) *The DAA has relied on an appropriate range of forecast scenarios*

4.23 The DAA attempts to create a reasonable and robust set of projections, but it would not be realistic in the context of the level of external factors which may directly impact on them to expect that the numbers will necessarily be accurate. It is for this reason that DAA does not merely consider a single forecast, but examines a range of scenarios as part of its annual forecasting process. Some of these are derived relatively easily, by variation of a single parameter such as GDP, while in some situations it is appropriate to consider more detailed variations, involving differing market shares between major players.

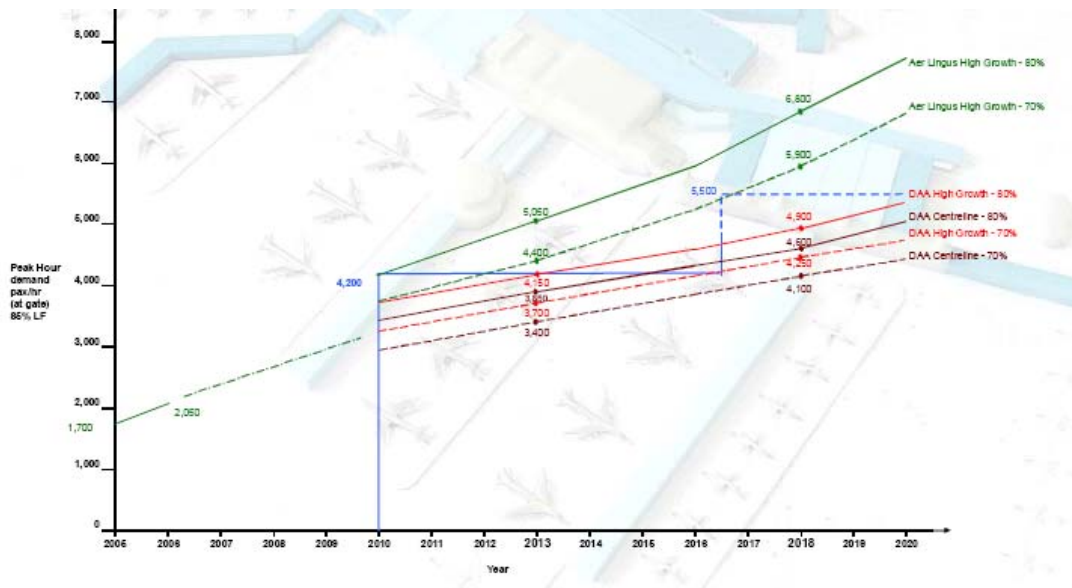
4.24 The sizing exercise for T2 was based on three scenarios, all finalised in April 2006, in the wake of the major expansion plans announced by the home based carriers and which were considered in detail by the DAA:

(a) Centreline scenario. The base case in the most recent official forecast of passenger numbers, aircraft movements, and peak day schedules, is the Centreline scenario. This scenario incorporates the announcement by Ryanair just prior to Christmas 2005 that it would be opening 18 new routes from Dublin in 2006 and basing five new aircraft at Dublin from the start of the summer season.

(b) *DAA HighGrowth (Scenario C) scenario.* Aer Lingus was finalising its growth plans in the context of its impending IPO during consultation on the requirements for T2, and the DAA developed another scenario that took these plans more fully into account. [REDACTED]

(c) *Aer Lingus High Growth Strategy scenario.* [REDACTED]

The Centreline and Scenario C forecasts predict very similar levels of annual passengers airport wide. However, Scenario C gives Aer Lingus a higher market share, largely at the expense of airlines with a smaller presence at Dublin.



4.25 The graph above illustrates the peak hour analyses corresponding to each of the scenarios considered. As can be seen, the sensitivity of this peak hour demand was also assessed against different proportions of the based fleet being utilized in the peak hour (70% and 80%).

4.26 It is worth noting that subsequently another scenario was developed. In August 2006, after the decision on the sizing of T2 for design and planning purposes, Ryanair indicated verbally to DAA that it would probably base an additional five aircraft at Dublin from start of the winter season. An additional five based aircraft would obviously have implications from a stand perspective. Hence a high-Ryanair growth scenario<sup>34</sup> was developed taking this level of new capacity into account, and also incorporating the growth since the completion of the Forecast 2006, which had been somewhat higher than expected.<sup>35</sup> Although this scenario was not used when sizing T2, it was one of the scenarios used later in a review of stand and gating capacity. An annual and peak day schedule was produced in August 2006, based on the tentative information available to DAA at that time. It is worth noting that the information given to DAA in August was not in fact precisely accurate, and less capacity was put in place for the winter season than anticipated at this time.

**(g) The peakiness of the Schedule**

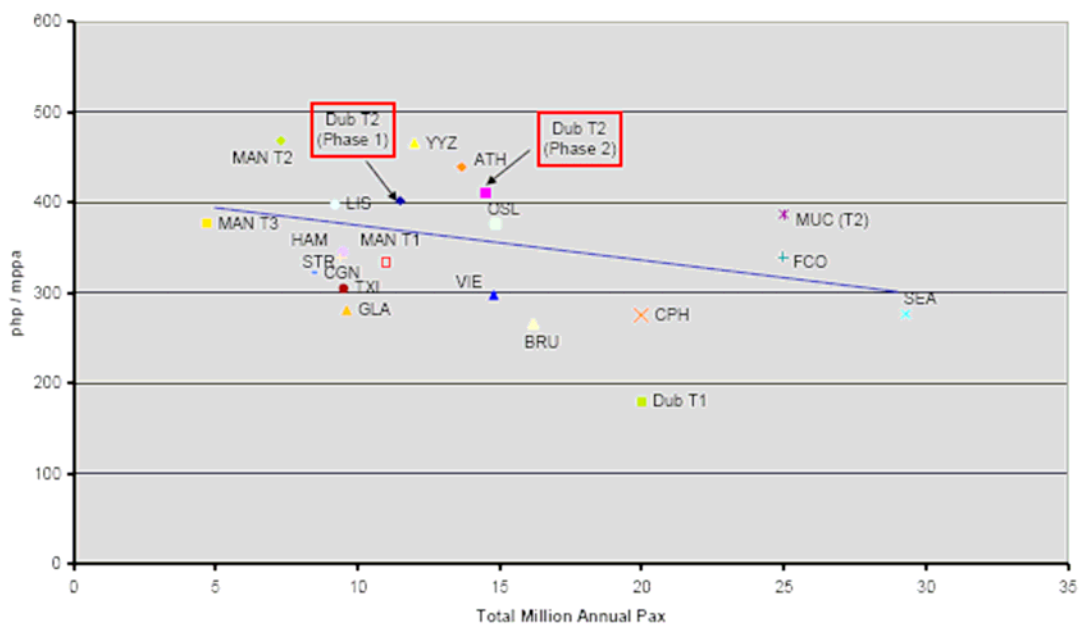
4.27 The peakiness of a schedule can, *inter alia*, be described in terms of the ratio of the passengers in the peak hour compared to the number of annual passengers (in millions): PHP/mppa. Schedules which are peaky have a large number of aircraft departing within a relatively short period of time, and other (off-peak) periods which are less busy.

<sup>34</sup> In this scenario Aer Lingus had a lower market share than in Scenario C.

<sup>35</sup> As the size of T2 had already been determined and designs were already well advanced at this stage (the planning application for T2 was made in late August) the FR + 5 scenario did not feed into the sizing of T2.

4.28 Based on the analysis outlined above and taking in to account what was considered to be an appropriate and reasonable level of headroom, the design peak hour passenger level for T2 has been set at 4,200. As pointed out in the Ian Rowson report to the CAR, the PHP at T2 will be higher than at T1 today. Two key sources of evidence confirm that the DAA’s forecasts of peakiness are reasonable. First, they are in line with figures at comparable airports. Second, they evolve in a reasonable manner as capacity restrictions at Dublin are lifted. These issues are further discussed below.

4.29 COMPARISON WITH OTHER AIRPORTS. Ian Rowson, in his “High-level analysis of DAA’s investment plans” provides a chart comparing the forecast peakiness at Dublin’s T2 with that at other airports in Europe. The chart is based on one provided to the CAR by the DAA in its Dublin Terminal 2 Benchmarking Report, which is reproduced below.



4.30 The chart shows that, based on the design capacity of T2 Phases 1 and 2, peakiness (in terms of the number of passengers processed during the peak hour relative to the airport throughput at Dublin) is broadly in line with that elsewhere in Europe.

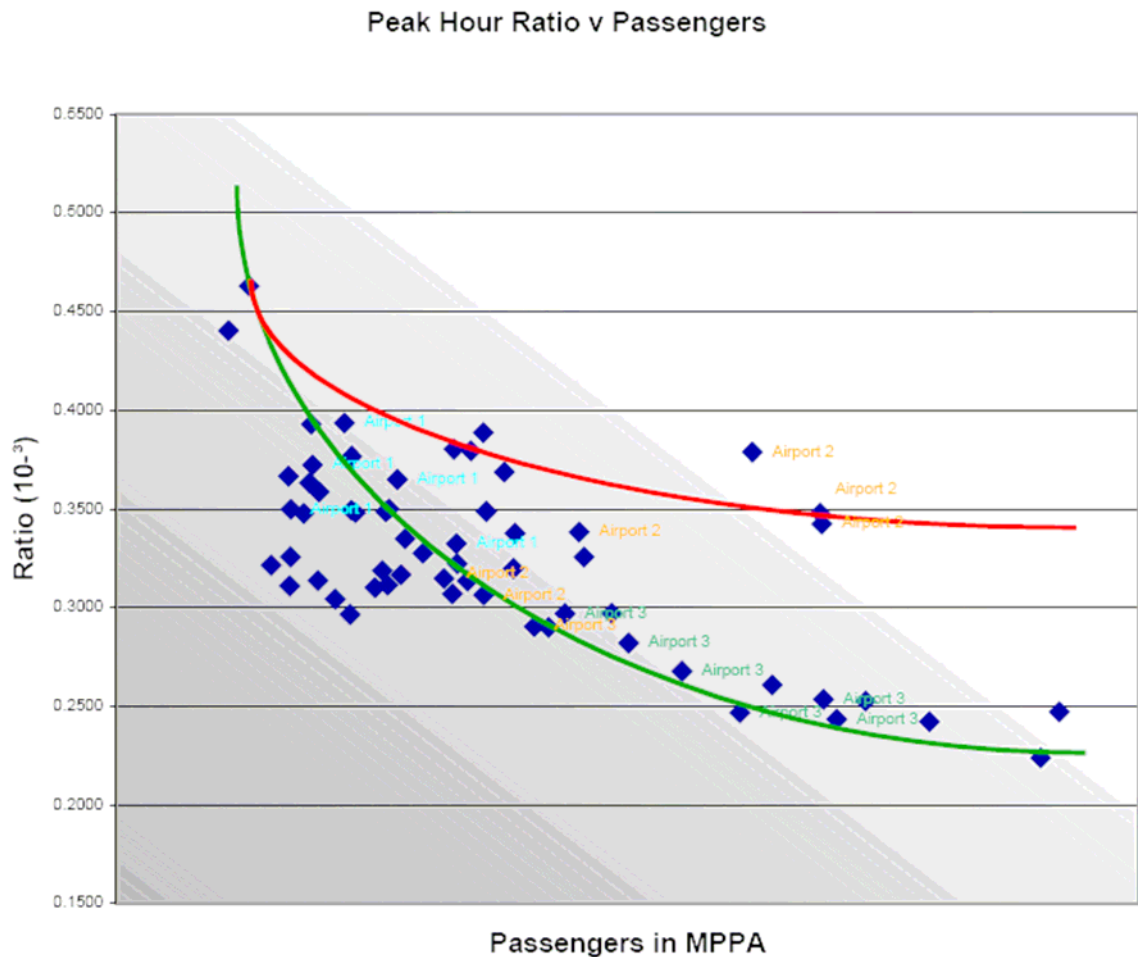
4.31 One of the assumptions underlying the DAA’s high PHP is that Aer Lingus will want to get its fleet airborne early in the morning. This assumption is in line with the behaviour of based airlines at other airports, particularly LCCs, as shown in ARUP’s benchmarking report<sup>36</sup>

4.32 REVIEW OF CAPACITY CONSTRAINTS AT DUBLIN. The second piece of evidence that the peakiness forecasts at Dublin are reasonable comes from a detailed review of the response of airline schedules to capacity constraints at Dublin. The peakiness of an airport’s schedule depends on:

<sup>36</sup> For example, at Stansted Ryanair has 83% of its fleet departing during the busy hour.



- (a) the extent to which aircraft using the airport are based there (or overnight there);
- (b) the importance of the short haul fleet, and of carriers using a low cost model; and
- (c) whether the airport is capacity constrained.



4.33 The graph above illustrates the trend for a series of airports over time. Where no additional capacity is added, the peak-to-annual profile falls, while if capacity is added (e.g. Airport 2) the peak to annual ratio generally increases at the very moment that capacity is introduced, and then begins to fall off again. CAR can verify by reference to material previously supplied on a confidential basis that the airports with the lowest peak to annual ratio include the larger congested airports in Europe.

4.34 In the absence of constraints, the operating profile of many airlines gives rise to a peaky profile at their aircraft home base. This is particularly true of those with a large short haul fleet, and those whose business model depends on keeping costs low. Efficient utilisation of short haul fleets can only be achieved by “loading” the early morning peak, getting the aircraft generating revenue up in the air as soon as possible and permitting the maximum number of rotations per aircraft per day of the airport. It is worth pointing out that as Dublin is on the western fringe of Europe, with the differences in local time from Continental European destinations, the need to get out earlier is greater for Irish airlines than for airlines based in central Europe which also have the option of “gaining time” on

routes leading west. This effectively puts more pressure towards peaking on airlines located in such areas.

4.35 This means that, in the absence of capacity constraints, the schedule at Dublin would be peakier than it currently is, and should be peakier in the future when there is additional capacity available. Aer Lingus and Ryanair both have large home-based fleets; they operate predominantly short haul routes, and (now) pursue a low cost model. As the airport becomes busier over time, the schedule for Terminal 2 would be expected to gradually become flatter and more similar to the profile today.

4.36 Dublin is currently subject to three sources of capacity constraint. All three mean that airlines schedule fewer departures in the busy hour than they might otherwise.

- (a) First, there are airside constraints such as a lack of pier served contact stands.
- (b) Second, there is limited terminal capacity to process passengers. Dublin Airport's coordinator, Airport Coordination Limited has produced information regarding the scheduled demand for the current Summer 2006 season. The estimated number of passengers exceeds the current declared capacity of 3,250 passengers per hour by some 2,000 passengers during peak periods (in excess of 60% over capacity). To help manage this degree of overcrowding the DAA has requested a greater degree of coordination of airline schedules so that it can better spread airline departures over the busy hour. The result will be to place even greater constraints on the peakiness of the schedule at Dublin.
- (c) Third, there is excess demand for departure slots at peak times.

4.37 The result of these constraints is that the peakiness of schedules at Dublin is currently different from those that airlines would choose if the airport was not congested. Since the investments in the 2006 CIP are designed to relieve this congestion, a natural consequence is that the peakiness of forecasts schedules in the future is likely to be higher than current levels particularly during the initial growth phases.

***(h) The approach is in line with best practice***

4.38 As noted above, the methodology used for sizing was found to be in line with best practice by the Government's verification consultants. The relevant conclusion is repeated here for convenience: "The approach to sizing of the terminal and key systems follows very closely the guidance contained in the IATA Airport Development Reference Manual".

4.39 Ian Rowson has confirmed that T2 is appropriately sized to accommodate a PHP of 4,200 passengers.

***(i) There was due consideration of alternative designs for T2***

4.40 The design of T2 was chosen by the DAA following an exhaustive consideration of alternatives to meet the Government's mandate. This section describes the selection process that was carried out and which led to the decision on the current design of T2.

4.41 First of all, as described above, Pascall and Watson considered a range of different options for T2 in their master planning work. This is set out in the Capacity Enhancement Report and described in section III above.

4.42 The DAA retained the services of Arup, Pascall & Watson and Mace to undertake the project management and design of the new terminal, Pier E and associated works who then considered a further range of more detailed options for terminal design.

4.43 The first step in the process was to set out the key project requirements (this was done in March 2006 in the Gateway 1 report). Based on the strategic requirements, alternatives were developed which were then further considered on the basis of more detailed criteria. In accordance with the agreed Gateway process, the Gateway 2 stage led to decisions on the scope and size of the terminal. The objective of Gateway 2 was to prepare a range of functional option concepts for high-level evaluation and the selection of a single concept for further development in the next stage.

4.44 The assessment process evaluated “families” to identify areas where they perform comparatively well or poorly. It was then possible to identify the risk and performance profile of when each option might be preferred. This process also meant that modifications and improvements to the emerging designs could be feed into the next stages of development.

4.45 A total of nine distinct architectural options, several with further sub-options, were developed, and all key variants were presented to users. Following feedback the principal options were evaluated in accordance with the following criteria:

- (a) Operations – Non-airline
  - Terminal operations
  - Airline operations
  - Security
  - Flexibility/adaptability
  - Inter-dependence from Terminal 1
  - Maintainability
  - Baggage handling
- (b) Operations – Airline and Ground Handlers
  - Aircraft turnaround
  - Staffing efficiencies
  - Aircraft servicing
  - Baggage operations
- (c) Operations – Retail & Commercial
  - Deliveries and servicing
  - Access

- Location
- Beta concept
- Waste management
- Property and car parking
- (d) Commercial
  - Capital cost
  - Operational and life cycle costs
  - Asset write-off
  - Retail and concessions revenues
- (e) Customer Service and Staff Experience
  - Travel distances and level changes
  - Wayfinding and legibility
  - Mobility and impaired access
  - Architectural quality/visual impact
  - Staff experience
  - Passenger experience/quality of passenger environment
- (f) Access to Terminal
  - Legibility and wayfinding
  - Resilience and reliability
  - Access to car parking
  - Access to public transport
  - Safety
  - Connections between terminals
- (g) Sustainability and Environmental Issues
  - Public transport accessibility
  - Resource costs
  - Energy use
  - “Green” initiatives
  - Impact on/contribution to surrounding environment
  - Urban design integrity
- (h) Deliverability/Buildability
  - Delivery date
  - Ease of construction/buildability
  - Disruption to existing operations during construction

- Ease of future expansion
- Planning risk
- Construction safety

4.46 In order to ensure that all factors were considered appropriately and equally, a chart was developed against which each option was assessed under the criteria and awarded a score. As the design proposals progressed Options 5, 6 and 7 were developed in greater detail and then assessed. As a result of the evaluation process and comments the key characteristics were refined into Options 8 and 9 which were, in turn, evaluated.

4.47 To ensure the best overall selection, an additional comparative assessment of options 8 and 9 was carried out so that the strengths and weaknesses of each option could be fully explored and a reasoned decision taken. This detailed analysis (as reported in a presentation to the DAA on 28 July 2006 and to CAR on 2 August) revealed that while option 8 performed better than option 9 in terms of airline and non-airline operations and customer services / staff experience, option 9 performed better than option 8 in terms of commercial issues, construction programme, programme risk and disruption to the existing airport passengers and users during construction.

4.48 On balance of the various strengths and weaknesses of each option the DAA authorised option 9 for the following reasons:

- option 9 has the earliest completion date and the shortest critical path and is therefore more likely to allow the DAA to comply with the Government mandate of opening T2 in 2009; and
- option 9 offers the best commercial performance and lowest capital cost.

4.49 As has been demonstrated, a thorough selection process was put in place in advance and all options were measured against the same robust criteria. These criteria were developed by the design and project team (Arup, Mace, P&W and DLPKS) and represent best international practice for the design of such projects. The process, methodology, specification and output from the T2 development process was subject to independent verification by the Government as part of the AAP. The report prepared by the Independent Verifier provided a strong endorsement of the process, methodologies, specification, cost and the overall appropriateness of the T2 proposition.

**(j) Conclusion**

4.50 DAA designed T2 to satisfy the projected number of passengers that will need to be handled during busy hours (“peak hours”) at the minimum acceptable level of service, which the majority of users accepted during the consultation process (see section II above). On this basis the first phase of T2 was dimensioned to handle 4,200 departing passengers during the peak departure hour (DPHP).

4.51 The level of service standards for passengers in T2 is in line with international best practice.

4.52 On this basis the projection for a Phase 1 capacity of 4,200 PHP at T2 with LOS at IATA service level C, is clearly justified. This leads in turn to a scale of 75,000 square meters in T2 which is an appropriate size to accommodate such a PHP.

(iii) **Pier D**

4.53 The Capacity Enhancement Plan identified the Pier D project as a critical early deliverable to meet the urgent need for contact stands at Dublin Airport. Pier D received its planning permission in 2006 and was the only alternative by which the DAA could deliver the project within the 2007 deadline set by the Government.

4.54 Pier D will provide, *inter alia*, gate capacity lost when the existing Pier C is incorporated into the new T2.

- (a) **Number of gates.** Recommendations about the number of gates at Pier D were made in the Capacity Enhancement Report as part of a wide-ranging exercise of planning the optimal way to expand gate capacity at Dublin. The key recommendations from the report are:

	<b>Size</b>	
Pier A (Existing)	11NB + 2WB	circa 200m x 2 levels
Pier B (Existing)	5 WB + 4NB	(Upgraded)
Pier B Extension	3 WB (+) 1NB (-)	circa 200m x 2 levels
Pier D (Phase 1)	15NB (+)	circa 260m x 2 levels
Pier D (Phase 2)	5NB (+)	circa 120m x 2 levels
Pier C Existing	3WB (or 6NB)	Circa 250m long on 2.5 levels
Pier E	2WB (+) 8NB (+)	circa 330m x 2 levels

The Capacity Enhancement Plan was based on the DAA's Forecast 2004 passenger forecasts. As a check on the ability of its plans to meet revised forecasts made during 2006 the DAA commissioned ARUP to provide an airport wide review of gating capacity. This report (Gating Study) was based on a range of forecast scenarios including the original Centreline scenario, and the Ryanair+5 scenario which took account of Ryanair's indication that it would base a further 5 aircraft at Dublin.<sup>37</sup> The Gating Study concluded that the DAA's plans to expand gating capacity were adequate to meet forecast demand under the Centreline scenario, but might fall slightly short under the Ryanair+5 scenario.

- (b) **Size.** The size of Pier D is in line with international benchmarks. More importantly, it is designed for flexible use of narrow and wide body aircraft, the elevated walkway facility is the only proposition that could achieve planning permission given the listed old terminal building being located where it is. More importantly, Pier D in its current design had already achieved planning permission and so it had to be built to the planned size consistent with the planning application as that was the only solution for the DAA to meet the Aviation Action Plan's requirement to deliver a new pier in 2007.

<sup>37</sup> The Ryanair+5 scenario is referred to as the Revised Centreline scenario in the Gating Study.

(iv) ***T1 extension***

4.55 One of the key components in the 2006 CIP is an extension of the existing terminal building (T1). The Terminal 1 extension is designed to improve passenger experience within the airport through increased circulation space and enhanced comfort levels in the main terminal area.

The 7500m<sup>2</sup> extension consists of arrivals and departures facilities on two levels plus a mezzanine, with ancillary support accommodation including additional check in facilities and retail. The mezzanine level will also cater incorporate facilities for food and beverage and toilets with an external terrace area and storage.

The additional retail space created from the extension will generate additional revenues. Overall the DAA expects the T1 extension project to generate a positive return. The T1 extension is programmed to be completed in December 2008 before T2 starts operating.

T1 is at Stage 4 of the Gateway process: planning permission was applied for in January 2007. As part of the procurement process detailed plans have been completed and following conclusion of the second stage tender assessments a preferred contractor will be nominated. A full description of the project specification, and the reasons why this specification is an optimal way to meet forecast demand, is set out in the Gateway 1, 2, 3 and 4 reports for the T1 extension. In summary the key arguments are:

a) Improved passenger experience via:

- De-bottleneck the Departures route from the street
- Linked with the new GNIB facility this will reduce inbound immigration queuing and bottlenecks
- Clear departure and arrival routes
- Additional concourse space – refer to increase in operations provision.
- Improved passenger circulation space and comfort with double height space and views onto the airfield
- Additional airside catering facilities on the departures route
- Airside restaurant/bar with external smoking area on the mezzanine level
- New retail offers
- Additional toilet provisions

B) INCREASE IN OPERATIONS PROVISION:

- Check-in desks increased from 16 to 20 in area 13 + 25%.
- Additional queuing/circulation space between areas 12/13
- Area 12/13 Queue/Circulation Current = 510msq
- Area 12/13 Queue/Circulation New = 1200msq

- Allows for maximising 100% use of check-in desks in area 12 and 13 by removing the inter island queuing arrangement that currently exists. No restrictions on the size of aircraft as the areas no longer back onto each other.
- Due to the additional space and desk numbers in area 13 this will allow for better allocation of the Transatlantic product and associated security pre screening of passengers that is required for American carriers prior to check-in.
- Removes the bottlenecks at each end of check-in areas 12/13 at security and the vertical circulation area at D lifts.
- Increases the declared hourly capacity.

c) Increase in retail provision:

There is an opportunity to provide additional retail space by extending the successful retail street concept incorporating both direct retailing and concession opportunities. This extension will also allow consolidation of the existing direct retailing in Pier A back to the main shopping area. Additional space has been identified as a key driver in terms of both providing the platform for incremental sales growth and to retain capture and penetration levels. At present the overall available retail space in the Airport is low for the number of pax.

The proposed extension to Terminal 1 would, in conjunction with other planned developments, deliver a level of retail capacity that would handle up to 30M+ pax in a cost effective manner. The provision of additional mezzanine level space also addresses existing logistics and support issues around storage and back office support capacity.

This proposal seeks to address these issues by expanding the available retail offer on the Airside and to site it to ensure that it is located in the passenger flows to the new Pier D and reconfigured Pier A. This site also represents the most cost effective area for development in the context of the expected passenger flows in the airport going forward. In addition to the T1 Extension the CIP also includes significant additional expenditure of circa +€50m which includes new facilities such as area 14, amendments to central immigration upgrades and repairs to escalators, carousels lifts and improvements to the Retail offerings and a new Landside Restaurant all of which are described in detail in the CIP.

4.56 The reason for focusing on the retail side during design work is that the extension is unusual because it is expected to bring positive returns, leveraging the commercial which will ensue following the opening of Pier D later in 2007. The costs associated with capacity expansion alone are both small, and needed to support retail revenues. The main cost driver for the T1 extension is the provision of additional retail space, and main factor affecting the return will be the successful design of this space.

(v) Apron and Stands

4.57 This project involves the construction of additional aircraft stand capacity and associated infrastructure. The sizing work was based on the Forecast 2004 passenger forecasts of demand by the DAA, and the rationale is fully set out in Capacity Enhancement Report. As a check on the ability of its plans to meet revised forecasts made during 2006, the DAA commissioned ARUP to provide a review of gating capacity



airport wide. This report (Airportwide Gating) was based on the Scenario C forecast and the Ryanair+5 scenario which took account of Ryanair's announcement that it would base a further 5 aircraft at Dublin.<sup>38</sup> The conclusions drawn from the review were that while capacity was shown to fall slightly short of demand under both scenarios (depending on the year being assessed and the contingency numbers being applied), the proposed plans reflect to the greatest degree possible the optimal expansion within the physical constraints of the airfield.

**(vi) Utilities**

4.58 These projects involve a full range of smaller projects of infrastructure that supports current and future core airport operations. The basis of this major project is the 2006 T&T "Utilities Master Plan", which describes the strategic planning associated with electricity, gas, water and communications. The CIP 2006-2009 individual sheets of the utility projects involved describe in detail the particular needs that these projects are expected to address under completion.

**(vii) Multi-storey Car Park**

4.59 The Capacity Enhancement Report noted that a multi-storey car park would be needed to serve T2, and estimated the necessary size as 1,500 spaces for phase 1. Further planning for the car park is still at a preliminary stage.

**(viii) Customs and Border Protection**

4.60 Planning for customs and border protection is at an advanced stage following extensive consultation with US and Irish Government Authorities. The brief for the facility is as described in the US Customs and Border protection document, January 2006 and the DAA's proposed scheme is awaiting formal sign-off from the US authorities and users. The authors recommend a 4,500 square meters facility able to provide for primary and secondary screening of passengers, secure storage of baggage and retrieval if necessary to support the level 2 passenger screening process. It is estimated that these inspection facilities will be able to handle the screening of all US bound passengers (circa 1,600 pph).

**(ix) Relocation of Car Hire**

4.61 This project is at an advanced stage of development with a grant of planning permission from Fingal County Council expected within a matter of weeks. The project involves the relocation of the car hire facilities at Dublin since the current car hire facilities for six car hire companies are located on a number of discrete sites within the footprint of the proposed new second terminal building and ancillary facilities. The final output of this project is to deliver 1,000 surface space car parking spaces in one consolidated site. The decision to relocate, and the forecast size, is explained in the Capacity Enhancement Report.

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<sup>38</sup> The Ryanair+5 scenario is referred to as the Revised Centreline scenario in the Gating Study.

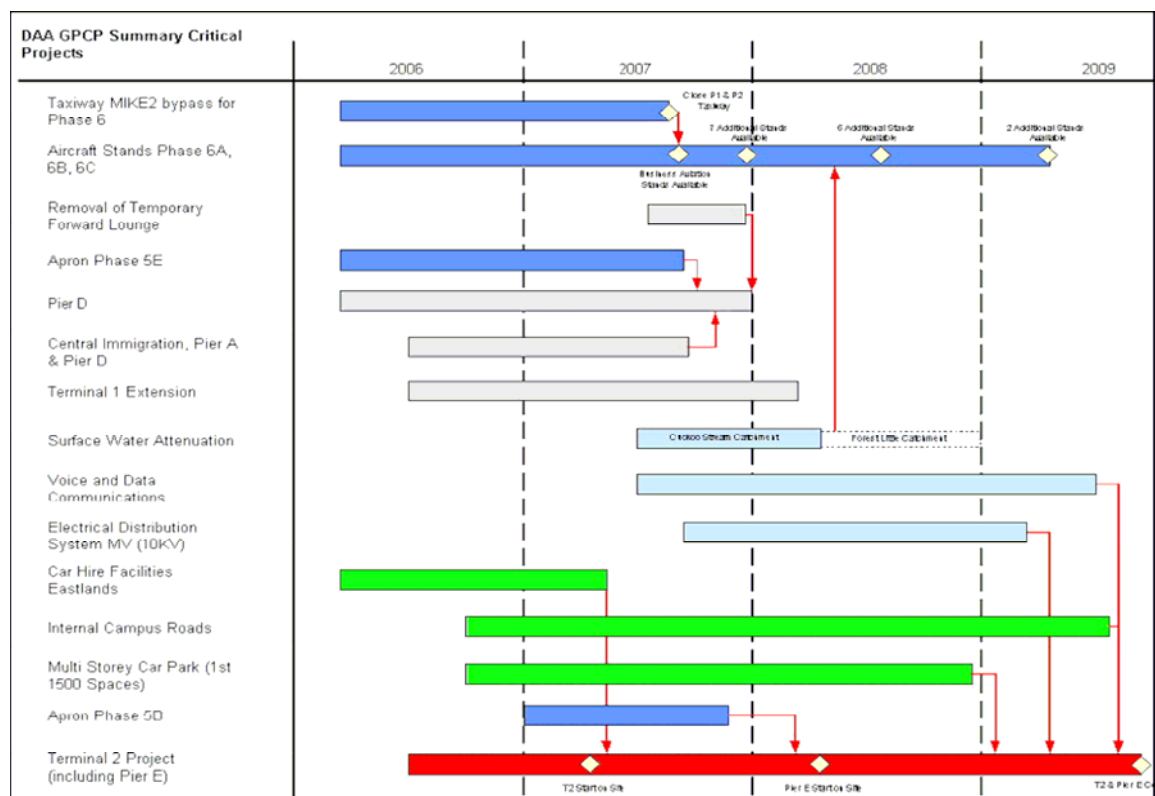
(x) Retail Refurbishments

4.62 This project refers mainly to refurbishment of retail space in the “Street” and Piers A and B of the airport and the construction of a new remote central warehouse and distribution facility for retail activities at Dublin. Details of the project and its rationale are set out in the 2006 CIP Report.

5. The proposed sequencing of the investments is optimal

5.1 The DAA is mandated by the Government to deliver T2 by 2009. In order to ensure that this deadline is met, the DAA has ensured that the work on each component project is phased in such a way to ensure overall delivery. Approximately 80% of the programme, by value, is interconnected and this has impacted on the way in which the individual projects are phased. The DAA has sought to spread expenditure as far as possible however the DAA has also taken the decision not to have a new terminal facility without pier accommodation and this has reduced the possibility of phasing pier delivery.

5.2 The diagram below illustrates the high-level<sup>39</sup> critical path leading to the opening of T2 in 2009. The phasing of the individual projects in this path was initially developed by Pascall and Watson and the DAA in the summer 2005 however this was further developed by Turner & Townsend as part of a detailed assessment of the critical path for the overall programme.



5.3 The main drivers dictating the sequencing of projects leading to the completion of T2 are the interconnectivity of projects and the continued growth in passenger numbers

<sup>39</sup> This high level summary is underpinned by comprehensive and detailed project schedules within DAA’s Primavera toolkit

(which has impacted the sequence for pier construction and consequently the sequencing of replacement apron). In particular:

Link 1: Apron 6 A, B, and C provides stand capacity<sup>72</sup> in order to meet demand. Construction of this facility means that P2 is taken out of operation. The P2 taxiway route to the runway is replaced by M2. M2 must be constructed in advance of Apron 6 A, B, and C.

Link 2: The removal of the temporary forward lounge allows new contact stands on the north side of Pier D to be operated.

Link 3: Apron Phase 5E must be constructed by September 2007 to allow aircraft to sufficient taxiway capacity to taxi around Pier D

Link 4: The Immigration facilities serving Pier A and Pier D must be consolidated into one central facility in order that the immigration service can efficiently process passengers. This project must be complete prior to Pier D becoming operational to ensure there is a segregated route for arriving passengers to the baggage reclaim hall.

Link 5: The first phase of the surface water attenuation scheme provides attenuation to area 6A, B and C. This moves the airport towards compliance with the Fingal County Council local area plan<sup>73</sup>. Surface water attenuation is designed to ensure run off from the airport does not contribute to localised flooding. The scheme also provides limited pollution control.

Link 6: Voice and data infrastructure needs to be upgraded in order to provide capacity to service T2 operations.

Link 7: Electrical distribution network needs to be upgraded to service T2 and to provide a more robust distribution network for the airport.

Link 8: T2 will be located on the site of the current car-hire facilities. Accordingly, it is critical that these car-hire facilities are relocated to a chosen area within the Eastland's Long-term car park.

Link 9: Internal compass road network needs to be upgraded to provide capacity and new routes to service T2.

Link 10: The new multi-storey car park will be constructed to serve passengers using T2 and this must be operational before T2 opens to comply with the FCC planning approval for the project.

Link 11: Apron phase 5D replaces taxiway capacity that is removed by pier E construction and operation.

5.4 In parallel with these capacity enhancements there are a number of projects that must be completed to ensure that the overall airport infrastructure will operate in a cohesive manner. These include replacement of the Airfield Lighting Control equipment, upgrades to the MV Airfield Power Supplies, a Global Surface Water Quality & Quantity Attenuation Facility to ensure that run offs from the new paved areas do not flood or pollute the local streams/rivers, upgrades/replacement of runway centreline lighting and additional taxiway lighting.

## **6. The key elements of the 2006 CIP have been independently verified to be in line with best practice**

6.1 Additional confirmation of the appropriateness of the 2006 CIP comes from independent verification exercises of key elements of the programme. These exercises covered the key recommendations in the Master Plan, and the plans for T2.

6.2 First, the Master Plan has been verified by independent airline experts working for Fingal County Council. This verification was part of the preparation of an Airport Action Plan, published in 2006, for the land within the Designated Airport Area. This will provide the primary planning tool for the consideration by the Local Authority of all future significant planning applications.

6.3 Second, the process, methodology, specification and output from the T2 development process in particular was subject to independent verification by the Government as part of the AAP. The Department of Transport commissioned Boyd Creed and Sweet, who submitted their findings in August 2006. The report provided a strong endorsement of the process, methodologies, specification, cost and the overall appropriateness of the T2 proposition. Key findings include:

- (a) “In terms of design and planning, the DAA and its consultants have elected to use a gateway process; akin to the gateway process advocated by the Office of Government Commerce (OGC) in the UK (an independent office to the Treasury that works with public sector organisations to gain best possible value for money from procurement). One of the principal advantages of the gateway process is that project reviews are carried out by a team of experienced people, independent of the programme/project team. This multi-stage process is used to examine a programme or project at critical stages in its life-cycle to provide assurance that it can progress successfully to the next stage. It is considered best practice with this process to achieve “sign off”, approval or commitment to each gateway stage at board level and with key stakeholders. In addition, the project directors or leaders of the project team should also provide “sign-off”.
- (b) “The approach to sizing of the terminal and key systems follows very closely the guidance contained in the IATA Airport Development Reference Manual. The approach is supported by the interrogation of key operational elements of the terminal against agreed criteria and benchmarks. Moreover, the project team has developed and refined the methodology to understand the likely impact of passenger growth and the relationship between demand and the need for future capital investment”.
- (c) “The approach to consultation follows the guidance within the IATA Airport Development Reference Manual for appropriate consultation between airport planners and stakeholders in the development of requirements for a passenger terminal facility, and therefore accords with best practice”.

## **7. Conclusion**

7.1 It has been shown above that the 2006 CIP was based on appropriate detailed projections prepared by the DAA and its world class team of consultants, that building T2 to accommodate a Phase 1 capacity of PHP of 4,200 passengers is appropriate given the

needs of users (who were consulted extensively in this regard) and the massive increase in home based aircraft and strong growth in long haul traffic in Dublin assuming appropriate terminal facilities can be built. It has also been shown above that the terminal is appropriately sized to accommodate the PHP of 4,200 passengers. Finally, it has also been shown that at all times the DAA followed world-class procedures which (along with the results) have been independently verified on several occasions.

#### **IV. THE COSTS INVOLVED IN BUILDING THE NEW CAPACITY IN THE 2006 CIP HAVE BEEN BENCHMARKED AND INDEPENDENTLY VERIFIED TO BE IN LINE WITH BEST PRACTICE**

##### **1. Introduction**

1.1 The preceding sections have documented the fact that the component projects within the 2006 CIP have been developed and designed in a way that ensures “value for money” in meeting the reasonable needs of present and prospective users of Dublin Airport, in line with the Statutory Objectives. This section confirms two additional points: the estimated costs of the projects in the CIP 2006 are a reliable guide to the likely actual cost, and importantly, these costs have also been benchmarked both internally and independently to be in line with those of similar infrastructure projects in Western Europe.

1.2 It should be noted that following the consultation meeting on the 22nd November held in CAR’s offices, a Benchmarking report was prepared which addressed all the major areas of planned expenditure in the 2006 – 2009 CIP, and issued to CAR in January. The format of the report was agreed with CAR, in particular that the benchmarks would be undertaken at a facility level. Because much of the benchmark data is commercially confidential, and to give CAR increased confidence Turner & Townsend invited CAR to visit their London office where they would be afforded the opportunity to review their full Data Base. DAA also offered to arrange visits to ARUP and DLPKS to similarly review their extensive Data Bases. DAA noted that in particular, DLPKS’s data base was recognised as the most comprehensive within the construction industry and that DLPKS produce a standard pricing manual every year which has a comprehensive industry readership. All three consultants contributed to the report issued to CAR. Despite this unique offer CAR have, to date, ignored this opportunity.

##### **2. The cost benchmarking figure which CAR refers to (€3,500/m<sup>2</sup>) is misleading**

2.1 The key to any data is an appreciation and proper understanding of the data source, scope and relevance and most importantly context. The €3,500/m<sup>2</sup> benchmark to which CAR refer has been extracted from data provided to CAR that was first presented to the airlines at a consultation event on 26 May and again on 23 June. At the meeting in May, DAA clearly articulated to the Airlines, both the nature and the purpose of benchmarking and its commitment to its use. Slides clearly explaining the range of potential cost of the terminal building were presented (copies are attached at Appendix 5. In summary, the slides show the range of option being considered with internal floor areas ranging from 76,750 m<sup>2</sup> to 88,725m<sup>2</sup> and the cost per m<sup>2</sup> ranging from €3,500 to €4,200. This resulted in a cost range for the terminal building, only, of €303m to €351m. To ensure that there was no doubt in the airlines minds, the slide also explicitly excludes the cost of the Pier, demolitions, fees, planning charges, etc. CAR would appear to be quoting this key piece of data out of context and DAA are concerned to ensure that there is no opportunity for misinterpretation of misrepresentation.

- (a) The €3,500/m<sup>2</sup> benchmark, shared with the airlines is base dated first quarter 2005, to inflate for comparison to the same base date as the current Terminal 2 estimate requires an addition of 7.3% (indexed construction inflation), i.e.

€3,755/m<sup>2</sup>. This was illustrated in the benchmarking report previously provided to CAR, but this information does not appear to have been considered in CAR's later consultation document.

- (b) The benchmark refers to the construction cost of the terminal only, as clearly shown on the slides. It does not reflect nor include any allowances for:
- Pier E;
  - Regrading of Aprons;
  - Road improvements serving both terminals;
  - A new energy centre;
  - Kerbs and forecourts;
  - Capital contribution to FCC and Utility companies;
  - Professional fees;
  - Critical enabling works and services diversions; and
  - Abnormal costs relating to risk and contingencies.

i.e. it is a “clean cost” with as many “site specific” costs removed in order that a like-for-like comparison can be made with the benchmarks provided. A simple extrapolation of cost based upon “x” area multiplied by “y” benchmark would be grossly misleading and demonstrate a fundamental misunderstanding of the appropriate use of such statistics.

- (c) Reference to the Terminal 2 cost plan prepared by PKS and included as an appendix to the CIP confirms the indicative benchmark for the terminal. (See pages 2 and 8 of the PKS report), i.e. the cost of the terminal, not including fees, planning contributions, etc., is €310m which compares very favourably with the benchmark data and is at the bottom of the range of potential costs shared by the airlines (€308m-€351m).
- (d) The benchmarking of piers is a separate topic and covered in the separate report already sent to CAR.

2.2 We have previously explained to CAR the benchmarks are only an indicator of costs, not the answer. Blind acceptance of any data of this nature without fully appreciating its provenance could lead to a serious misjudgement of the potential outrun costs. It should also be noted that the benchmark report identified different cost benchmarks for the terminal and pier elements of this project but CAR have combined these in a single figure, which further undermines the manner in which CAR have used these overall benchmarks in the consultation documents.

2.3 It is comforting to note therefore that all the data provided to CAR correlates and confirms the appropriateness and accuracy of the forecast and most significantly all the forecasts have been completely supported by independent third party verification leaving

absolutely no doubts as to the basis, substance or accuracy of the forecasts costs and the benchmarks used.

### **3. The cost estimates are reliable**

3.1 The DAA has taken steps to ensure that its cost estimates are reliable. First it has employed a number of different engineering consultants and quantity surveyors to assist in developing the cost estimates for the 2006 CIP, all of which were well qualified, with access to relevant information about the costs of similar projects. They include the following:

- (a) Burks Green is an architecture and engineering consulting company with a high level of expertise in airport construction projects. The company has worked on projects across the UK and internationally from offices in the East Midlands, UK and Warsaw, Poland. It employs over 200 experts.
- (b) Bruce Shaw Partnership is one of Ireland's leading firms of quantity surveying / cost management providers in the building industry. They provide professional services within the construction industry. Established in the early 1970s, Bruce Shaw Partnership has grown steadily and now has a staff complement in excess of 200 people, with offices in Dublin, Cork, Limerick and Barbados, as well as associated offices in London and Belfast.
- (c) Davis Langdon PKS was founded in 1860. It has developed into Ireland's leading quantity surveying practice. It is in the forefront of developments in the quantity surveying profession and the Irish construction industry. The company is member of Davis Langdon & Seah International - DLSI. DLSI have 2000 staff throughout Europe, the Middle East, Asia, Australia, New Zealand, Canada and the USA. They have worked on major projects in Ireland and abroad.
- (d) Franklin & Andrews is recognised as one of the world's leading Construction Economists. Operating in all sectors of the economy covering property, infrastructure, energy, education, healthcare, utilities and government, the company provides a comprehensive range of commercial management advice and services. Part of the Mott MacDonald Group, Franklin & Andrews has access to know-ledge, experience and resources of over 10,000 staff working in over 100 countries in all aspects of the built environment.
- (e) Turner & Townsend is an international construction and management consultancy. They have 50 offices around the world. The company provides a full range of consultancy services designed to deliver effective solutions for clients in any sphere of private and public sector activity, anywhere in the world.

3.2 Second, where possible the estimates have been based on detailed plans about what will be built, and expert views about what this will cost. In excess of 75% of the CIP has been developed to the extent that it is either at construction stage or has been developed to statutory planning stage. In other words, the proposition has been substantially developed and is supported by either a tender price or a detailed cost plan. The following table lists information taken from the individual CIP project sheets for the large projects listed above. For each one the table shows the Gateway stage of the project, and lists the cost benchmark information that supports the cost estimate in the 2006 CIP.



Project	Design Stage	Cost benchmark
Terminal 2 Projects	Detailed Design – Gateway 3	PKS Cost Plan Costs reviewed by independent consultants appointed by the Government.
Pier D	Construction – Gateway 4	Franklin & Andrews detailed cost plans Tendered Contract- Lump sum price
Aprons and stands	Various	DAA database (and others)
Terminal 1 - Extension	Feasibility (Gateway G2 Complete)	Base construction approx. = € 4,500 per m2 (FAR – 101258)
MSCP Short-term Car-Parking	Master planning- Pre Gateway 1	Bruce Shaw - €7,500-12,000 per space St. Vincent's Hospital - €20,000 per space DCU - €11,870 per space
Customs & Border Protection	Feasibility – Gateway 1	As per Terminal 2 Cost plan
Car Hire Facilities Eastlands	Feasibility - Gateway 1	T&T database DAA database Surface spaces (compacted stone): €1200 per space

3.3 The table shows that the two largest projects, T2 and Pier D, are both quite advanced. In both cases a very detailed cost plan has been drawn up by suitably qualified quantity surveyors (detailed below). In the case of Pier D the cost in the 2006 CIP was known with some certainty because the contract was already awarded on a lump sum basis.

3.4 For the other projects, the cost estimate in the 2006 CIP was based on benchmarks provided by the DAA's consultants, or was based on the DAA's own experience of such projects.

#### **4. Benchmarking exercises show that the cost estimates are in line with best practice**

4.1 Two benchmarking exercises confirm that the cost estimates in the 2006 CIP are in line with best practice: the submission by the DAA to the CAR on 3<sup>rd</sup> January, and the report by the Government's verification experts.

4.2 The report by the Government's verification experts was the result of an independent cost benchmarking exercise commissioned by the Government as part of the AAP. The Department of Transport commissioned Boyd Creed and Sweet to conduct a review of the DAA's specifications and costs for T2, and to set out their findings in an Independent Verifier's Report to verify the specification and cost of Terminal 2.<sup>40</sup> The report concluded that the estimated costs for T2 are within industry norms.

<sup>40</sup> The verification consultants were appointed by the Department of Transport in March 2006.

*“The Gateway 3 estimated cost of Terminal Two on a cost per square metre basis, lies at the mid point range of the UK terminal buildings benchmarking study carried out by the DAA’s team of consultants. The verification team has independently verified the benchmarking exercise and the cost plan and concludes that the estimated cost is within industry norms for this type of project in a European capital city”.*

4.3 Wider confirmation that the costs of the 2006 CIP are in line with reasonable benchmarks was provided by the DAA to the CAR on 3<sup>rd</sup> January 2007 in its “DAA-CIP04 Cost Benchmarking Report”. This was prepared as a response to sections 1(a) and 1(b) and sections 2 of the 1<sup>st</sup> Statutory Information Request. The report sets out the benchmarking of cost in relation to the following projects, which together represent 75% of the total 2006 CIP:

- Taxiway Mike 2
- North Apron Infill
- Aprons 6A, 6B and 6C
- Apron 5A
- Multi Storey Car Park
- Pier D
- Terminal 1 Extension
- Terminal 2

4.4 These projects represent 75% of the total 2006 CIP. In the report the estimated costs of these projects were compared with similar projects from the databases of a range of consultants: Burks Green, Bruce Shaw Partnership, DAA – GPCP, DL/PKS, Franklin & Andrews / PM, and Turner & Townsend.<sup>41</sup> All of these consultants have extensive experience and access to suitable cost information.

4.5 The analysis in the Cost Benchmarking Report confirms that the estimated costs for these projects are in line with those of comparable projects elsewhere.

## **5. Conclusion**

5.1 It has been shown above that the costs inherent in the 2006 CIP have been developed meticulously. They have been verified on several occasions as falling within appropriate international benchmarks. Accordingly, the 2006 CIP should be added to DAA’s RAB in its entirety.

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<sup>41</sup> All of the above consultants have contributed to the benchmark parameters provided in the October 2006 CIP (DAA-CIP04).

## **V. THE INVESTMENTS IN THE 2006 CIP WILL BE EFFICIENTLY DELIVERED (PROCUREMENT, MANAGEMENT AND FINANCING) UNDER BEST PRACTICE PROGRAMS**

### **1. Introduction**

1.1 This section will demonstrate that the investments in the 2006 CIP will be delivered efficiently in line with the Statutory Objectives. The DAA has appointed a Programme Management team of international renown to see through the key projects and will, in addition, apply its Gateway Process, which have been described above.

### **2. The DAA has appointed a Programme Management team of international renown**

2.1 Cognisant of the circumstances surrounding delivering a complex and highly interconnected programme of capital projects in the uniquely challenging environment of an operating airport (which is processing over 21 million passengers per annum), the DAA has appointed a Programme Management team of international renown (Turner and Townsend) with specific, contemporary experience in the delivery of complex transportation solutions to the most exacting standards of time, cost, quality and governance. By combining DAA's in-house expertise and detailed knowledge of Dublin Airport with world class experts in the design and delivery of airport / transportation infrastructure solutions, the DAA believes that it has assembled the necessary capability and competence to deliver what is clearly one of the most pivotal and challenging infrastructure programme facing Ireland in the next 5 years.

2.2 Specifically, this team is deploying, on behalf of DAA, world class proven procedures to ensure rigour and governance throughout the delivery of this programme, with value and risk management as central processes to this objective.

### **3. All projects under the CIP 2006 will be delivered through the Gateway Process**

3.1 All DAA projects under the Capital Investment Programme are being delivered using the Gateway Process, which has been described above. Over the next 10 years Dublin Airport will be undergoing a challenging period of capacity enhancement to meet the increasing needs of a growing passenger throughput. This high profile and substantial investment will be under the continuous scrutiny of the Board of DAA and many other stakeholders, such as passengers, local community, airlines, the Commission for Aviation Regulation and Government.

3.2 A project gateway process has been implemented to support the delivery of the DAA Capital Investment Programme. In order to enable the efficient delivery of such a large scale programme the Gateway process is necessary for the following reasons:

3.3 The DAA Capital Investment Programme is one of the most highly visible and important programmes in DAA's history. Concise and visible gateway management of the individual projects is essential to enable DAA to demonstrate control and provide high level quality assurance;

3.4 There are tight timescales, budgetary and operational constraints. The project gateway process defines execution planning and informs the decision-making process to ensure effective delivery of capital projects;

3.5 There are numerous stakeholders and interdependencies, such as airport Operations, airlines, passengers, the local community and local Council, the Regulator, who all have relevant, but often conflicting, requirements. The process creates an audit trail which demonstrates the management of these stakeholder requirements throughout the delivery of projects.

3.6 The complexity of the programme is such that there is a need to invest in the front end optioneering and option selection process in order to develop an optimal solution. The Gateway model provides a method for progressive approval and release of funding in a structured and standardised manner.

3.7 DAA contends (Ref. Capital Programme – Monthly Statement (Dec06)), that the deployment of the Programme Management methodology in support of efficient and timely delivery of the CIP is demonstrably evident from the performance delivery in year 1 (2006) of the CIP. Highlights include:

- Capital spend at Group level in 2006 = € 147 million (91% of budget)
- Dublin Capital Spend = € 118 million (88% of budget)
- Dublin Capital Spend = € 118 million (100% of CIP)
- Capex contracted / board approved at Dec. 31st 2006 = € 230 million
- Projects on site in 2006 = 20 versus a target of 18
- Projects completed in 2006 = 15 versus a target of 17
- Gateway papers published in 2006 = 104 versus a baseline of 78
- Planning applications lodged in 2006 = 17 versus a target of 18
- Pipeline of approvals / contract awards for 2007 = [REDACTED]
- DAA is on target (as of January 2007) to reach a cumulative up to [REDACTED] of contracted CIP works by end 2007.

#### **4. Conclusion**

4.1 It has been shown above that the DAA is following a world-class programme designed to ensure efficient delivery of the 2006 CIP. The DAA is ahead of most of its performance targets. Accordingly the 2006 CIP has set appropriate targets which the DAA can deliver.

## **VI. FINANCEABILITY**

### **1. Introduction**

1.1 Pursuant to Section 33(1)(c) and as established in section I above, the CAR must in its Interim Determination specifically ensure that the DAA will be able to operate “and develop Dublin Airport in a sustainable and financially viable manner”.

1.2 As also stated in section I above, the single most important imperative is that the DAA delivers the much needed additional capacity at Dublin which is currently sorely lacking. The Government in its Aviation Action Plan insisted on this, in particular by setting extremely tight deadlines for the delivery of a new pier and T2.

1.3 Accordingly the DAA submits that the only solution consistent with CAR’s Statutory Objectives is for it to set DAA’s airport charges taking into account the imperative to deliver the 2006 CIP and thus implement the Aviation Action Plan and that the DAA have sufficient financial headroom to be able to deliver these facilities even in the event of a market downturn or unforeseeable event.

1.4 This would also be consistent with the approach of the UK CAA. Indeed, the CAA has on several occasions stated that it seeks to ensure the airport operator has the necessary headroom, under a variety of adverse stress tests of the market conditions, for the needed capacity to be developed timely in the Southeastern British market, as part of its statutory duty. Its focus is on ensuring that the airport operator will deliver the much needed capacity (at Stansted and Heathrow specifically) even in the event of a market downturn.

1.5 There can be no doubt that there is an overwhelming need for extra capacity at Dublin airport and that the critical imperative behind the CIP 2006 must be to ensure that the much needed capacity will be delivered in 2009 in line with the Government’s decision. This requires CAR to consider a variety of financial and aviation market possibilities and to ensure that the DAA is positioned to deliver the 2006 CIP even if faced with such challenges. These include in particular a short-term market downturn and adverse events in the capital markets which may result in a higher cost of debt in the future. In particular, the CAR should be aware that the cost of debt is currently at almost all time low and it should therefore allow for an increase in the cost of debt in the future.

1.6 The DAA has previously provided CAR with a copy of the financial model underpinning the financial and regulatory analysis of the 2006-09 CIP (Forecast Model 2006-2014.xls, 1,869 KB last saved 050107 14.37). The model shows that if the average charge per passenger in real terms between 2006 and 2009 of c. EUR 7.50, and the average charge per passenger in real terms beyond 2009 is around EUR 8.50 [REDACTED]

1.7 This section will confirm that the 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 CAR should set the DAA’s airport charges at a level to ensure compliance with this ratio/rating.

1.8 Notwithstanding this minimum level, DAA remains of the view that a credit rating of ‘A’ remains appropriate. DAA understands that this is also consistent with the views of government, its shareholder. It should also be noted that at a level of BBB+ or lower, DAA would be the lowest-rated of Government-owned European airports.

1.9 Funds From Operations (“FFO”) is operating cashflows after interest and tax but before capex. It is commonly-used, particularly by S&P, as a measure of the level of free cash generation of a company. The FFO/Debt ratio is used by S&P to compare the debt outstanding against the free cash flow of the company – a high ratio means that it is very likely to have enough cash to pay its debts as they fall due. A low ratio indicates a more highly-stressed company. [REDACTED]

*Graph removed.*

1.10 DAA’s analysis reveals that an average charge per passenger in real terms between 2006 and 2009 of c. €7.50 and c. €8.50 between 2010 and 2014 is the minimum needed [REDACTED]

1.11 A rating of BBB+ is appropriate to aim at as a target minimum rating for a business that will be accessing the capital markets regularly. With a lower rating than BBB+ the DAA will find it more expensive to raise finance in the bond markets because it will have to offer a higher rate of interest to attract investors. If the DAA’s financial ratios are not good enough to support a BBB+ rating, then bank finance would also be more expensive and restrictive. Finally, evidence that regulators generally accept that BBB+ ratings are needed to support efficient capital investment comes from the fact that most regulated companies in the UK have a BBB+ rating or above.

1.12 Evidence from S&P ratings of European airports shows that a FFO/Debt ratio of 15%, with a stable outlook, is the minimum needed to maintain a credit rating of BBB+ for a business such as the DAA. This charge profile is the minimum needed to ensure financeability since the DAA’s business is risky, so that even with this charge profile and prudent management, there is a substantial risk that DAA’s ratios fall below 15%, and its rating falls below the target of BBB+ and closer to the minimum investment grade rating (BBB-) and the start of “junk” ratings (BB+).

1.13 In addition, the DAA's financial analysis assumes that the rate after 2009 will be set at a level which will keep FFO/Debt above 15% in the future. If there was uncertainty about future regulatory commitment to financeability then S&P could choose to reflect this by maintaining DAA's "negative" outlook (even if the rating was also lowered at the same time) making it very difficult for the DAA to raise long-term finance in the current charge period. In fact the CAR will be setting the rate only until 2009, and market expectations about the future will depend on the extent to which the CAR acts now in a way that provides regulatory certainty about the remuneration of capital in the future. Specifically this means that the DAA supports a current charge of c. €7.50 only if the CAR adopts a framework that is consistent in two ways:

- (a) Consistency between the investment choices made the DAA, and the decisions about what investments are allowed in the RAB by the CAR. This is important in order to avoid the unexpected exclusion of capital investments from the RAB after the DAA has become committed to them. This would leave DAA receiving no return on capital invested – specifically external debt capital with an ongoing servicing requirement.
- (b) Consistency in the choice of parameters for use in financial modelling. This is important to make sure that the DAA benefits from the upside, as well as bearing the downside, of changes to conditions, for example passenger forecasts.

1.14 Finally we make a practical observation. The assessment of financeability has to be done on the basis of DAA plc, not on the basis of Dublin Airport. The corporate and financing structure of DAA means that its ability to finance investments at Dublin depends on the performance of the group as whole; although it might be possible to hypothetically work out the ratios for Dublin Airport as a standalone business, this has very limited relevance to DAA's existing banks and bondholders; and in any case it is not clear whether the riskiness of the hypothetical stand alone business would be higher or lower than the group as a whole, given the significant cash receipts from DAA's unregulated businesses in recent years.

1.15 The next sections comment in more detail on each of these points in turn.

## **2. Maintaining FFO/Debt ratios above 15% over the long term is needed to ensure the DAA can finance its investments**

2.1 The 15% lower bound to the FFO/Debt ratio is critical for maintaining the DAA's credit rating at an appropriate target credit rating. Three observations are important.

- (a) Evidence shows that the 15% ratio is likely to be the minimum DAA will require to maintain a credit rating of BBB+ or more.
- (b) The terms on which DAA could raise finance would be adversely affected if its rating was below BBB+.
- (c) Evidence from UK regulated companies confirms that BBB+ at least is the minimum appropriate rating.

*(i) A 15% ratio is needed to support a credit rating of BBB+*

2.2 Credit rating agencies make a careful assessment of business risks and use a broad range of indicators of financial risk, in particular certain financial ratios when assessing the financial risk profile of a company. The CAR noted in CP2/2005 that S&P identified that it focused mainly on two ratios: FFO interest cover and FFO/Debt. As CAR discusses, FFO interest cover for the DAA has been strong for the recent past, largely on the basis of the lower real interest rates that have prevailed in the Euro area. However interest cover is a short-term measurement of credit quality, a point recognised by OFGEM in its review of gas distribution network pricing where the regulator noted: “we have concerns regarding over-reliance on PMICR [Post Maintenance Capex Interest Coverage Ratio] for assessing financeability”. Another concern about interest cover ratios is that they are only a measure of interest service, ignoring any potential repayment of debt over time. Whilst this is acceptable in the short-term, it becomes less relevant in the medium- to long-term. FFO/Debt measures do capture total debt quantum and allow a judgement of the ability of a company to bear this debt. The CAR identified a range of other measures of interest cover in CP2/2005, but since the same concerns apply to these the discussion here will focus on FFO/Debt as the sole reliable indicator of credit quality in the long-term.

2.3 In terms of the actual level of the ratio, CAR noted that “S&P would be looking for evidence that the company should be able to sustain a ratio in excess of 20%” for its current rating of “A”. The threshold for an “A-” or “BBB+” rating should therefore be lower than 20%, although DAA cannot be sure of the exact required level as S&P does not routinely state ratio thresholds for ratings other than the current rating.

2.4 Evidence of the importance of the FFO/Debt ratio and relevant information about a suitable benchmark is provided by a close study of S&P’s ratings evaluations of a range of airports. The full analysis is in Appendix 1. The conclusions, in brief, are:

- (a) FFO/Debt is currently the key ratio when setting credit ratings.
- (b) S&P believes that the direction of the ratios is as important as the current level. This is because ratios are an early warning signal of credit deterioration. If ratios are credibly forecast to improve then S&P might tolerate lower ratios for a short period of time, but usually only if this temporary drop is due to an acquisition or investment. This is shown again by the quotation from CP3 / 2005 p36: S&P indicated its concern about a “sustained pattern”. Therefore a price control that results in a steady deterioration of credit ratio metrics will be a concern to S&P, even if the “average” ratio over any period is above a threshold – this is particularly relevant when a company is moving downwards from a higher ratio / rating. Typically, S&P will only anticipate ratio recovery if this occurs within two years, since any more distant recovery is hard to anticipate with any degree of certainty. A downward trend will also be a potential concern for lenders in the context of the DAA seeking to raise significant sums over the long term to fund the CIP. It is for these reasons that DAA believes it is critically important that the CAR take a view on financeability which looks beyond the end of the current price control period.
- (c) The ratios needed to support a particular credit rating depend on the business risk profile of the company. Suitable businesses with which to compare the DAA are

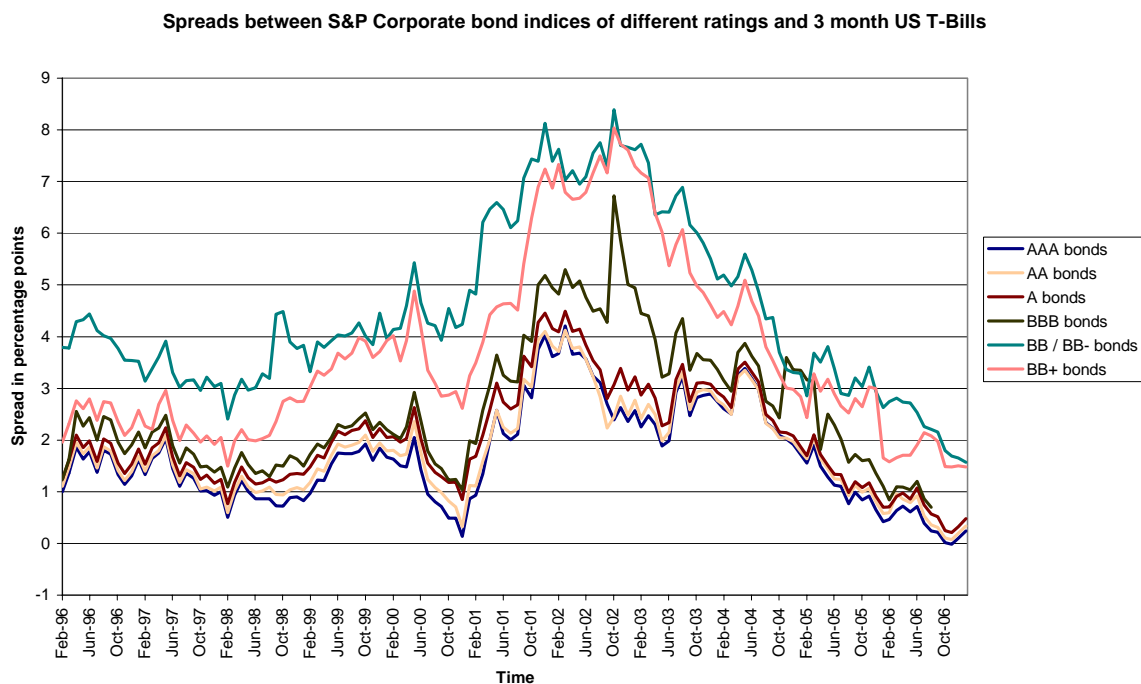


similar airports. Of a sample of airports rated by S&P, Copenhagen and Manchester probably provide the closest comparable for DAA, and these suggest that a minimum ratio of 15% is likely to be required for a “BBB+” rating, which is the lowest target credit rating which would be comfortably within investment grade European airports which have target FFO/Debt ratios lower than 15% either have much stronger business profile (e.g. BAA, due to its competitive position, stable regulatory regime and revenue diversification) or a weaker rating (e.g. Rome) and are not relevant as comparators when assessing the requirements of Dublin.

**(ii) DAA needs a minimum of a BBB+ rating to raise finance at a reasonable cost**

2.5 The reason maintaining a minimum ratio of BBB+ matters is because borrowing can become expensive at lower ratings. The CAR has previously argued that the impact of credit-rating drop below investment grade (i.e. below A- or BBB+) on the cost of funding is not sufficiently significant to create financeability issues for the DAA. The argument appears to rely on the observation that the difference between the spreads of investment-grade bonds and those of speculative-grade bonds has narrowed substantially in recent periods.

2.6 It is true that in recent years there has been a narrowing of differences spreads across ratings, as can be seen in the following chart. This chart shows the “spread” that issuers of bonds must offer in order to attract investors over and above the rate available on 3 month US T-Bills.



2.7 However the chart also shows that there have been prolonged periods when the yield on BBB bonds did not track close to those with higher credit ratings, with the spreads for bonds rated “BBB” or lower being significantly greater than for the higher grades of credit risk over extended periods. For example, during the period from, in particular, late 2001 through until early 2004 the spreads payable on bonds rated BBB

rose very significantly above those with better credit ratings which continued to track closely together over this period.

2.8 Empirical evidence, such as that illustrated above, suggests that the current level and dispersion of spreads is low by reference to the situation over the past ten years as a whole. It appears reasonable to expect that the level of corporate spreads may rise again over the period over which DAA requires to borrow funds to finance the CIP.

2.9 So far we have focused on bond issues and public credit ratings. But the existence of sources of finance that do not strictly require a credit rating, such as bank debt, EIB funding or monoline guarantees, does not mean that companies with poor financial ratios still have access to cheap and appropriate sources of funds. There are a number of reasons for this.

- (a) A public credit rating giving an investment grade rating is a particular source of comfort for lenders, including banks, and companies without this rating are excluded from the largest and most liquid pool of debt, allowing the longest and cheapest source of commercial funding.
- (b) While banks may not require a credit rating as a basis for making loans they will typically wish to undertake their own due diligence or pursue other procedures to form their own credit assessment. This will, of itself, add to the costs of raising funds and can make access to such debt slower than with a bond issue. Banks will often use credit ratings as an external check on their own credit process. Furthermore the bank is likely to reach similar conclusions about the riskiness of a company's finances as the credit rating agencies would have done. If bond investors would need high interest rates to tempt them to invest due to additional risks, banks will also require compensation for the same additional risk.

2.10 In any case bank financing, even if available on reasonable terms, is not always an appropriate way to fund large, long term, investments. Bank finance is characterised by a number of other features which can make it a potentially less attractive source of financing or which do not solve the fundamental problem of having a relatively weak financial position, whether or not this is reflected in a published credit rating:

- (a) Using bank finance would typically imply borrowing with a shorter maturity (typically only 5 to 7 years, as with Bristol Airport and BAA). This shorter maturity of bank loans means that DAA faces the risks of being able to refinance more frequently with the associated costs and the potential impact on the stability in DAA's rating. This may hamper access to the long-term debt market as an alternative or complementary source of funds.
- (b) The use of loans would typically be associated with access to a less diversified funding base. In addition, many banks will have regard to the expected rating of a borrower at the time of maturity and a projection of weak credit ratings would indicate a high refinancing risk and could lead to banks declining to participate. This may adversely affect the availability or pricing of funds.
- (c) The covenants imposed by banks are likely to be more onerous or restrictive than would be the case with a bond issue.

2.11 For completeness we note that Monolines also require an investment grade (often between “BBB” and “BBB+”, as shown by the table in CP3 / 2005 p38). Additionally, as with banks, monoline insurers typically require significant operational restrictions to preserve credit quality, thus making this option less attractive to the DAA.

*(iii) Evidence from regulated companies in the UK confirms that a rating of at least BBB+ is appropriate*

2.12 Further evidence that both a credit rating of at least BBB+ is appropriate, and a FFO/Debt ratio of 15% is appropriate for airports, comes from reviewing the experience of regulation in the UK.

- (a) Commenting on a study they had conducted, OFGEM stated that it would review any situation which showed ratios that resulted in ratings of “BBB” or lower. As OFGEM/ OFWAT discussed, most regulated companies have settled on ratings of “A-” or above. At January 2006, OFWAT/OFGEM found two thirds of regulated energy or water companies in the UK were rated “A-” or higher by S&P. This highlights that the target rating for DAA should be at least “BBB+”, if not “A-”.
- (b) A review of charge determinations for these companies (provided in Appendix 2), shows that regulators have adopted FFO/Debt targets of 10% to 13% for UK regulated utilities. However, as more fully set out in Appendix 2, airports would require higher ratios to support similar ratings because of higher risk: their business is more cyclical, Dublin in particular is embarking on a major capital investment programme compared to its overall asset base, and airports have fewer customers and greater counterparty risk.

### **3. The risks facing DAA’s business mean there is a significant chance that its ratios fall even below 15%**

3.1 The second reason why a charge of c. €7.50 is a minimum is that this charge still leaves the DAA with a substantial probability of having ratios lower than 15%, and with a worse credit rating than BBB+.

3.2 The risk that the DAA has a very poor credit rating matters, particularly when a large debt raising programme is anticipated. When the CAR examined this question in some detail in CP2/2005 and CP3/2005 it concluded that “its SFV objective is reasonably achieved if the company’s financial projections are *robustly* consistent with investment grade ratings” (emphasis added). The CAR indicated that it considers that BBB is an appropriate target credit rating, which we dispute for the reasons given above. But even if the CAR were right, adopting a charge profile which aimed only to give a credit rating of less than BBB+ would not be consistent with the DAA being “robustly” within investment grade ratings. “BBB” for example is very close to the cut-off for “junk bonds” and targeting BBB would mean accepting a high probability that the DAA will fall below that level because DAA faces many downside risks and has few options for mitigating them, either operationally or financially.

3.3 As a preliminary point, note that S&P has concluded that DAA’s business risk profile is “Strong” on the basis of “its dominant competitive position in Ireland, its strong commercial skills, the high level of origin-destination passengers and continued strong passenger growth”. However, S&P note that set against these are the “immature

regulatory regime”, “the very large capital expenditure program over the next 10 years, with uncertainty about regulatory compensation” and a “financial profile that will likely weaken over the next three to five years owing to the large investment program”.

3.4 To set DAA’s business risk profile in the context of European airports, DAA is assessed by S&P as being in the same category as Copenhagen, Manchester, Schiphol and Rome airports. BAA and Aeroports de Paris are all assessed as having stronger business risk profiles, and are graded at “Excellent” due to either the stronger competitive position or (particularly in BAA’s case) greater diversity of revenue. Airports such as Brussels, Birmingham and Newcastle all have weaker business risk profiles at “average”, “adequate” or “satisfactory”.

3.5 More concretely, the DAA faces a wide range of potential shocks. These are detailed in Appendix 3, but the main headings provide an indication of the riskiness of the DAA’s business at a time when it is investing heavily in new capacity.

- (a) Event risks and the difficulties associated with forecasting traffic
- (b) Risk of insufficient capacity to accommodate actual growth in business
- (c) Capital Expenditure Plan Risk
- (d) Risk of excessive construction inflation
- (e) Risks associated with operating costs
- (f) Risk of increased requirements for security measures
- (g) Risks associated with the operating model for Terminal 2
- (h) Pension Cost Risks
- (i) Risks on commercial revenues
- (j) Risk relating to the cost of capital/capital structure risks
- (k) Risks related to the support from and performance of non-regulated business
- (l) Risk due to airport separation

3.6 The aforementioned risks and their implications can be mitigated through certain actions, but only to a limited extent. The most fundamental element of risk mitigation is the extensive work that DAA has put into estimating the variables in its business plan, for example the development of the CIP, including the extensive user consultation, and DAA’s traffic forecasting process. This work has provided DAA with some comfort on the achievability of its financial projections.

3.7 Moreover, the negative impact of the risk factors identified above to the financial health of the company may, in theory, be reduced through a combination of:

- (a) management action, focus or process changes to address the specific issue depending on the circumstances (e.g. recent deployment of additional customer

service personnel to explain the new security regulations for liquids to passengers before arriving at security screening areas);

- (b) compromises to the level of service available (e.g. congestion caused by a risk related to security or the imposition of new regulations); and
- (c) reductions in expenditure in operating areas or capital expenditure (e.g. deferral of specific uncommitted project or programme expenditure), and possible cost pass-through where this is possible.

3.8 However, the potential for further mitigation of the key risk factors depends on the circumstances. Risk factors that are industry-wide and general by their nature cannot be mitigated entirely and are problematic in terms of assessing the scale and timing of any impact on the company.

3.9 It is particularly difficult for the DAA to make changes to the CIP as a means of mitigating the impact of any sustained downward trend in demand growth or the impacts of a severe shock or one-off event. This is because the majority of the CIP is represented by a small number of large projects, many of which are closely interrelated. There is therefore limited scope for cancellation or deferral without very significant implications for the overall costs of the whole programme or the timing of its completion. The scope for changes to the CIP are further reduced by the fact that DAA is likely to have spent or committed approximately █████ of capital expenditure by the end of 2007 and €1.2bn of the CIP will be spent by 2009. Any changes to the plan may require new planning applications which would result in delays as would any decision to defer elements of the CIP (to the extent that this is possible). Any delays or deferrals would lead to a failure to implement the government's Aviation Action Plan and would damage the long-term prospects for its business and the long-term interests of users.

3.10 The DAA's view is that it is imperative that sufficient headroom is allowed in the assessment of financial projections and the allowed price cap to take account of the range and extent of potential risks impacting the business. Otherwise, there is a strong likelihood that if any of these risk factors occurs, it will be impossible for DAA to avoid significant consequent impacts on either levels of service available or on the delivery of required capacity. This is particularly the case over the period of this review due to:

- (a) the high proportion of operating costs that are fixed or semi-fixed and effectively uncontrollable during the period under review;
- (b) the degree to which DAA is reliant on (relatively more risky) commercial revenues; and
- (c) the scale of the capital programme, the timing of capital commitments required to meet delivery timescales, and the interdependence of the projects within the programme.

3.11 Additionally in its previous draft determination, CAR suggested DAA should bolster its financeability through stopping paying dividends and followed this in the final determination by noting that DAA could accommodate performance deteriorations through "a prudent adjustment to the group's dividend policy". Clearly this remains a possible way in which DAA could respond to unforeseen credit stresses but we would

point out that (a) due to legal issues surrounding potential separation, DAA has not paid dividends in 2005 and 2006 and (b) DAA's shareholder has repeatedly stated that it expects to be remunerated for the use of its equity. Finally, such an action can be a response to unforeseen credit shocks only if it is not already built into the base case projections.

#### **4. A higher charge would be needed if there is a lack of regulatory certainty**

4.1 The third reason why the charge of c €7.50 is a minimum for what is needed is that the financial model of the DAA assumes that there is certainty that the charge after 2009 will be set at the level which it is expected will be needed to maintain the FFO/Debt ratios. In practice, investors and market participants will have to form expectations about the likely future charge based on the past and current conduct of the CAR. To ensure the DAA's financeability at a moderate charge the CAR should set a framework that is both consistent, and adopts a long-term planning perspective.

4.2 **Consistency.** The discussion on financeability and on the necessary level of airport charges assumes that any regulatory determination made by the CAR will be based on appropriate levels of costs and commercial revenues for DAA, and in particular that the value of the RAB and the treatment of capital expenditure will be consistent over time. The issue of "financeability" is in large part a matter of how the DAA is perceived by the capital markets. And the consistency of the regulatory framework will have an important bearing on that. There are two important senses in which the framework must be consistent.

- (a) Consistency between the investment choices made the DAA, and the decisions about what investments are allowed in the RAB by the CAR. This is important in order to avoid the unexpected exclusion of capital investments from the RAB after the DAA has become committed to them. The framework should not allow the ex post evaluation of investments once it is too late for the DAA to change its plans. Debt markets expect investments to be RAB-eligible unless there are very clear and widely-accepted reasons why they have been disallowed.
- (b) Consistency in the choice of parameters. This is important to make sure that the DAA benefits from the upside, as well as bearing the downside, of fluctuations in conditions. To give a concrete example of a lack of consistency, the appropriate charge will depend on forecasts of passenger numbers. These forecasts will also affect the size of the DAA's investments. Suppose that passenger forecasts rose after the point at which investments were made. It would be opportunistic to use the subsequent passenger forecasts to set the charge (thereby choosing a lower charge) unless the process guaranteed that the later forecast would also have been used even if forecasts fell (implying a higher charge). This is opportunistic because it means that the CAR is acting in ways that make the DAA bear the downside of certain risks, but not the upside.

4.3 Lack of certainty and consistency would lead to a perception of additional regulatory risk, leading to a higher cost of capital. Part of the success of heavily debt-financed infrastructure in the UK is due to the agreement between regulators and operators on the treatment in the RAB of planned capital expenditure and the understanding that there will be no ex-post revisions to the value of the assets to be remunerated through regulated prices.

4.4 **Long-term perspective.** The second important aspect of the framework is that it should take a long-term perspective. Whilst the period covered by the interim review is limited to the period 2007-09, DAA believes that it is critically important that a longer-term perspective is adopted when the CAR is considering the financeability of the CIP. The DAA is concerned that if a “myopic” view is taken by the CAR to the financeability issue now, at a time when DAA needs to arrange long term finance to fund the development of long life assets, this may prove costly in the long run. It is therefore important that CAR does not consider financeability only in terms of selected ratios and a credit rating over the period from 2007 to 2009, but takes into account fully and explicitly the situation in the period from 2010 to 2014 as this is of key importance to potential funders.

4.5 Any assessment of financeability performed by the financial markets and credit rating agencies will address the capability of DAA to withstand either a shock event or a lower than anticipated rate of demand growth over a longer period and the degree to which the regulatory environment is supportive in those circumstances.

## **5. The assessment of financeability must be done at group level**

5.1 The final point to note on financeability is that, as a practical matter, all analysis of financeability must be done at the level of the consolidated DAA plc group rather than at the level of Dublin Airport. This is a direct consequence of the corporate structure of the DAA. Two facts are key.

- (a) First, the legal entity for Dublin Airport is the DAA plc. The assets of the airport are held directly by DAA plc.
- (b) Second, in the past almost all financing has been effectively raised by DAA plc, and is held at the group level. The only exceptions are debts held by some special finance vehicles that are direct subsidiaries of DAA plc. There are no debt instruments that are tied in any way to the specific assets of Dublin Airport. New debt providers to DAA are likely to require that any new borrowings be raised in a similar manner to ensure that all debt has the same ranking and structural priority.

5.2 The consequence is that lenders considering whether to offer credit to the DAA as well as the DAA’s existing lenders will be unavoidably concerned with the financial performance of the group as a whole. Potential poor performance by any part of DAA plc could affect the likelihood that they are repaid or earn a return, even if the lender is particularly interested in the prospects for investments at Dublin.

5.3 This has implications for financeability in a regulatory context. If the financial performance of the group as a whole is what determines whether lenders will forward funds, and on what terms, then the statutory requirement to ensure that the DAA is able to finance additions to the RAB can only be met by considering the financial performance of the group as a whole.

5.4 It is possible, only as a hypothetical exercise, to estimate the financial ratios for Dublin Airport on a standalone basis through making a theoretical estimate of the debt capacity of the various DAA group businesses. [REDACTED]

[REDACTED] This theoretical exercise must be weighed against the practical issue of financeability and the ability of DAA plc's to service and raise debt.

5.5 Finally, note that even if this difficult exercise were possible, it is not clear what the outcome would be. Had the attempt been made to identify the position of Dublin Airport on a standalone basis several years ago it would probably have revealed that the risk profile, cost of capital and acceptable ratios for any given credit rating would have been lower for Dublin Airport than for the DAA group as a whole. However, currently and prospectively it is not clear that this remains the case given the sale of Great Southern Hotels, the disposal of the stake in Hamburg Airport and the scale of Dublin's CIP. It is therefore possible that the financeability of CIP is now greater on a group basis than it would be if attempted on a standalone basis.

## **6. Conclusion**

6.1 This section has demonstrated that the CAR should set the airport charges at a level where the DAA will be able to maintain FFO/Debts ratios above 15% over the long term and an investment grade of BBB+ as a minimum. These parameters will allow the DAA to finance its major investments under the 2006 CIP in line with Section 33(1)(c) and not unjustifiably jeopardize the delivery of the much needed extra capacity at Dublin Airport in 2009 as mandated by the Government's Aviation Action Plan in line with Section 33(1)(a) and (b).



## APPENDIX 1: S&P ANALYSIS OF DIFFERENT AIRPORTS

### 1. Introduction

(1) S&P undertake ratings for airports worldwide. It is most appropriate to draw evidence from European airports rather than airports in other parts of the world where the business situations and risks differ from those in Europe and hence the relationship between gearing levels, key ratios and credit ratings are not the same. It is for this reason that we consider evidence from European airports in this section. This is consistent with the approach adopted by S&P which has performed its “Peer Comparison” for DAA against BAA, Birmingham, Copenhagen and Manchester airports.<sup>42</sup>

(2) Of the thirteen European airports rated by S&P in October 2006, only three were rated below “BBB+”:<sup>43</sup>

(a) **Aeroporti di Roma at BBB**, which was originally rated “A-” and was steadily downgraded to “BBB” due to credit concerns regarding its regulatory regime and its dependence on Alitalia, highlighting the possibility of downgrade that can occur as a result of regulatory uncertainty and dependence on a financially troubled anchor user if prices are not set at a sufficiently high level to provide a financial buffer;

(b) **London City Airport at “BBB”**, currently rated BBB (although this rating is likely to be withdrawn following its acquisition). The smaller scale of London City’s operations and its heavy dependence on business traffic mean that this is not a valid comparator to Dublin; and

(c) **FML Ltd. (East Line Group) at “B-”**, which runs one of the three Moscow airports. This low rating reflects the situation where “East Line continues to be involved in various litigation concerning privatized and state-owned airport assets”<sup>44</sup>). This is not a situation analogous to Dublin.

(3) It appears to DAA that there are very specific reasons which explain why these three airports have low credit ratings, and that none of these is particularly relevant to the situation at Dublin. This again supports the contention that A or, at a minimum, BBB+ is a sensible target credit rating, allowing some headroom to accommodate unforeseen credit shocks whilst retaining secure access to the investment grade debt markets. We also note that at BBB+, DAA would be the lowest-rated of Government-owned European airports.

(4) As outlined above, the relevant comparable airports are those with a similar business risk assessment by S&P: the relevant airports are discussed below:

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<sup>42</sup> S&P Dublin Airport Authority plc Analyses, February 2006.

<sup>43</sup> S&P: European Airports: Solid Performance Despite Increasing External Risk, October 2006.

<sup>44</sup> S&P: Summary FML Ltd (East Line Group), July 2006.

## **2. Copenhagen Airport: rated “BBB+”/Stable**

(5) S&P assesses the business risk for this airport as strong on the basis of its position as a natural hub for Scandinavia and also its “moderate investment needs”: S&P highlights its “modest and flexible capital-expenditure program”.<sup>45</sup>

(6) For its outlook for Copenhagen Airport, S&P notes “Major industry events causing a consistent passenger volume decline or a significant deterioration in SAS’ operations could pressure the rating, as could a further increase in leverage. FFO to gross debt and FFO to gross interest are likely to improve to about 15% and 4x, respectively, by 2009”.<sup>46</sup>

## **3. Manchester Airport: rated “A”/Stable**

(7) The assessment of Manchester’s business risk as strong is supported by its competitive position and supportive regulatory regime. Set against this is “a significant, albeit reduced, capital expenditure program that will constrain financial flexibility”.<sup>47</sup>

(8) S&P clearly sets out its target ratios for the current “A” rating for Manchester: “the stable outlook reflects our expectation that MAG will maintain its strong business position and keep FFO interest coverage above 4.0x, and FFO to debt greater than 25%”.<sup>48</sup>

## **4. Schiphol: rated “AA-”/Negative outlook**

(9) The key business strengths of Schiphol reflect its strong competitive position, solid aviation, real estate and retail operations, and the supportive regulatory environment. The negative outlook is based on an expectation that Schiphol will be privatised in the next one to three years, leading to a more aggressive capital structure.<sup>49</sup>

(10) S&P’s only disclosed target ratio for Schiphol is a minimum FFO Interest cover of 4x. Its most recent ratios were FFO/Debt at 20.5% and FFO Interest cover at 4.9x. Given the high rating and impact of potential privatisation, we would suggest that Schiphol is not a particularly relevant comparator for the situation of Dublin.

## **5. Aeroporti de Roma: “BBB”/Stable**

(11) S&P highlights Rome’s competitive position, high proportion of O&D passengers and “manageable capital expenditure programme”.<sup>50</sup> It goes on to state: “at the current rating level, we expect the group to improve funds from operations (FFO) gross interest coverage to above 2.5x and adjusted FFO to total debt to more than 10% over the next couple of years”.

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<sup>45</sup> S&P Copenhagen Airport Analysis, December 2006, p. 1-2.

<sup>46</sup> S&P Copenhagen Airport Analysis, December 2006, p. 2.

<sup>47</sup> S&P Manchester Airport Analysis, June 2006, p. 1.

<sup>48</sup> S&P Manchester Airport Analysis, June 2006, p. 2.

<sup>49</sup> S&P NV Luchthaven Schiphol Summary Update, October 2006.

<sup>50</sup> S&P Romulus Finance SARL Research Update, June 2006, p. 1.

(12) S&P's analysis of the situation of AdR supports a target threshold of FFO / Debt ratio for DAA much higher than 10% on a number of grounds:

- (a) Rome is rated "BBB", weaker than we would recommend is appropriate for DAA. This is supported by S&P's assessment of Rome's credit: "These [cash flow protection] measures will likely remain weak in the medium term, limiting the company's ability to withstand prolonged market downturns".<sup>51</sup> DAA believes that allowing DAA to be in such a position would be clearly incompatible with CAR's SFV duty; and
- (b) Rome is not implementing a capital investment programme on an absolute or relative scale which is any way comparable to the transformatory programme envisaged in the CIP. As S&P notes, AdR has "manageable" capex plans.

## **6. Conclusions from European rated airports with "strong" business risk profile**

(13) Copenhagen and Manchester provide the closest comparable for DAA, suggesting that a target minimum ratio of 15% is appropriate for a "BBB+" rating, which is the lowest credit rating which would be comfortably within investment grade. The European airports which have target FFO to debt ratios lower than 15% either have much stronger business profile (e.g. BAA, due to its competitive position, stable regulatory regime and revenue diversification) or a weaker rating (e.g. Rome) and are not relevant as comparators when assessing the requirements of Dublin.

(14) We are aware that some non-European airports appear to be able to support higher levels of gearing despite lower ratings, particularly those in Australia, New Zealand, the US and Canada. DAA does not believe that consideration of such airports is appropriate as their competitive situation differs sharply from that of Dublin Airport. For example, Brisbane is 1,000KM from Sydney and 4,500KM from Perth and therefore faces little competition for international flights and is ensured a significant volume of domestic traffic as road and rail are not realistic substitutes for air travel in most circumstances. In addition, there is a "light-touch" regulatory regime in place: e.g. there is no material regulation of Brisbane's aeronautical charges, despite its strong competitive position as Queensland's major international gateway, enabling it to maintain a rating of "BBB" with FFO/Debt of 8% (which S&P views as "aggressive"<sup>52</sup>). Similar issues arise when considering Sydney or Perth airports. S&P summarise this as "New Zealand and Australian airports are characterized by strong business positions, resulting from their robust market positions and highly reliable operating cash flow profiles".<sup>53</sup>

(15) Similarly, S&P notes in respect of US and Canadian airports that "Corporate capitalization and other credit metrics are not applicable or directly comparable in the analysis of airport entities in the US and Canada. In addition, airport ownership in North America resides primarily with governments (federal in Canada and local, county or not-for-profit authority governance structures in the US), which can offer upward lift to the

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<sup>51</sup> S&P Romulus Finance SARL Research Update, June 2006, p. 1.

<sup>52</sup> S&P Analysis Brisbane International Airport, April 2006.

<sup>53</sup> S&P Analysis Wellington International Airport, December 2006.

ratings based on implied support, as well as direct capital grant funding support as exists in the US".<sup>54</sup>

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<sup>54</sup> S&P Plane And Simple: Key Drivers of Airport Credit Quantity Across the World, October 2006.

## **APPENDIX 2: REVIEW OF REGULATED COMPANIES IN THE UK**

### **1. Introduction**

(1) UK regulators have also considered financeability measures, as CAR discussed in CP3 / 2005 p36. These are outlined below:

- (a) OFWAT determination 2004: Minimum FFO/Debt of 13%<sup>55</sup> ;
- (b) OFGEM Gas and Electricity Transmission Determination December 2006: minimum FFO/Debt of 10%;<sup>56</sup>
- (c) OFGEM Electricity Distribution 2004: Minimum Retained Cash Flow/Debt of 9%.<sup>57</sup>

(2) This has led to specific increases in allowed revenues for all UK water companies in 2004 (average 1% of prices<sup>58</sup>) and for the Scottish electricity distribution and transmission utilities.<sup>59</sup>

(3) An important further observation which has a considerable impact on financeability is the seriousness with which UK regulators take the issue of regulatory commitment and minimising regulatory risk. For example, OFWAT and OFGEM issued a joint paper in February 2006 on Financing Networks; this was followed by submissions from interested parties and an open seminar to discuss the issues. Following this process, OFGEM concluded in October 2006 that:

*“We will, as described above, work to improve the predictability of price controls and communicate these improvements, which should reduce market concern about short-term ratios. In the meantime, we will continue to assess financeability of the price control proposals using current techniques”.*<sup>60</sup>

### **2. How are energy and water companies different from airports?**

(4) Water, gas and electricity distribution and transmission companies are widely regarded as less risky than airport operations. This is supported by the discussion by the UK CAA where it proposed asset betas for Heathrow and Gatwick airports that were

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<sup>55</sup> OFWAT Future Water and Sewerage Charges 2005-10, 2004, p. 233.

<sup>56</sup> OFGEM Transmission Price Control Review: Initial Proposals, 2006, p. 33.

<sup>57</sup> OFGEM Electricity Distribution Price Control, 2004, p. 113. Minimum Retained Cash Flow/Debt of 9%: (Retained Cash Flow (“RCF”) is FFO less dividends, so the ratio of RCF/Debt will naturally be less than FFO/Debt.

For reference, in 2004 OFWAT assumed an RCF/Debt target of 7% (in the same analysis that used a FFO/Debt target of 13%). This indicates OFGEM had an implied FFO/Debt target that was higher than 13%).

<sup>58</sup> CP2/2005, p. 38.

<sup>59</sup> OFGEM Electricity Transmission Price Control Review: Final Proposals, 2006, p. 58 and OFGEM Electricity Distribution Price Control, 2004, p. 114.

<sup>60</sup> OFGEM Open Letter, 27 October 2006, p. 3.

higher than for water and electricity companies.<sup>61</sup> Airport operators are exposed to considerably more risks:

- (a) **Volume risk:** regulated utilities are generally not exposed to significant volume risk: they are paid in part on the basis of connections and face little competition either from alternative infrastructure providers or from alternative means of moving the commodity. Airports on the other hand are exposed to competition – particularly when acting as a hub, but also regarding origin and destination traffic, which can go to other airports, other modes of travel or can choose not to travel at all;
  - (b) **Cyclicality:** airports are more exposed to the wider economy than regulated utilities: not just in the volatility of traffic but also in terms of exposure to airlines (which traditionally have a volatile credit risk due to high operational gearing and overcapacity) and retail revenues: for DAA this is a particular problem, given that 65% of revenues come from non-aeronautical activities;
  - (c) **Capital requirements:** although regulated utilities have undertaken large capex projects, especially in the water sector, these have tended to be a large number of small projects. Airports on the other hand tend to undertake small numbers of large projects, such as a new terminal. CAR recognised some of this point in its previous determination but argued that DAA would be in a position to defer capital expenditure in the event of a downturn<sup>62</sup>. As explained in greater detail above, given the nature of the T2 project and associated works, DAA will have little ability to halt capex, particularly to the extent that it has to commit to contractors in advance of the works being carried out as evidenced by the likelihood of committing circa €900m of its €1.2b CIP by the end of 2007;
  - (d) **Concentration of end users, leading to greater counterparty risk:** unlike water companies, airports typically have exposure to the credit risks of a small number of airlines. DAA is particularly affected by this since together Ryanair and Aer Lingus represent over 66% of traffic. This risk would become even more important for DAA if a merger/takeover were ever to occur.
- (5) On balance, these factors suggest that, whilst regulators have adopted FFO/Debt targets of 10% to 13% for UK regulated utilities; airports would require higher ratios to support similar ratings. This is supported by the evidence for European rated airports which suggests that 15% is an appropriate target minimum ratio for a “strong” airport at “BBB+” with more required to sustain a rating of “A-”.

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<sup>61</sup> Heathrow asset beta of 0.575 to 0.625 and Gatwick Asset beta of 0.64 to 0.71 (CAA Airports Price Control Review, December 2006, p182) and asset betas for water of 0.2 and electricity distribution companies of 0.2 to 0.4 (Europe Economics report for CAA’s initial proposals Supporting Paper XIII – Cost of Capital – estimating separate costs of capital for Heathrow and Gatwick, p. 42).

<sup>62</sup> CP3/2005 p. 36.

## APPENDIX 3: RISKS

### 1. Event risks and the difficulties associated with forecasting traffic

(1) The primary driver in the DAA's planning and financial analysis, aside from the allowed aeronautical charges, is the forecast of traffic volumes which impacts the assessments of aeronautical and non-aeronautical revenues, operating costs and capital costs. Any forecast of traffic is subject to material risks, as illustrated by CAR when it summarised the history of Dublin traffic outcomes against forecasts.<sup>63</sup> despite the recent improvement in traffic volumes, outturn traffic was below the projections made in 2000 in all years from 2000 to 2006.

(2) Demand in the aviation industry is particularly susceptible to changes in economic and political circumstances as well as to major events and shocks, all of which are outside the control of the industry. This has been seen historically by the way that volumes vary according to the state of the economy, particularly on certain routes, the impact on traffic between eastern and western Europe following the enlargement of the EU on 2004 and the impact of events such as the September 11 attacks, the outbreaks of the SARS virus in Asia and political and military events in the Middle East.

(3) When making traffic forecasts it is difficult to take account of the whole range of factors which could impact on demand volumes and hence the revenues, operating costs and financial position of an airport. In particular, it is difficult to take into account factors or potential unforeseeable events or circumstances which may impact on the level or pattern of traffic at any point in time and hence introduce volatility within an overall longer term trend. The risks to which Dublin's forecasts are potentially exposed include:

- (a) macro-economic factors, such as downturns or accelerations in domestic, European and worldwide economic growth, impacting demand from business and leisure travellers to and from Ireland;<sup>64</sup>
- (b) catastrophic events such as renewed terrorist attacks (including the increased security requirements likely to ensue) or a repeat of the Foot and Mouth outbreak;
- (c) one-off events such as major sporting or cultural events that cause a significant short-term change to the volume or pattern of traffic;
- (d) loss of a key customer – Ryanair and Aer Lingus' combined share of more than 66%<sup>65</sup> of Dublin traffic makes this a particular problem for the DAA, and the exit of EasyJet from the Irish market constitutes an example of such an event;
- (e) the potential for consolidation of airline customers – particularly in the context of the DAA the acquisition of Aer Lingus proposed by Ryanair;

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<sup>63</sup> CAR: Industry Presentation on Interim Review, September 2006, slide 9.

<sup>64</sup> There is considerable dependence on Irish market & economic conditions in Ireland, impacting consumer spending and demand for overseas travel.

<sup>65</sup> DAA annual report 2005, p. 12.

- (f) specific risks affecting the airline industry such as changes to fuel costs, environmental taxes, staff disputes and government duties;
- (g) bad debts - the impact of a decline in the credit quality of a major customer can be seen by the material impact on Zurich Airport of the restructuring of SAir Group in 2001;<sup>66</sup>
- (h) cyclical nature of the aviation industry, fuelled by historical overcapacity;
- (i) uncertain implementation process for Open Skies and the impact of this on Dublin/Shannon traffic; and
- (j) the possibility of increased competition from other airports.

(4) This degree of demand volatility marks airports as different to other regulated industries where, for all practical purposes, volumes are fixed regardless of price and are largely less sensitive to changes in economic conditions and unforeseeable or one-off events.

(5) The impact of a significant event or shock may result in one or a number of the following:<sup>67</sup>

- (a) reduction in the rate of volume growth or cause a volume decrease in a particular year or years;
- (b) reduction in commercial revenues generated either as a consequence of lower volumes or propensity to spend or the commercial failure of key customers;
- (c) increase in the operating costs of the airport, such as increased security costs; and
- (d) increase in the cost of capital, if financiers believe that these events demonstrate an increased risk to their capital.

(6) Given the uncertainty of forecasts and the extent to which volumes can vary significantly and rapidly from those forecast in response to unforeseeable events and factors outside DAA's control, DAA believes that extreme care must be taken when seeking to interpret any deviation from forecast. DAA believes that there is a very significant risk of mistaking a short-term acceleration of demand for a long term growth pattern, particularly if such deviations are then extrapolated and then used as the basis for making decisions. DAA is particularly concerned the CAR understands that to do so in the context of the interim review of charges would have the effect of introducing significant asymmetry to the DAA's risk profile since it would effectively capture the key upside into the "base case" leaving DAA facing only the considerable downside risks identified in this paper. Such an approach could potentially jeopardise the financeability of the CIP.

## **2. Risk of insufficient capacity to accommodate actual growth in business**

<sup>66</sup> See e.g. S&P's discussion in its Analysis of Unique Flughafen Zurich AG, April 2003.

<sup>67</sup> It is problematic to model both the immediate impact and recovery period related to a shock event, since by their nature they are unknown and extreme events.



(7) DAA already faces a capacity constraint, giving rise to significant problems with some dimensions of the quality-of-service experienced by users, both airlines and passengers. Apart from the damage that such problems cause to the reputation of the DAA and of Ireland, and their safety and service level implications, there is significant income risk to DAA if capacity is not provided in time to meet market demand. Furthermore, if DAA is unable to fund the capital investment required, other providers may fill the vacuum thereby further weakening DAA's financial profile in the longer term. For example, if the DAA were to be unable to fund the development of a new car park it may become necessary for it to defer investment in this area allowing another operator to generate commercial revenues which would otherwise, under a single till, be used to reduce the level of airport charges. As an alternative, DAA could sell the site for the car park to another operator providing funding for capital expenditure in the short term but eliminating all potential for additional commercial revenues from that site in the future.

### **3. Capital Expenditure Plan Risk**

(8) Any transformatory capital plan increases an organisation's risk of overspending or late delivery of capacity, particularly where there are interdependencies between programme elements. DAA's projected financial position is particularly sensitive to variations in cost outturn or timing of expenditure, particularly given the "lumpy" nature of DAA's CIP. Any significant modifications proposed to the major projects in the CIP could require additional planning approval thereby feeding back into further delays. In addition, lengthy planning timelines or delays to any individual project could jeopardise the ability of Dublin Airport to provide the increased capacity needed to meet the expected demands of users and to implement government policy.

### **4. Risk of excessive construction inflation**

(9) A report prepared by Turner & Townsend, included in the CIP submission (Section 17), has forecast that construction inflation related to Dublin Airport will exceed general CPI. The 2005 price determination does not differentiate between general and construction inflation in computing the price cap. DAA has proposed that this discrepancy be addressed by applying CPI + 2.5% to the capital expenditure forecast used in the determination of airport charges.

### **5. Risks associated with operating costs**

(10) Key operating costs risks to which the DAA is exposed include:

(a) The fixed and semi-fixed nature of the operating cost base (including payroll costs, insurance, rates, energy). For example, DAA plc regulated entity's payroll costs in 2005 represented 41% of total operating costs<sup>68</sup> compared to 20% for Thames Water or 22% for Anglian Water for 2006.<sup>69</sup> It is very difficult for DAA to make significant reductions to its operating costs in the short term in response

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<sup>68</sup> DAA plc Regulated Entity Accounts 2005, p. 7.

<sup>69</sup> Thames Water Utilities Limited regulatory accounts 2006, and Anglian Water Services Limited annual report 2006.

to changes in demand or as a strategy for conserving cash which could be used to meet the funding requirements of the CIP.

- (b) The lack of flexibility in payroll costs in the state sector and impact of national wage agreements. As a result of which it is difficult in the short to medium term for DAA to reduce its costs in this area.
- (c) The largely uncontrollable nature of the main elements of non-payroll costs, such as energy, insurance, rates, regulatory costs means that the scope for savings in these areas is very limited.
- (d) There exists the potential for operating costs to be impacted by unforeseen new regulatory or legislative requirements regarding security (see section 2.6 below); customer service (e.g. passengers with reduced mobility); immigration and border protection; or other areas which arise during the price control period. All such changes are likely to increase costs which have, in the past, not been retrospectively covered by the next price control or recovered through surcharges to customers and therefore have had to be carried by the DAA.

#### **6. Risk of increased requirements for security measures**

(11) Increased requirements for security measures, most recently related to the terrorist threat in the UK in August 2006, have the potential to:

- (a) create additional airport congestion, damaging service quality for users;
- (b) cause increases in security staffing and security accommodation and equipment costs;
- (c) reduce commercial and retail revenues due to the direct impact of restrictions and the impact of congestion and passenger confusion on the nature of the security measures; and
- (d) increase capital expenditures on providing additional security accommodation, floor area or equipment.

(12) The risk faced by DAA is that the CAR does not allow the resulting cost increases to be passed on to consumers immediately or as a result of the next price control review.

#### **7. Risks associated with the operating model for Terminal 2**

(13) The Aviation Action Plan announced by the Minister for Transport in 2005 included provision for an open tender competition to select the operator of T2. This process will be organised by an independent expert panel.

(14) The nature of the future operating model and its commercial terms has therefore not been determined and accordingly it is difficult for DAA to assess the impact of the opening of T2 on its financial position. The current financial projections have been prepared on the basis that DAA will operate the second terminal. Any solution that increases the risk to DAA, either through complex contractual arrangements or through operating income lower than assumed presently, would have a negative impact on DAA.

## 8. Pension Cost Risks

(15)



(16) DAA has committed to entering into discussions with employee representatives regarding pension benefits. These discussions commenced early in 2007. On the question of whether or not additional pension costs will be remunerated in full through airport charges, DAA are cognisant that the Commission's determination signals clearly that it recognises fully the principle that DAA pension costs should be recovered, and that the approach taken in the 2005 determination is, by design, a partial one.

(17)



## 9. Risks on commercial revenues

(18) Over the past ten years, Dublin Airport has developed a highly efficient retail model at Dublin Airport. However, the inclusion of these revenues on an estimated basis within the single-till regime has left DAA highly dependent on commercial revenues, with a very high ratio of commercial revenues to aeronautical revenues relative to other airports.<sup>70</sup> As retail operations are more volatile than aeronautical activity this increases DAA's risk as compared with a situation under which airport charges were set on the basis of a dual till or there were to be a correction when setting future price controls for differences between the actual and forecast level of commercial revenues. This risk has been compounded in previous determinations where CAR has adopted higher levels of commercial revenues in the price determination than were forecast by DAA. To the extent that unrealistic expectations as to the scale of commercial revenues are factored into financial projection prepared by CAR the resulting financial ratios and assessment of financeability will also be over-optimistic.<sup>71</sup>

(19) Revenues across the range of commercial services in Dublin Airport will be impacted by both differences in passenger volumes and the mix/profile of passengers. Commercial revenues may also be impacted by other factors such as increased

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<sup>70</sup> S&P notes that DAA has the lowest level of aeronautical revenues as a proportion of total revenues of all European rated airports resulting in an unbalanced revenue composition, which is a negative rating factor. Commercial revenues represented 65% of total revenues in 2005 compared to the "normal" level of 30% to 40% of revenue (S&P Analyses of DAA, 2 January 2007 and 21 February 2006).

<sup>71</sup> The Aviation Appeal Panel noted in 6.6.4 that "notwithstanding the significant over projection of commercial revenues by the Commission at the time of the previous charge determination, there is no discussion in the current determination of the possible reasons for that particular outcome. In our view, this omission is unlikely to inspire confidence that the Commission's commercial revenue projection on this occasion will be significantly more accurate than in the past".

competition from alternative car park operators; alternative transport options (e.g. metro); and the development of rental property in north county Dublin which might reduce demand for or impact the market rents for airport commercial property.

#### **10. Risk relating to the cost of capital/capital structure risks**

(20) As has been noted by Standard & Poors in its most recent rating of DAA, notwithstanding the forecast growth of traffic volumes and other steps taken by DAA the scale of investment in the 2006 CIP is likely to result in an increased level of gearing. The risks associated with high gearing include:

- (a) credit rating downgrade: capital intensive/infrastructure businesses require an appropriate credit rating to ensure availability of sufficient funding. A downgrade would increase the cost of funding, reduce financial flexibility and the availability of funding or lead to funds being made available only subject to more onerous covenants and other controls which may constrain the DAA's commercial freedom;
- (b) higher cost of financing/capital and of debt replacement (as it matures);
- (c) inability to raise finance/fund when required, leading to a potential credit crunch given the difficulty in deferring the CIP;
- (d) refinancing risk: significant refinancing of existing debt is required in the coming years, especially given that the timing of refinancing requirement is potentially close to the forecast peak borrowing requirement. In addition, a lower credit quality will, other things being equal, reduce the maximum possible maturity of debt, accelerating refinancing risk. For example, high yield bonds are generally limited to a life of 10 years, whereas strong investment grade utilities are able to issue up to 20 years and beyond;
- (e) debt default, which could lead to material value leakage to debt investors through restructuring / rescheduling of debt. In addition, this would also increase future debt costs for DAA;
- (f) indirect impact of high gearing on business trade terms, as counterparties require more assurance on credit quality e.g. through indemnities and / or cash collateral;
- (g) insolvency - due to inadequate interest cover (as occurred with the UK NATS), which could have a material impact on a major infrastructure facility for Dublin.

(21) In the context of gearing we note the recently expressed views of the UK Civil Aviation Authority ("CAA") on gearing in the context of its initial proposals for BAA's prices over the next quinquennium. The CAA has stated that a high level of gearing:

*“would not be in users' interests, as it would effectively transfer financing risk from the company to its users (who, having shared in the financial upside of the*

*arrangements, might therefore be expected to share in any accompanying downside)*".<sup>72</sup>

(22) CAA, whilst deciding that it would not make an adjustment for financeability, assumed gearing levels for BAA of 60% of capital compared to the expected levels under Ferrovial's structure of more than 80%.

**11. Risks related to the support from and performance of non-regulated business**

(23) DAA's assesses the financeability of the CIP on a group-wide basis and this is supported by contributions to the regulated business by the non-regulated business. This is consistent with the basis on which DAA has in the past raised funds and the basis on which the DAA is assessed by the capital markets. It should be noted that the non-regulated businesses are now in a very different position compared to the time of the previous determination. Proceeds from the sale of Great Southern Hotels in particular have boosted the credit profile of the whole group, aiding financeability of the CIP at Dublin airport. To the extent that the non-regulated businesses underperform DAA's expectations then this could have an impact of financeability at a group level.

**12. Risk due to airport separation**

(24) The State Airports Act 2004 provides for the separation of Dublin, Cork and Shannon airports.

[REDACTED]

(25) [REDACTED]

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<sup>72</sup> CAA "Airports Price Control Review – Heathrow, Gatwick and Stansted", December 2006, p. 179.

## **APPENDIX 4: FORECASTING METHODOLOGY**

(1) Forecasting is, by definition, an inexact science. Irrespective of the efforts devoted to preparation of robust estimates, exogenous factors can suddenly and significantly alter the operating environment overnight. Although we are aware of the key factors which generally affect traffic growth, in many cases the precise trend of these factors is unclear, or the rate of change uncertain. Hence it is necessary to accept that with all forecasts, there is inherent uncertainty. The forecaster must accept this uncertainty, and with the use of a robust methodology and sound reasoning limit the range of uncertainty over the medium and long term. We attempt to create a reasonable and robust set of projections, but it would not be realistic in the context of the level of external factors, which may directly impact on them to expect that the numbers will necessarily be accurate.

(2) It is for this reason that DAA does not merely consider a single forecast, but examines a range of scenarios as part of its annual forecasting process. Some of these are derived relatively easily, by variation of a single parameter such as GDP, while in some situations it is appropriate to consider more detailed variations, involving differing market shares between major players.

(3) 2006 was an unusual year for Dublin Airport, both in that it was a year when important decisions regarding capacity development were undertaken by DAA, and also a year in which significant changes were made by some of the key airlines based at the airport, some at short notice. For this reason, an unusually large number and variety of forecast scenarios were drawn up.

(4) The methodology used in the development of the annual passenger forecasts is described in detail in the forecast report, which for 2006 was DAPF06/01 (presented previously to CAR). In addition, CAR has previously commissioned Mott MacDonald to review this process, and its review considered it to represent the application of “best practice”.<sup>73</sup> More recently, consultants hired by Fingal County Council (as part of its review of the DAA plans for building a parallel runway) as well as ARUP (as part of the T2 project) have reviewed the forecast methodology and consider it to be robust. The methodology has been discussed in detail with CAR on a number of occasions.

(5) The process of deriving a peak day schedule from the annual forecast data has been discussed with CAR as part of the presentations made over recent months.

### ***Forecast scenarios developed in 2006:***

(a) Forecast 2006 is the most recent official forecast. Shortly before it was finalised, Ryanair announced it would base an additional 5 aircraft at Dublin from the start of the summer season 2006. This was incorporated into the forecast, as were underlying assumptions regarding organic Aer Lingus growth in the context of its development over recent years. Forecast peak day schedules corresponding to scenario were used for capacity planning activities.

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<sup>73</sup> Mott MacDonald: Preparation and Evaluation of Dublin Airport Traffic Forecast (May 2005).

(b) Two GDP variants of this scenario were produced, a high GDP and low GDP forecast, differing only in relation to the assumptions regarding GDP levels. These are detailed in the Forecast 2006 report. These are not used for capacity planning purposes, as more specific alternative scenarios were considered. No peak day schedules were produced.

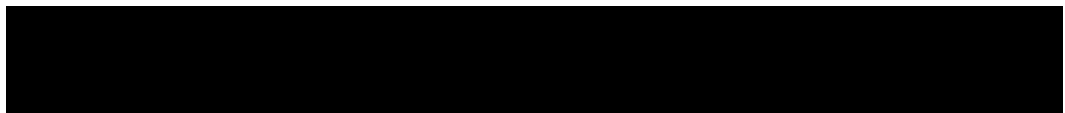
(c) It was also at this time that Aer Lingus was finalising its growth plans in the context of its impending IPO, and its growth projections were considered.



(d)



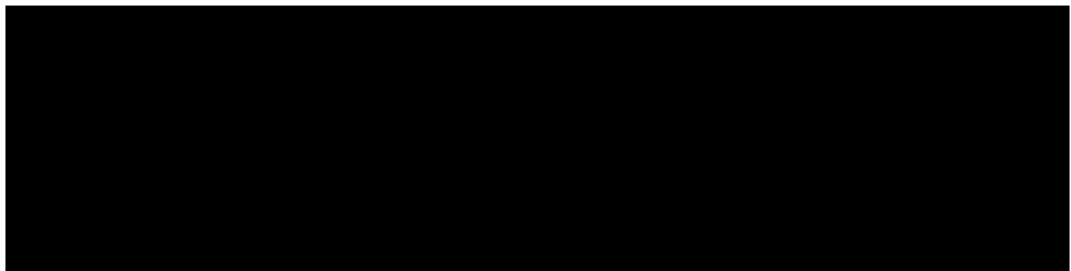
(e)



This scenario, termed the DAA High Aer Lingus Growth (Scenario C), was one of the scenarios used as the basis for sizing T2. Thus, both annual traffic information and peak day schedule information were produced for this scenario. This was finalised in March 2006 and fed into the T2 sizing exercise.

(f) In August 2006, after the decision on sizing of T2 for design and planning purposes, Ryanair indicated verbally to DAA that it would probably base an additional five aircraft at Dublin from start of the winter season. An additional 5 based aircraft would obviously have implications from a stand perspective. Hence a high-Ryanair growth scenario was developed taking this level of new capacity into account, and also incorporating the growth since the completion of the Forecast 2006, which had been somewhat higher than expected. This was one of the scenarios considered as part of the Aircraft Gating study. An annual and peak day schedule was produced in August 2006 based on the tentative information available to DAA at that time. As the size of T2 had already been determined and designs were already well advanced at this stage (the planning application for T2 was made in late August) the FR + 5 scenario did not feed into the sizing of T2.

(6)



**APPENDIX 5: LIST OF CAR QUESTIONS FROM CP1/2007 CROSS-REFERENCED TO RELEVANT SECTIONS OF THE DAA STATEMENT OF CASE**

**Q1:** *Please comment on how the DAA's investment plan has evolved since the Determination in September 2005. Does it represent an improvement on earlier plans? Are the changes in costs justified?*

This question is answered primarily in the following sections:

- Section I (1) (iii)
- Section I (3) (i)
- Section I (3) (ii)
- Section II
- Section III

**Q2:** *What are the advantages and disadvantages of using trigger-pricing principles when setting price caps airport charges at Dublin Airport?*

- Section I (1) (i). This response will be supplemented by a separate submission as well.

**Q3:** *For what projects in CIP2006, in any, should the CAR incorporate the principle of trigger pricing when making future determinations? To what key milestones and dates should triggers relate?*

- Section I (1) (i). This response will be supplemented by a separate submission as well.

**Q4:** *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?*

- Section I (1) (i). This response will be supplemented by a separate submission as well.

**Q 5:** *Should charges to recover the costs of CIP2006 be front or back loaded?*

- Section I (1) (i). This response will be supplemented by a separate submission as well.

**Q6:** *What traffic forecast should be used when setting the price cap? Who should bear the risks if demand out-turns does not correspond to the initial traffic forecast?*

- Section I (1) (i). This response will be supplemented by a separate submission as well.



**Q7:** *What action, if any, should the CAR take to strengthen regulatory commitment and credibility with respect to the level of charges it will allow in future determinations for the funding of CIP2006? Should the length of the price cap be increased?*

- Section I (1) (i). This response will be supplemented by a separate submission as well.

**Q8:** *Should Terminal 2 be built to satisfy a busy-hour capacity of 4,200 and provide a level of service equating to IATA level C?*

This question is answered primarily in the following sections:

- Section I (1) (ii). This response will be supplemented by a separate submission as well.
- Section I (3) (iv). This response will be supplemented by a separate submission as well.
- Section III. This response will be supplemented by a separate submission as well.

**Q9:** *Is €609 million a reasonable estimate of the cost to build the proposed new terminal and pier?*

This question is answered primarily in the following section:

- Section IV. This response will be supplemented by a separate submission as well.

**Q10:** *Is €3,500 per square metre a reasonable estimate of the costs of building a terminal that provides service standards equating to IATA level C? Is the metric of cost per square metre appropriate, or should some other metric be used, e.g. cost per passenger, cost per peak-hour passenger? Are the comparator airports cited relevant when thinking about the costs for T2? Is it appropriate to use benchmarks?*

This question is answered primarily in the following section:

- Section IV. This response will be supplemented by a separate submission as well.

**Q11:** *What are the merits of using peak-load pricing for airport charges at Dublin Airport to fund Terminal 2?*

- Section I (1) (i). This response will be supplemented by a separate submission as well.

**Q12:** *What calculations should the CAR 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?*

- Section I (1) (i). This response will be supplemented by a separate submission as well.

**Q13:** *How much would users be willing to pay in airport charges for the improved quality experience that they expect T2 to provide?*

- Section I (1) (i). This response will be supplemented by a separate submission as well.

**Q14:** *What are the merits of using differential pricing when setting airport charges for T1 and T2 users at Dublin Airports?*

- Section I (1) (i). This response will be supplemented by a separate submission as well.

**Q15:** *What calculations should the CAR 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?*

- Section I (1) (i). This response will be supplemented by a separate submission as well.

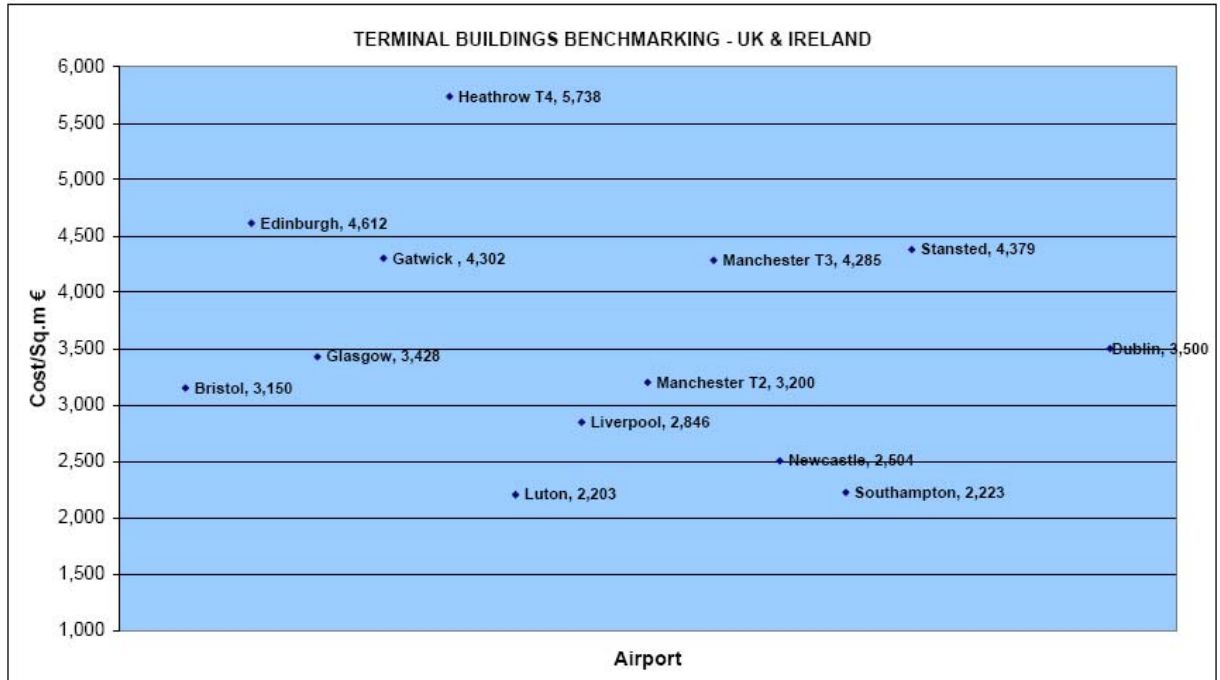
## APPENDIX 6: COST BENCHMARKS

DLPKS/206001  
Terminal 2 & Pier E Dublin Airport  
10 May 2006

Davis Langdon

PKS

TERMINAL BENCHMARKING FROM COMPLETED UK PROJECTS



# Terminal Costs

	Option 5	Option 6	Option 7
	86,650m <sup>2</sup>	76,750m <sup>2</sup>	88,725m <sup>2</sup>
	€m	€m	€m
Terminal Building (Cost range)	308 – 348	303 – 341	311 – 351
Terminal cost range/m <sup>2</sup>	<b>€3600-4100</b>	<b>€3500-4000</b>	<b>€3700-4200</b>

# Infrastructure etc Costs

	Option 5	Option 6	Option 7
	€m	€m	€m
Demolitions and Site Clearance	4.2	3.8	3.7
Infrastructure/Roads	35	35	12
Phasing	9	9	3
<b>Sub Total</b>	<b>48.2</b>	<b>47.8</b>	<b>18.7</b>
Terminal Building (Cost range)	308 – 348	303 – 341	311 – 351
<b>Outline Overall Construction Cost</b>	<b>€357 – 396m</b>	<b>€318 – 356m</b>	<b>€330 – 370m</b>

**APPENDIX 7: SAMPLE QUESTIONNAIRES FOR AER LINGUS AND IBERIA**

*This appendix has been excised as confidential and commercially sensitive.*

**APPENDIX 8: COVER EMAIL – SEPTEMBER QUESTIONNAIRE**

## LUEMBA SONSA, Guy

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**From:** Rita James [Rita.James@arup.com] on behalf of Dervilla Mitchell [Dervilla.Mitchell@arup.com]  
**Sent:** donderdag 28 september 2006 15:21  
**To:** Anita DelGreco  
**Subject:** FW: Dublin Airport T2 Project - Airline Questionnaire

**Attachments:** DAT2\_AirlineQuestionnaire\_Sept2006.pdf



DAT2\_AirlineQuesti  
onnaire\_Sept...

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From: Rita James  
Sent: 12 September 2006 17:50  
To: jp@aca-intl.com; urban.blaznik@adria.si; ivan.sheridan@aerarann.com; padraig@aerarann.com; Niall.Walsh@aerlingus.com; dick.butler@aerlingus.com; dmundur.hafsteinsson@airatlanta.com; Isabel.mc-carthy@dlh.de; jrawl@aircontractors.com; bllinas@aireuropa.com; eoscott@airfrance.fr; philippe.lenaour@cityjet.com; aop@eircom.net; malcolm.naylor@airsouthwest.com; roythomas@airwales.com; vitalbaciliberto@yahoo.co.uk; lsmith@alpha-group.com; robert.airaut@aa.com; maria.sebastian@aa.com; siobhan.scanlon@delta.com; info@atrs-ireland.com; darran.allen@aviance-uk.com; mary.briggs@flybmi.com; Marjorie.Briggs@flybmi.com; peter.rushton@ba.com; tony.l.buss@britishairways.com; Therese\_Jager@usairways.com; geoffrey.white@cityjet.com; Hugh.Rodgers@cityjet.com; declan.ryan@cityjet.com; Beatrice.Cosgrove@COAIR.com; tony.enqvist@coair.com; Pat.Reede@coair.com; jiri.hrdina@czechairlines.com; michael.darcy@darcysmyth.ie; angela.coleman@delta.com; joan.m.carrick@delta.com; alan.butler@dhl.com; mike.farrell@dhl.com; liam.dunphy@eirjet.com; mart.relve@estonian-air.ee; dobrien@lebas.com; ops@fbodublin.com; sean.ofairdeallaigh@figdcoco.ie; dcanavan@fedex.com; ken@fingalaviation.ie; christian.wild@finnair.com; robert.finnegan@firstchoice.co.uk; afi@futura-aer.com; JFitzgerald@gategourmet.com; nmcinerney@gategourmet.com; mbreen@junoconsultants.com; James.Harrison@gulfairco.com; ryan.mckeag@gulfairco.com; karl.louwrens@tmil.net; tony.dalton@exxonmobil.com; spearc@iata.org; csobrin@iberia.es; glenn\_uk@icts.co.uk; dubcln@icsgrp-uk.com; john.alsford@flybe.com; margaret.shannon@klm.com; karen.mcloughlin@dlh.de; simon.cook@luxair.lu; malaysia@eircom.net; malev@ireland.com; trevor.myers@menziesworld.com; frank.torr@MAELbox.com; bannona@ryanair.com; doolana@ryanair.com; deatons@ryanair.com; callaghanj@ryanair.com; anders.sviden@sas.se; janis.balkens@sas.se; matt.danaher@sas.dk; dympna.dwyer@sas.dk; johnmurphy@servisair.com; bernardfarrell@servisair.com; Joe.hogan@singaporeair.com.sg; mryan@signatureflight.co.uk; mwilson@signatureflight.co.uk; michaelatohova@skyeurope.com; rcopeland@shp.ie; colin.ethier@skyservice.com; ltessier@spanair.es; peter.carey@fernley.co.uk; declan.oshea@srtechnics.com; john.oshea@srtechnics.com; gwilliams@starair.ie; catherine.grennell-whyte@swiss.com; sales@atts.ie; suzanne.treacy@tnt.com; arthur.farrell@tnt.com; ronnie.judge@tnt.com; sales@turkishairlines.com; Therese\_Jager@usairways.com; IRE1SCL@europe.ups.com; tina.ghiladi@usairways.com; gerry.jackson@wfs.ie  
Cc: peter.kemp@aircanada.ca; lonergant@iata.org; otoollel@iata.org; murray.williamson@aircanada.ca  
Subject: Dublin Airport T2 Project - Airline Questionnaire



WRITTEN BY KATE WEST (kate.west@arup.com) and sent out on her behalf.

Good Afternoon

Over the course of this year, we have held various stakeholder events and meetings to inform the early design work of the Dublin Airport Terminal 2 and Pier E project.

Planning was submitted for the project in August and we are now moving into the next stage of design work. As such, we are seeking your feedback regarding the stakeholder consultation process. This will help us to forward plan our stakeholder consultation for the next phase of work, to best meet your needs.

We would be obliged if you would fill in the attached questionnaire, and send your responses to Kate West by Friday the 22nd September 2006.

If you would like to speak to anyone directly about the project, please don't hesitate to contact the undersigned.

Kind Regards,

Kate West.

Arup

13 Fitzroy Street

London

W1T 4BQ

tel: +44 (0) 207 636 1531

fax: +44 (0) 207 755 3679

kate.west@arup.com

www.arup.com



**APPENDIX 9: CAA DECISION ON 2003-8 PRICE CAPS AT HEATHROW,  
GATWICK AND STANSTED, DATED FEBRUARY 2003 (ANNEX 4)**

**Economic Regulation of BAA London Airports**  
**(Heathrow, Gatwick and Stansted)**  
**2003 - 2008**  
**CAA Decision**  
**February 2003**  
**Annexes**

*Civil Aviation Authority*  
*CAA House, 45-59 Kingsway, London WC2B 6TE*

## **Annex 4: Agreement with BAA on enhanced information disclosure and consultation**

The CAA envisages that the provision of information will develop around a central business plan document covering a period of at least 10 years. This document would provide information to users on development plans for the individual airports and would be the basis around which user-airport consultation takes place.

The purpose of the document would be to allow users to understand:

**The principal business drivers behind the airports' central business plans:** including assumptions made by the airport operator regarding the future operating environment of the airports including desired levels of service and those constraints faced by the airports that are a material influence on the plans.

**The forecast demand for airport outputs for the duration of the plan:** informing users of the level of demand for airport capacity and services together with the principal factors that are expected to drive that demand.

**The capacities that the airports intend to provide to meet this demand:** allowing users to understand what facilities the airports intend to supply, and the extent to which these will meet demand forecasts. This would provide users with a forecast of the extent to which the airports would be able to meet expected demand for outputs, primarily passenger throughput, and the implications of this for the quality of service that users receive at the airports.

**Options for the development of the airport around the central plan:** informing users 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.

**The resourcing implications behind the development plan:** giving users an overall picture of the estimated total cost of the plan and pricing implications (informed, where appropriate, by the price control formula imposed by the CAA, and any long term pricing policies laid out by the CAA).

**Cost estimates of individual projects within the capital expenditure programme:** providing users with information, to an appropriate level of detail, on total capital expenditure and subsequent operating costs. The amount of cost detail would be related to the stage of the development process. For those projects having reached a high level of definition, specific cost estimates and indications of benefits would be expected. For projects envisaged in the longer term more general capital cost provisions may be appropriate. Specific data including alternatives considered may be provided in individual project consultations, rather than in the overall plan. Some information may need to be provided in confidence to individual occupiers of projects. The likely attribution of these costs to the regulated and non-regulated tills should be provided.

**The outputs that are expected from individual projects:** wherever possible these would be quantified and provided on an incremental basis.

This document would be provided on an annual basis. An important part of each document would be to provide users with an account of how the plan has changed from previous documents and to provide an explanation for this change. This account would include changes to individual projects, as well as higher level changes.

The CAA recognises the sensitivity of commercially confidential information and therefore leaves it to the discretion of airports as to what should or should not be included in the plan on this basis. The plan would act as a basis for consultation only and would not represent a mandatory investment programme.

The plan should form the basis of an effective consultation process, designed to provide airport facilities to best meet the needs of future airport users. Within this process, BAA should ensure that the business planning document is provided to, and consulted with, all major users at the individual airports, including low cost and charter operators at each airport. Failure by BAA to produce sufficient information to allow the plan to effectively assume this role, or evidence that BAA has not consulted on the information provided with major users at all airports, or demonstration that BAA has consistently ignored the reasonable requests of users in the consultation process without good reason, and contrary to the interests of airport users generally, could jeopardise the sustainability of the regulatory framework.

The CAA also recognises that for this process to be effective, airlines would need to cooperate in the provision of relevant information on the costs and benefits of projects to them. They would also need to allocate sufficient resources to engage in the process. The CAA considers that it is incumbent on BAA, as the regulated entity, to progress the process via effective consultations in such a way as to ensure airlines can make the necessary contributions.

**APPENDIX 10: CAPACITY ENHANCEMENT STUDY**

*This appendix has been excised as confidential and commercially sensitive.*

**APPENDIX 11: AER LINGUS COMMENTS ON PASCALL & WATSON  
WORKSHOP PRESENTATION DATED 25 JULY 2005**

*This appendix has been excised as confidential and commercially sensitive.*



**APPENDIX 12: MINUTES OF MEETING DATED 11 APRIL 2006**

*This appendix has been excised as confidential and commercially sensitive.*

**APPENDIX 13: MINUTES OF MEETING BETWEEN CITYJET AND THE DAA,  
DATED 13 SEPTEMBER 2006**

*This appendix has been excised as confidential and commercially sensitive.*

**APPENDIX 14: MINUTES OF A MEETING BETWEEN CONTINENTAL,  
AIRLINES AND THE DAA, DATED 14 APRIL 2006**

*This appendix has been excised as confidential and commercially sensitive.*

**APPENDIX 15: MINUTES OF THE 6<sup>TH</sup> CONSULTATION EVENT WITH  
AIRLINES & HANDLERS, DATED 28 SEPTEMBER 2006**

**6th Consultation Event with Airlines & Handlers  
Great Southern Hotel, Dublin Airport, Dublin**

**28<sup>th</sup> September 2006**

**Attending for DAA:**

DAA: Mark Foley (MF), Barry Drinan (BD), Ciaran Scanlon (CS), Gabrielle O'Donovan (GOD), Christophe O'Brien (COB)

Arup: Dervilla Mitchell (DM), Kate West (KW), Jim Peacock (JP)

P&W: Michael Haste (MH)

**In Attendance:**

John O'Shea	SR Technics
Declan Ryan	CityJet
Matt Danaher	SAS
Martin McGillian	Air Canada
Alan Butler	DHL
Marjorie Briggs	BMI
Elizabeth Roche	Aer Arann
Joe Daly	SRT
Colin Spear	IATA
Bob Finnegan	First Choice
Dick Butler	Aer Lingus
Ken McHutcheon	Shell
Eoin Scott	Air France
Ger Kenny	Sky Handling
Richard Copeland	Sky Handling
John Fitzgerald	Gate Gourmet

**Agenda:**

- 1.0 Welcome and Introduction
- 2.0 Update on Current Projects
- 3.0 T2 Update
- 4.0 Impact on Cargo Operations
- 5.0 Gating Study Update
- 6.0 CIP Update
- 7.0 Questions and Answers

**1.0– Welcome and Introduction:**

MF (DAA) introduced the meeting and briefly outlined the agenda.

## 2.0– Update on Current Projects

CS (DAA) made his presentation outlining the status of both planned projects and projects already on site. He noted that the amount of apron works that are currently planned is of the same scale that was proposed in the 2003 Masterplan for Dublin Airport. A number of queries were raised during the course of the presentation and these were as follows:

Colin Spear (IATA) inquired about the reference to capital contribution in the context of the Runway project. MF noted that this was required by the Fingal County Council (FCC) and that it was a condition of the planning permission. He noted that this was a levy / general contribution towards FCC works around the exterior of the Dublin Airport campus. MF further noted that in addition, FCC have requested that land be set aside in relation to the creation of a separate western access to the Airport and that this request was currently under discussion as there was an issue with the cost associated with the transfer of the land to FCC ownership. BD (DAA) clarified the basis upon which FCC had calculated the capital contribution.

Moving on to the Utilities Masterplan, MF (DAA) queried the timetable associated with the finalisation of plans for the Fuel Hydrant system. CS (DAA) stated that the preferred option would have to be selected and designed next month. Ken McHutcheon (Shell) asked what the DAA preferred option for routing the Fuel Hydrant system was and CS responded that the internal option was preferred at this point in time. Ken noted that the Fueling companies primary concern was access to the system on a daily basis.

Niall Walsh (Aer Lingus) then requested clarification on the funding arrangements for the Fuel Hydrant system. He queried if costs would be levied directly on the Fuel companies / handlers and, if this was the case, would the project form part of the overall Capital Investment Programme (CIP) or would it be treated separately. MF (DAA) committed to getting clarity on the funding / commercial arrangements for this project and to confirm whether it would be included as part of the overall CIP.

In response to a query from IATA, CS (DAA) noted that the order of magnitude for the Utilities Masterplan was in the region of €50 million.

CS (DAA) then proceeded to give an update in relation to the Pier D project and Terminal projects such as Area 14 and the proposed T1 extension.

In relation to Area 14, Niall Walsh (Aer Lingus) sought clarity on whether CUTE was being provided as part of the project. CS (DAA) stated that, as far he was aware, no CUTE facilities were in the current plans but that the wiring for the later installation of CUTE was to be facilitated. Niall Walsh (Aer Lingus) noted that it had been stated to Aer Lingus previously that no dedicated check-in facilities were to be made available at Dublin Airport and that the development of desks without CUTE installed was 'unfair'. MF & CS (DAA) noted that consultation had taken place in relation to the Area 14 project and no objections had been raised at that point. Niall agreed that there had been consultation but stated that other users had fundamentally changed their position since that point and were now seeking to oppose the development plan for Dublin Airport. Niall expressed concern that the other party would have their requirements met while the plan for remaining users would be stalled. MF (DAA) stated he would revert to Niall with an answer in relation to operational issues associated with the Area 14 project in that context. Declan Ryan (CityJet) made reference to the fact that anecdotally, he had been told that Ryanair were sourcing a separate HBS provider for Area 14 and this reinforced the point that this project was being provided for the sole use of Ryanair. MF noted Declan's comments and again promised to refer the matter to operations.

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. Niall Walsh (Aer Lingus) was satisfied with this and accepted MF (DAA)'s point in relation to the need for the Regulator to correctly deal with commercial forecasts in order to ensure the proper treatment of the project overall.

Colin Spear (IATA) queried the proposed positioning of the baggage reclaim belt associated with the T1 Extension. He noted that, on the current drawing, there was potential inefficiency as only one side of the belt was accessible to the public. Some confusion ensued amongst a number of stakeholders regarding what was proposed in relation to the existing Belt 10 and Belt 10a. IATA interjected to note that they were “annoyed” that it seemed they were looking at old drawings and that the detailed design had moved on and was not reflected. CS (DAA) noted that DAA were still examining the optimum positioning for the belt and would revert on this issue. MF (DAA) stated that during his presentation on the Capital Investment Programme (CIP) he would be seeking views / suggestions on how a new more interactive approach could be adopted in terms of consulting on the CIP.

With regards to the overall T1 Extension, Richard Copeland (Sky Handling) questioned whether space had been allocated for airlines to store checked baggage airside. Richard stated that airlines and handlers were under severe pressure in this regard and it seemed amazing that no allowance was being made as part of the T1 Extension to deal with this requirement. MF / CS (DAA) stated that this issue had not been raised or notified to the project team, Dervilla Mitchell (Arup) noted however, that Sky Handling had raised this requirement during consultation on Terminal 2.

Dealing with the generalities of the impacts of these projects, MF (DAA) noted that some of the terminal works have been fast-track responses in order to deal with the aggressive growth at Dublin. He stated that when Piers D & E come into operation, centralised immigration will not be a possibility and he referred to the Pier A & D immigration project in this context. Niall Walsh (Aer Lingus) queried whether the Garda National Immigration Bureau (GNIB) would co-operate and sign-off to confirm that they would correctly resource such a facility. He further requested that DAA should not commit funds to any such project without such confirmation from GNIB. MF (DAA) made reference to the difficulty associated with getting any such confirmation from a government authority but noted that this was being addressed at the highest possible level with the Department. He further noted that DAA was charged with coming up with the infrastructure facility.

Eoin Scott (Air France) asked if any provision was being made in the T1 Extension project to upgrade public address announcement infrastructure. He noted that the system in place was inadequate and noted discussions with DAA operations and the AOC in this regard.

Matt Danaher (SAS) noted that ten percent additional security queuing space was referred to by CS (DAA) and commented that in the light of the extra check-in desks associated with Area 14 this was simply not sufficient. MF (DAA) stated that the T1 Extension cannot solve all problems and that T2 was necessary. The purpose of the T1 Extension is to leverage as much operational benefit from the additional space created and in tandem redress the commercial balance of the building, improving the offer to passengers utilising Piers A and D. Matt Danaher (SAS) questioned whether it was possible to security screen passengers delivered from the Area 14 facility separately. CS (DAA) stated that this had been examined but that it was not a workable solution. MF (DAA) reiterated that the current proposals reflected the maximum operational benefit that could be leveraged from the project.

Moving on to discuss the proposed centralised immigration facility project, a number of questions were raised by users in relation to the operation of the facility in the context of the drawing. CS (DAA) noted that the design team had been appointed two weeks ago and were looking at the issues that had been raised this morning but that there was planning risk associated with significant works to existing buildings that complicated matters. Colin Spear (IATA) stated that he appreciated DAA's position but asked why this project was only coming on-stream at this time given that Pier D has been planned for three years. He also queried why capital expenditure had been allocated to remodelling work in this area given that this project was in the pipeline and that this was not cost effective. MF (DAA) came in at this juncture and noted that Pier D had only been sanctioned as recently as nine months ago and noted that the Area 14 / T1 Extension projects also impacted any potential solution in terms of a centralised facility. Barry Drinan (DAA) also noted that the Pier D project had changed having initially been designed with a valve system for processing passengers and that this constraint had now been lifted. Niall Walsh (Aer Lingus) interjected at this point and stated

that the contract for Pier D was thus “inefficient” and options should be explored to reduce the cost of the contract accordingly, now that immigration facilities were being provided in another project. MF (DAA) stated that we could explore this but that it would require serious evaluation. He noted that the GNIB were committed to resourcing Pier D and to remove the booths, that represented small cost in the overall context of the project, might represent a higher price in terms of lost operational flexibility in the future.

Elizabeth Roche (Aer Arann) then asked whether provision for a domestic channel had been made. CS (DAA) noted that this was represented on the drawing. An exchange ensued where stakeholders / users debated the difficulty in ensuring that domestic passengers could only present to that channel. It was felt that it was impossible to segregate in the configuration depicted. Dick Butler (Aer Lingus) then questioned whether the AOC had indeed requested the provision of such a domestic channel facility. MF (DAA) committed to answering whether this requirement had been driven by the AOC.

MF (DAA) returned to one of the earlier points raised by IATA in relation to short term capital expenditure and noted that in relation to the specific example IATA gave i.e. the remodelling work undertaken recently to the access route for Pier A, MF (DAA) noted that the project planned for the major redevelopment of Pier A was not programmed for the near future and consequently those works were necessary. Colin Spear (IATA) noted that his real concern was that DAA should strive to implement the Masterplan for Dublin Airport and not deviate from the proposals as this could lead to inefficient use of capital expenditure potentially. MF (DAA) stated that he was confident that the Capital Investment Programme would confirm that DAA is committed to the Masterplan.

Dick Butler (Aer Lingus) queried the access arrangements for Area 14 and the timetable for when the facility would come into operation. In the ensuing discussion, Dick Butler (Aer Lingus) stated that when Area 14 comes on stream the impact of the additional passengers would render Areas 12 & 13, “a disaster area”. Niall Walsh (Aer Lingus) took up the point and asked when the additional Friskern facilities would be made available. MF (DAA) made the point that the introduction of Area 14 in itself would not result in net increase in passengers on the departures floor, these were essentially existing passengers being processed in a new area. Niall Walsh (Aer Lingus) stated that it was not enough operationally and that the Friskern facilities should be made available in tandem with Area 14 opening. MF (DAA) advised that the timing and the phasing of these projects was not fully worked out. Niall Walsh (Aer Lingus) requested in this context that DAA prioritise the delivery of additional Friskern facilities.

Colin Spear (IATA) stated that it seemed that the meeting on airport charges was going ahead without the airlines having had sight of the CIP. MF (DAA) stated that he would be giving an update on the CIP and the quantum of capital expenditure.

Declan Ryan (CityJet) took the opportunity to state that it was critical from CityJet’s point of view that the Domestic fast-track facility be retained during any works.

**Actions:**

- Funding / Commercial arrangements for the Fuel Hydrant project and it’s treatment in relation to the CIP to be outlined to users
- T1 Extension: Updated detailed design drawings in relation to the baggage reclaim proposals to be supplied to stakeholders / Checked baggage storage requirement of airline / handlers to be examined in the context of the T1 Extension
- Centralised Piers A & D Immigration: Driver for the provision of a domestic channel to be clarified

At this point, it was agreed that given that time was moving on and some attendees would have to excuse themselves shortly, MF (DAA) would move his piece on the CIP forward and then the T2 presentation would take place.



## 6.0 – CIP Update

MF (DAA) began by noting that the Regulator was today receiving responses from interested parties in relation to his consultation paper on the possibility / scope of a potential interim review. He further stated that T2 had now been through the Independent Verification process with the government consultants and that it was likely that the CIP would be presented to the next board meeting of DAA on the 9<sup>th</sup> October. MF (DAA) noted that the CIP was scrupulously grounded in the SOM Masterplan and the Pascall & Watson Framework Development Plan.

Following the presentation, IATA began by querying the funding arrangements for the proposed MSCP and the contributions that the US / Irish governments might make towards the Custom and Border Protection (CBP) project. MF (DAA) responded that clarity was still being sought in relation to CBP funding. Colin Spear (IATA) also asked whether Car Hire operators would be funding their capital expenditure requirement and BD (DAA) stated that this would be funded through the commercial arrangements with the Car Hire companies.

John Fitzgerald (Gate Gourmet) noted that the programme was highly interconnected and asked what proportion of the headline €1.178 billion programme could be excluded. MF (DAA) stated that something in the order of 87% of the programme was connected (€1.026 billion) and that, although there were some choices, it was necessary to emphasise that the vast majority of the CIP represented essential works.

Colin Spear (IATA) questioned why the timeframe shown was only three years and he said it appeared that DAA were hiding bad news from the airlines. MF (DAA) said that the DAA could commit to giving the airlines and users the programme with a ten-year outlook in due course.

MF spoke about the need for a more workshop type of engagement on the CIP, particularly in the context of achieving deep understanding of the rationale for projects and their timing. Having opened the issue to the audience, there was general agreement on this approach. MF committed to ensuring that parties would receive copies of the document in advance of the meeting.

### Actions:

- 26<sup>th</sup> October was agreed as the date for the CIP workshop, with reference to Colin Spear's availability

## 3.0 – T2 Update

Michael Haste (Arup) proceeded to give his presentation concerning T2. The following questions were raised during the course of and following the presentation.

Ger Kenny (Sky Handling) queried whether space had been allocated for Ticket Sales Desks as part of the T2 design. IATA noted that provision had been made on the left and right of the check-in building.

MF (DAA) stated that there were two key dates in relation to the T2 project. He noted that objectors would have until the 5<sup>th</sup> October to lodge their position with FCC and there was an absolute deadline of the 26<sup>th</sup> October for FCC to rule on the application or seek additional information.

Richard Copeland (Sky Handling) sought clarification on the functionality of the baggage system within T2. BD (DAA) confirmed that there had been a degree of redundancy designed into the system. Richie then proceeded to query the design of T2 in relation to an emergency evacuation situation. A long debate then took place on the functionality of T2 in this regard and the relative applicability of Fire Plans in the context of an emergency evacuation.

Alan Curtain (Shell / BP) then raised some points in relation to the airside operation and Pier E, specifically in relation to the design specifications for airbridges, inner roadways and

wingtip clearance between aircraft. BD (DAA) noted that this had been dealt with in the Gateway 2 report and that the Shell / BP consultant had been fully involved in developing the specifications.

Colin Spear (IATA) stated that, in relation to wayfinding, it was unfortunate that the check-in passenger experience had not stayed true to the original design principle. A long discussion then occurred, principally in relation to the impact of retail on wayfinding. It was noted by DAA / consultants that the detail on the retail drawings was still only indicative and that access was still under consideration. BD (DAA) noted that the external wall was being safeguarded and would remain exposed ensuring that the Departures Lounge would retain a view. MF emphasised that the passenger routing through retail was not concluded and further discussion would take place during the design/development stage of the project.

Declan Ryan (CityJet) queried how the CBP would operate in terms of delivering passengers airside and maintaining segregation for Piers B and E. MF (DAA) noted that, as part of the design of Pier E, sterile gates had been included for INS and the pier was designed to achieve segregation. MF (DAA) further stated that David Frizell (DAA) had now developed the brief for the CBP and that a series of workshops with airline users would need to take place to establish the detail.

Declan Ryan (CityJet) and Shell / BP queried the road system in relation to cargo and fuelling, specifically the access roads around Pier E both during and after construction. It was confirmed that a roadway would be maintained underneath the Pier.

MF (DAA) noted that detailed work was ongoing to try and understand the complexities associated with the T2 construction. He stated that DAA was looking for the appropriate forum and the right communication vehicle to ensure that all stakeholders / users were fully briefed in terms of the development and the associated impacts. He also noted that this was essentially a first look at the complicated chess moves that would be associated with the construction. Dervilla Mitchell (Arup) noted that evaluation forms had previously been circulated to stakeholders / users and that views on consultation going forward had been sought. She advised that the response to date had been poor and that the forms were again available at the meeting.

There was a short discussion with Martin McGillian (Air Canada) in relation to check-in facilities within T2 and the proportions assumed in relation to web-based check-in.

It was at this point agreed to suspend the meeting and take the Gating Study and Update on Cargo at a later meeting. Declan Ryan (CityJet) requested that the outputs of the Gating Study be circulated to users in advance.

A representative from DHL stated that it was necessary that Cargo be advised on their situation as soon as possible. BD (DAA) made some points on the likely impact of Pier E and noted that every effort was being made to explore all possibilities. MF (DAA) stated that it was probably better at this point to hold a separate meeting on Cargo issues and noted that there was both a need for a short term and a long term plan in this regard.

**Actions:**

- Users to contact Dervilla Mitchell (Arup) with questions / requirements / suggestions for taking consultation forward, more interactive approach, etc.
- CIP to be circulated to all users in advance of next meeting
- Separate meeting / workshop on Cargo to take place on 20<sup>th</sup> October: Cloghran House, 10am
- Next consultation event / workshop to focus on CIP – 26<sup>th</sup> October (Location was TBC)

**APPENDIX 16: COPY OF RESPONSES RECEIVED BY THE DAA**

## LUEMBA SONSA, Guy

---

**From:** Rita James [Rita.James@arup.com] on behalf of Dervilla Mitchell [Dervilla.Mitchell@arup.com]  
**Sent:** donderdag 28 september 2006 15:21  
**To:** Anita DelGreco  
**Subject:** FW: Dublin Airport T2 Project - Airline Questionnaire

**Attachments:** DAT2\_AirlineQuestionnaire\_Sept2006.pdf



DAT2\_AirlineQuesti  
onnaire\_Sept...

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From: Rita James  
Sent: 12 September 2006 17:50  
To: jp@aca-intl.com; urban.blaznik@adria.si; ivan.sheridan@aerarann.com; padraig@aerarann.com; Niall.Walsh@aerlingus.com; dick.butler@aerlingus.com; dmundur.hafsteinsson@airatlanta.com; Isabel.mc-carthy@dlh.de; jrawl@aircontractors.com; bllinas@aireuropa.com; eoscott@airfrance.fr; philippe.lenaour@cityjet.com; aop@eircom.net; malcolm.naylor@airsouthwest.com; roythomas@airwales.com; vitalbaciliberto@yahoo.co.uk; lsmith@alpha-group.com; robert.airaut@aa.com; maria.sebastian@aa.com; siobhan.scanlon@delta.com; info@atrs-ireland.com; darran.allen@aviance-uk.com; mary.briggs@flybmi.com; Marjorie.Briggs@flybmi.com; peter.rushton@ba.com; tony.l.buss@britishairways.com; Therese\_Jager@usairways.com; geoffrey.white@cityjet.com; Hugh.Rodgers@cityjet.com; declan.ryan@cityjet.com; Beatrice.Cosgrove@COAIR.com; tony.enqvist@coair.com; Pat.Reede@coair.com; jiri.hrdina@czechairlines.com; michael.darcy@darcysmyth.ie; angela.coleman@delta.com; joan.m.carrick@delta.com; alan.butler@dhl.com; mike.farrell@dhl.com; liam.dunphy@eirjet.com; mart.relve@estonian-air.ee; dobrien@lebas.com; ops@fbodublin.com; sean.ofairdeallaigh@figdcoco.ie; dcanavan@fedex.com; ken@fingalaviation.ie; christian.wild@finnair.com; robert.finnegan@firstchoice.co.uk; afi@futura-aer.com; JFitzgerald@gategourmet.com; nmcinerney@gategourmet.com; mbreen@junoconsultants.com; James.Harrison@gulfairco.com; ryan.mckeag@gulfairco.com; karl.louwrens@tmil.net; tony.dalton@exxonmobil.com; spearc@iata.org; csobrin@iberia.es; glenn\_uk@icts.co.uk; dubcln@icsgrp-uk.com; john.alsford@flybe.com; margaret.shannon@klm.com; karen.mcloughlin@dlh.de; simon.cook@luxair.lu; malaysia@eircom.net; malev@ireland.com; trevor.myers@menziesworld.com; frank.torr@MAELbox.com; bannona@ryanair.com; doolana@ryanair.com; deatons@ryanair.com; callaghanj@ryanair.com; anders.sviden@sas.se; janis.balkens@sas.se; matt.danaher@sas.dk; dympna.dwyer@sas.dk; johnmurphy@servisair.com; bernardfarrell@servisair.com; Joe.hogan@singaporeair.com.sg; mryan@signatureflight.co.uk; mwilson@signatureflight.co.uk; michaelatohova@skyeurope.com; rcopeland@shp.ie; colin.ethier@skyservice.com; ltessier@spanair.es; peter.carey@fernley.co.uk; declan.oshea@srtechnics.com; john.oshea@srtechnics.com; gwilliams@starair.ie; catherine.grennell-whyte@swiss.com; sales@atts.ie; suzanne.treacy@tnt.com; arthur.farrell@tnt.com; ronnie.judge@tnt.com; sales@turkishairlines.com; Therese\_Jager@usairways.com; IRE1SCL@europe.ups.com; tina.ghiladi@usairways.com; gerry.jackson@wfs.ie  
Cc: peter.kemp@aircanada.ca; lonergant@iata.org; otoolel@iata.org; murray.williamson@aircanada.ca  
Subject: Dublin Airport T2 Project - Airline Questionnaire

WRITTEN BY KATE WEST (kate.west@arup.com) and sent out on her behalf.

Good Afternoon

Over the course of this year, we have held various stakeholder events and meetings to inform the early design work of the Dublin Airport Terminal 2 and Pier E project.

Planning was submitted for the project in August and we are now moving into the next stage of design work. As such, we are seeking your feedback regarding the stakeholder consultation process. This will help us to forward plan our stakeholder consultation for the next phase of work, to best meet your needs.

We would be obliged if you would fill in the attached questionnaire, and send your responses to Kate West by Friday the 22nd September 2006.

If you would like to speak to anyone directly about the project, please don't hesitate to contact the undersigned.

Kind Regards,

Kate West.

Arup

13 Fitzroy Street

London

W1T 4BQ

tel: +44 (0) 207 636 1531

fax: +44 (0) 207 755 3679

kate.west@arup.com

www.arup.com



**Dublin Airport Terminal 2 Projects**  
Stakeholder Airline Questionnaire

---

Have you comments on the proposals for T2 (including Terminal, Pier and Landside Works)? 

Y	N
---	---

Have you raised any comments already? 

Y	N
---	---

Please advise of details:

Have these comments been addressed/responded to? 

Y	N
---	---

Are you satisfied by the level of consultation to date? 

Y	N
---	---

Comments regarding consultation:

Looking forward, would you like the level of consultation to:  Increase  Decrease  Stay the same

Looking forward, please advise on type of consultation preferred. Please feel free to tick as many or as few of the options as you think appropriate so we can structure future consultation to meet your needs.

(Please ✓)

- Events for all airlines and ground handlers
- Events for T2 users only
- Workshops with design team
- One on One meetings
- Updates via email
- None
- Other

Please specify:

- Consultation in Dublin
- Consultation in UK
- Consultation elsewhere

Location:

Location:

## Dublin Airport Terminal 2 Projects Stakeholder Airline Questionnaire

Have you comments on the proposals for T2 (including Terminal, Pier and Landside Works)?

<input checked="" type="radio"/> Y	<input type="radio"/> N
------------------------------------	-------------------------

Have you raised any comments already?

<input checked="" type="radio"/> Y	<input type="radio"/> N
------------------------------------	-------------------------

Please advise of details:

<p>Baggage Belt Sys. Ramp Access - BAG. Security - unattached</p>
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Have these comments been addressed/responded to?

<input type="radio"/> Y	<input checked="" type="radio"/> N
-------------------------	------------------------------------

Are you satisfied by the level of consultation to date?

<input checked="" type="radio"/> Y	<input type="radio"/> N
------------------------------------	-------------------------

Comments regarding consultation:

<p>Waiting for it next - please of consultation</p>
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Looking forward, would you like the level of consultation to:  Increase  Decrease  Stay the same

Looking forward, please advise on type of consultation preferred. Please feel free to tick as many or as few of the options as you think appropriate so we can structure future consultation to meet your needs.

(Please ✓)

- Events for all airlines and ground handlers
- Events for T2 users only
- Workshops with design team
- One on One meetings
- Updates via email
- None
- Other

Please specify:

- Consultation in Dublin
- Consultation in UK
- Consultation elsewhere

Location:

Location:



## Dublin Airport Terminal 2 Projects Stakeholder Airline Questionnaire

Have you comments on the proposals for T2 (including Terminal, Pier and Landside Works)?

<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N
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Have you raised any comments already?

<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N
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Please advise of details:

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Have these comments been addressed/responded to?

<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N
---------------------------------------	----------------------------

Are you satisfied by the level of consultation to date?

<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N
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Comments regarding consultation:

<i>Going Forward, will need to go into greater detail.</i>
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Looking forward, would you like the level of consultation to:  Increase  Decrease  Stay the same

Looking forward, please advise on type of consultation preferred. Please feel free to tick as many or as few of the options as you think appropriate so we can structure future consultation to meet your needs.

(Please ✓)

- Events for all airlines and ground handlers
- Events for T2 users only
- Workshops with design team
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- Updates via email
- None
- Other

Please specify:

- Consultation in Dublin
- Consultation in UK
- Consultation elsewhere

Location:

Location:

## Dublin Airport Terminal 2 Projects Stakeholder Airline Questionnaire

Have you comments on the proposals for T2 (including Terminal, Pier and Landside Works)?  Y  N

Have you raised any comments already?  Y  N

Please advise of details:

Have these comments been addressed/responded to?  Y  N

Are you satisfied by the level of consultation to date?  Y  N

Comments regarding consultation:

REPETITIVE AT TIMES  
GO ON SITE AND SEE HOW THINGS ARE PROGRESSING

Looking forward, would you like the level of consultation to:  Increase  Decrease  Stay the same

Looking forward, please advise on type of consultation preferred. Please feel free to tick as many or as few of the options as you think appropriate so we can structure future consultation to meet your needs.

(Please ✓)

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- Events for T2 users only
- Workshops with design team
- One on One meetings
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- None
- Other

Please specify:

- Consultation in Dublin
- Consultation in UK
- Consultation elsewhere

Location: VIEW OTHER AIRPORTS.

Location: AS ABOVE.

**RESPONSE**

**THE PUBLIC CONSULTATION ON DUBLIN AIRPORT CHARGES FOLLOWING  
THE CAPITAL INVESTMENT PROGRAMME 2006 DATED 9 FEBRUARY 2007**

**DUBLIN 9 MARCH 2007**

## 1. Introduction

Dublin Airport Authority (“DAA”) submitted its answers to Questions 1 and 8-10 raised by the Commission for Aviation Regulation (“CAR”) in its consultation paper CP1/2007 on 7 March 2007. This submission supplements those answers in relation to Questions 2-7 and 11-15 on “trigger pricing”, the profile of charges over time, peak load pricing and possible differential pricing between terminals. This paper forms an integral part of the comprehensive factual presentation, which was given in our submission, dated 7 March 2007, and should therefore be read and understood within the broader context, which was set out there.

Prior to providing detailed comments, the DAA has a number of preliminary observations:

### ***The proposed policy changes are inconsistent with the scope of the interim review***

The scope of the present interim review was set out in CP9/2006 at page 18: which stated that it “shall [...] consider the data and arguments before the 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. In addition, it may be necessary, in order to maintain the internal consistency of the review assumptions, to adopt revised traffic forecasts for the review and to recognise the consequential impacts on operating costs and retail revenues. It may also be necessary 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.”

In this context, the DAA considers that the questions of capex triggers, the time profile of charges, peak pricing and possible differential pricing are new elements which raise important policy issues and thus do not fit within the CAR’s approach to the interim review as set out by the CAR in its statement from CP9/2006 quoted above. The DAA considers that the CAR’s statement in CP9/2006 implies that policy matters must be taken as set out in the 2005 Determination except where the Statutory Objectives need to be readdressed in the light of new circumstances. These new policy issues do not meet these conditions and so should not be taken into account in the interim review.

***The proposed policy changes are far-reaching and would require more in depth consideration if they are to be pursued further***

The CAR has committed itself to publish a draft Interim Determination by April 2007 and issue the final determination by June 2007. The late arrival of the CP1/2007 (with a deadline for response on 10 March 2007) does not allow the CAR, the DAA and other interested parties fully to review and consider the consequences of the policy changes in play. These are far reaching policy changes which would have a significant impact both on the DAA and airlines and thus require much more detailed consideration if they are to be pursued further. There is simply not enough time left within the interim review to do this.

Moreover, CP1/2007 is itself presented in the form of an initial and high-level probe. It would be wholly inappropriate for the CAR to implement fundamental and far-reaching policy changes in its Interim Determination on the basis of an initial and high-level document. In addition:

- CP1/2007 does not acknowledge that the Government has instructed the DAA to build T2 by 2009 in its Aviation Action Plan (“AAP”). Instead the consultation paper proceeds on the assumption that the DAA could, in effect, be compelled by a new price cap structure set by the CAR to complete T2 at a much later stage and even later than 2012. The CAR cannot lawfully superimpose on the decision of the Government with the intention to delay T2 and must restrict its role to deciding the level of charges at Dublin Airport within the framework of the AAP.
- As noted above, these changes would have a significant impact on airlines. There is no in-depth analysis of the market effects of the proposed mechanisms, although it is precisely these effects, which CP1/2007 believes could justify such policy changes. The market for air transport services to/from Dublin is highly competitive with two “home grown” carriers, Ryanair and Aer Lingus, which are among the most competitive airlines in Europe (indeed their recent financial performance shows that they are both “best in class” airlines) with strong growth plans as well as Aer Arann and CityJet which are likewise highly competitive and numerous other airlines based elsewhere in Europe and further afield. These carriers compete intensely against each other often at very low fare levels. Any significant differential in airport charges at Dublin between these carriers would have a very significant impact on competitiveness of these airlines against each other. This raises fundamental policy issues which would therefore

require very serious consideration before implementation and significantly more than is contemplated in CP1/2007.

- In relation to the DAA, CP1/2007 proposes to incentivise Dublin Airport by transferring more risk on the airport for the timely completion of projects in its CIP 2006. Increasing the risk for the DAA will naturally impact on its ability to finance the completion of T2, which in turn will impact on the minimum prices it must be able to charge to prove financeability. Increasing the risk that debt investors perceive at DAA will also increase financing costs. Moreover, DAA's assessment of the financeability of its CIP has reflected its assessment of its expected risks in the context of its current regulatory pricing regime. Additional risks or a lack of clarity over the future regulatory regime could impact this financeability. Each of the potential changes to policy have in common an increase in risk and uncertainty for the airport operator, yet there is no analysis in CP1/2007 of how the risks will affect charges.
- Importantly, the CP1/2007 contains no analysis of the proper role of the CAR if the policy changes were adapted. Each of these proposed changes would entail a much more detailed level of regulation which is inconsistent with the principle that the CAR should impose the minimum restrictions on the DAA as set out in Section 33(2)(h) of the 2004 Act. For example if the DAA deems that peak-load pricing might be beneficial in managing demand risk why should it be prevented from doing so freely on a dynamic basis and instead subject to the heavy-handed regulation from CAR (on a five-year basis).
- There has been no consideration of the practical implementation of each or all of these policy changes. At a minimum, the administrative burden would be substantially increased for the DAA, CAR and for users.
- The document is "asymmetrical" in that it considers incentives in a one way direction only. It considers only "penalties" on the DAA for failure to meet certain targets (eg in the section on triggers). Proper incentive-based regulation sets incentives in both directions, ie positive incentives for DAA to say deliver capex early, as well as negative triggers. Any proper consideration of amended incentives would need to consider incentives symmetrically and not just effective penalties on DAA.

- The DAA is concerned that consideration of these issues at this stage will entail a loss of focus in the process. This concern is reinforced by the fact that as late as 2 March 2007, the CAR published two additional reports to the CP1/2007 on its website. These reports discuss the concept of airlines directly paying for infrastructure or taking a share in the airport operators and on congestion charging. It is unclear how these two papers fit within CP1/2007, yet they are published on the website in the context of this document and so presumably must be related. There is no indication of the context of these two papers how they might influence CAR's thinking and what feedback is requested from stakeholders. While the first of these is expressed in general terms rather than specifically about DAA these issues, both papers are indicative of an increasing lack of focus in the economic debate. Equally these papers seem to ignore much of the previous consultation enquiries. For example, the congestion charging paper contains no reference to the fact that CAR previously raised the concept of a dual till being used for congested airports. CAR has not provided a good reason for not pursuing this. Failure to mention this in this consultation is indicative of the general lack of focus.

The DAA will therefore provide an initial response to the policy questions in CP1/2007 with the clear expectation that the CAR will not seek to introduce fundamental and far-reaching policy changes at this late stage in the Interim Review. If the CAR, on the basis of CP1/2007 believes there is good cause to proceed with the ideas for policy changes set out there, the DAA will expect those to be presented concretely and in an exhaustive consultation paper in due time before the next Determination in 2009.

## **2. Trigger pricing**

### **Question 2: What are the advantages and disadvantages of using trigger-pricing principles when setting price caps for airport charges at Dublin Airport?**

This question is highly complex and requires much more detailed consideration. However, a number of preliminary points can be made. Firstly, the CAR has promoted trigger pricing as a vehicle to protect "the user pays" principle: "Only those users that actually benefit from a service should pay for it; and the charges users pay should only include the costs of services that they are currently able to use" (page 9). According to the CP1/2007, the user pays principle is consistent with CAR's Statutory Objectives. While that conclusion may hold true as a general proposition (although the single till concept in fact is not fully consistent with it),

it is also clear that trigger pricing also runs the risk of going against several of CAR's other Statutory Objectives, including but not limited to in particular the requirement that CAR act in such a way as not to compromise Dublin Airport's sustainability and financial viability (SFV). It is noteworthy that the CEPA paper states that any such triggers would need to be sufficient "in most circumstances, probably not adversely affecting its financeability". This is an admission that triggers could well have some impact on the financeability of the October 2006 CIP and thus increase DAA's risks and thus the availability and cost of capital, in turn impairing DAA's SFV.

The renewal of assets is an ongoing process in any systems industry. At any one time, some customers are using new assets while others are using old assets. To revise charges every time a new piece of investment comes into effect would be unduly onerous. If airport capacity were delivered on a 'just-in-time' basis, there would be a constant series of relatively small capacity development programmes underway. However, given the complex nature and scale of airport development, this would neither be a practical nor cost-efficient manner of delivering large-scale capacity. Hence a key decision for an airport is how much headroom is required and it is wholly appropriate to ensure that an appropriate window is provided between major construction phases.

Furthermore, it is clear that the introduction of trigger pricing will increase financial risk for the DAA. The DAA has so far assessed the financeability of CIP 2006 on the basis of its current and expected risk profile. Introducing trigger pricing will necessarily affect that risk profile and thereby its financeability but it is difficult to make any predictions without knowing the design of the trigger(s). Setting triggers could, for example, increase the risk and make financing more expensive. For example, a delay in recoupment creates greater opportunities for regulatory intervention and increases the perceived risk of major projects like T2, which will again directly increase financing costs.

Even if a trigger pricing system could be designed theoretically to be consistent with the Statutory Objectives, it would also be necessary to find a clear-cut expression for each trigger. The more unclear a trigger is and the more open it is to interpretation, the higher the costs in using the regime. Any perceived scope for dispute increases the risk to investors and so the cost for the DAA. In practice, it can be very difficult to define completely unambiguous triggers. Poorly constructed triggers would in turn increase the potential for disagreement and also litigation between the CAR, DAA and users over the correct interpretation of these.



More fundamentally, trigger pricing might impact DAA's ability to source funding for its capital expenditure from the debt markets. Trigger pricing may add significant uncertainty to DAA's risk profile. As T2 will be built over a two year period, DAA's debt providers may face a longer period of increased risk which may cause them not only to be more cautious but might well lead them to increase the cost of debt to DAA. Similarly, an increase in the DAA's risk profile would impact the cost of equity.

The Statutory Objectives charge the CAR with the responsibility of safeguarding the sustainability and financial viability of the DAA. Given the significant financial risks trigger pricing creates for Dublin Airport, trigger pricing should therefore at most be the exception rather than the rule.

Additionally, seen from the perspective of best practice, trigger pricing should not be composed so as to cause significant increases in price. According to the ICAO's Policies on Charges for Airports and Air Navigation Services (2004): "Airport charges should be designed to avoid undue disruption to users, increases in charges should be introduced on a gradual basis."

As an example, the UK CAA did set some capital expenditure triggers on BAA in the context of its price cap decision relating to BAA's London airports for the 2003-8 period in relation to the construction of Heathrow T5. However, these related to a few percent of the total capital expenditure incurred in relation to T5. There is no precedent DAA is aware of where other regulators set triggers accounting for a significant percentage of capital investment costs.

Moreover, the DAA also does not believe that the envisioned "negative" triggers create any incentives. On the contrary, a "positive" incentive on DAA could, e.g. if DAA delivers certain developments before schedule it gets an uplift in the maximum cap. The DAA considers it is inconsistent for CAR to discuss negative incentives without also considering positive incentives as well as being inimical to proper incentive-based regulation.

Finally, it is doubtful trigger pricing is consistent with CAR's Statutory Objectives which require it to impose the minimum restrictions possible in the circumstances. To design a trigger-pricing regime, which is consistent with the Statutory Objectives, it is therefore clear that the CAR must become much more involved in the details of the operation and planning at Dublin Airport. CEPA recognise that a disadvantage of applying trigger pricing is that it

“requires CAR to get involved in detailed design issues for capex.”<sup>1</sup> This raises an issue when the CAR, through the design of triggers, causes undue interference with the role of the DAA, which the CAR is obligated to take into account under Section 33(2)(h) of the Aviation regulation Act 2001 as amended by the State Airports Act 2004.

Moreover, the CP1/2007 fails to address how trigger pricing would bring benefits if they were to be introduced at such a late stage in the process of building T2, after all the work that has gone into the planning, sizing, design, user consultation etc. DAA fails to see how the CAR would be able to construct meaningful triggers now.

Thus the DAA considers that the introduction of triggers is an extremely complex subject, which raises significant issues, which require significantly more consultation and consideration if they are to be pursued.

**Question 3: For what projects in CIP2006, if any, should the CAR incorporate the principle of trigger pricing when making future determinations? To what key milestones and dates should the triggers relate?**

Given the general and unrestrained proposal for trigger pricing, it is difficult for the DAA to advise on this question in light of the reservations expressed above. CIP 2006 will be so delivered before the 2009 Determination and given the impossibility of undertaking sufficient consultation and consideration as part of the interim review, this question is at best academic as the DAA cannot see how CAR would impose triggers in relation to the 2006 CIP.

### **3. Profile of charges over time**

**Question 4: 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?**

There are a number of reasons, consistent with the Statutory Objectives, which favour levying higher charges in advance of the completion of the projects in CIP 2006 and in particular T2:

- **Enable financeability:** the DAA’s approach to financeability is described in Section VI of the submission to CAR dated 7 March 2007. The maintenance of the financial ratios and credit ratings discussed in that submission requires the remuneration of

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<sup>1</sup> CEPA Table 1

projects in line with when capital is expended by DAA and therefore in advance of their completion.

- **Reduction of total cost of CIP 2006:** it will be easier to finance the projects because the regulatory risk is reduced and this will reduce the interest payments required by debt providers.
- **Incentive compatible:** as explained in relation to Question 2 above, avoiding large increases in charges at the moment when more capacity is available is more in line with the principle of economic efficiency in the Statutory Objectives. By way of illustration, the UK CAA allowed “revenue advancement” to fund Terminal 5 in its 1996 and 2003 reviews of BAA.
- **Increased regulatory certainty:** it will reduce the risk of revision, which otherwise might be perceived to exist. This is also an objective, which the CAA identified as legitimate in relation to its 2003 review of BAA mentioned above (see point 6.8 of the Decision).
- **Avoids shock of sudden large increase in charges:** As recognised by the UK CAA, a “smoothing” of charges is more likely to be tolerated by airlines. By lowering the risk that airlines will contest sharp price increases in the future, the incentives for the DAA to deliver its investment program increases accordingly.
- **Consistent with the overall principle of network regulation:** All assets will be replaced eventually and users have the benefit of old and new assets on a continuous and shifting basis. There is no principle of charging less as assets age in network regulation. ICAO recognises in its Policies on Charges for Airports and Air Navigation Services (2004) pre-funding: “Pre-funding of projects may be accepted in specific circumstances where this is the most appropriate means of financing long-term, large scale investment, provided that strict safeguards are in place.” CAR itself has also accepted remuneration of assets in the course of construction. Any change to this policy would therefore represent a significant change in CAR’s policy which would not only negatively impact DAA in the short term but would also significantly increase the overall uncertainty over the regulatory climate which may lead to an increase in the risks perceived by the financial community to exist in relation to regulation of Dublin Airport and thus lead to a higher cost of capital. In particular, debt investors might start

to doubt that properly incurred capital expenditure will continue to be eligible for the regulated asset base and will receive an appropriate rate of return.

- **Under-investment and/or delayed completion:** A tighter price cap resulting from reduced revenue advancement could create financial disincentives for the DAA to provide the required level of investment at Dublin Airport to the detriment of user interests and the Statutory Objectives.

**Question 5: Should charges to recover the costs of CIP2006 be front or back loaded?**

The advantages and disadvantages depend on the link to pre-funding. Back loading increases the regulatory risk and the cost of financing. Back loading provides perverse economic signals in that it results in lower charges when facilities are more heavily utilised, in fact the greater the congestion the lower the charges, and a sharp increase in charges when capacity becomes available. Front loading of charges helps demonstrate market demand for the new facilities and enables earlier delivery of lumpy investment which might otherwise be delayed due to the risks associated with back loading e.g. economic recession, war, terrorism, disease pandemic etc any or all of which perceived risks could delay investment. Front loading, on the other hand, is less risky to the DAA, makes it easier to obtain financing and is also in line with international practice. By way of illustration, the UK CAA has allowed some front loading in relation to BAA's London airports: "For large capacity additions it promotes the efficient, economic operation of airports and is in the interests of users to allow prices to adjust such that prices are relatively higher prior to the capacity coming on stream (where there is excess demand and congestion) and relatively lower when it is completed (when there is less excess demand)."

In contrast to front loading, back loading of charges also creates a significant risk in that neither the DAA nor CAR can be certain that economic circumstances or market conditions will not materially change over a five to ten year horizon. It also increases the incentives on the airlines to "game" traffic forecasts, e.g. by talking up forecasts, which would then not be met.

**Question 6: What traffic forecast should be used when setting the price cap? Who should bear the risks if demand out-turns does not correspond to the initial traffic forecast?**

The DAA bases its investment decisions on its own internal demand forecast. These are consistent with the estimates of cost and financing for the projects. Given the operational

responsibility of the DAA, it is better situated to forecast demand than the CAR or other third parties.

The present regime transfers the volume risk in the regulatory period to the DAA, subject to the CAR's decision to open interim reviews in exceptional circumstances. It is important to appreciate that the demand forecast is not the sole preserve of the DAA and that users feed into its forecast. For that reason it would be unjustifiable to transfer all the risk for projected volumes to the DAA, when those volumes are based on the feedback from users. This would in effect invite users to manipulate the process by "talking up" their traffic forecasts and then deliver less to penalise the DAA. It would therefore seem appropriate to maintain consistency between the forecast and the regulatory period.

It is also important for reasons of regulatory certainty and thus policy to ensure consistency between the forecasts used and the regulatory period. This is also an issue for debt providers who require clarity on the trajectory of expected charges and the timescales in which these might change in the normal course of events. This is even more important when one considers that the traffic forecasts impact operating expenditure and commercial revenues as well as capital expenditure.

Finally, as noted previously forecasting is as much an art as a science yet demands real expertise and experience. The DAA is best placed to produce the most reliable forecasts, given that these require a balancing on macro-economic and micro-economic judgements as well as being able to take a view on different airlines (often contradictory) own forecasts given that many forecasts will require an assessment of which airline among several competitors is likely to take the most significant share of traffic. Before committing to capital investment it is necessary for someone to make these judgement calls and the DAA is best placed to take this "central" role. The CAR determined that the then Aer Rianta should carry the volume risk associated with the events of the "foot and mouth" epidemic in the UK and of the infamous 9/11 in the US during the term of the 2001-2005 determination. The DAA is prepared to accept normal volume risk for any given regulatory period but just as it would not be allowed to enjoy out performance indefinitely it should not have to carry any sustained under-performance due to unforeseen circumstances. There should be a measure of symmetry in this respect.

**Question 7: What actions, if any, should the CAR take to strengthen regulatory commitment and credibility with respect to the level of charges it will allow in future determinations for the funding of CIP2006? Should the length of the price cap be increased?**

At a minimum, the DAA considers that some consistency in approach to:

- calculation of WACC over regulatory periods;
- traffic forecasts;
- addition of capital expenditure to RAB; and
- approach to risks and financeability

are critical in giving the appropriate incentives and allowing some level of “regulatory stability” which could be reflected by the financial markets, leading to a lower overall cost of capital.

In addition, some level of consistency in regulatory policies and a lengthy period of full consideration before introducing any policy changes are essential. Thus, consideration of matters, which raise significant policy issues during an Interim Determination procedure, is not consistent with strengthening regulatory certainty. It is important that the relevant consultations be as focused as possible. In this respect, consultations such as the Cost Benefit Analysis, which fails to acknowledge the binding delivery date of 2009 for T2, are not helpful.

In order to ensure the lowest possible cost of capital to the benefit of all parties and ensuring the DAA’s SFV, it is important for CAR to move to a “supportive” regulatory regime. Standard & Poors’ expressed opinion of the CAR regulatory regime (“immature”) is reflective of a general concern about the current state of regulation which has the effect of penalising the DAA (and thus users) financially given that it feeds into matters such as credit ratings and debt providers’ assessment of the correct remuneration for the risks they perceive in DAA.

#### 4. Peak-load pricing

##### **Question 11: What are the merits of using peak-load pricing for airport charges at Dublin Airport to fund Terminal 2?**

At the outset, the DAA notes that this question is leading in that it only asks for “the merits” rather than advantages and disadvantages of peak-load pricing. Moreover, the question only refers to the funding of T2, although peak time activities will have an impact on both terminals and airside. The question has therefore been poorly phrased to capture the proper context and effects of peak-load prices at Dublin Airport.

It would seem that the CAR has been motivated to pursue peak-load pricing, at least in part, by the report from Ian Rowson (“High level analysis of DAA’s investment plans – key issues”), which was published together with CP1/2007. The report claims that the investments in T2 are based on a considerable change in peak-hour profile between T1 and T2 (8% of departures leaving in the peak hour in 2006 compared to almost 20% in 2013). Paragraph 3.19 states that: “As a result, T2 is projected to have a demand profile for departing passengers which is twice as peaky as the airport’s demand profile at present, and it is this prospect that drives the proposed size and cost of the terminal.” Appendix 1<sup>2</sup> demonstrates that the change in peak-hour profile is in fact minor for prospective T2 airlines (from 16% of departures leaving in the peak hour in 2006 to 20%). This reduces the prominence of peak load pricing as a vehicle for better capacity utilization.

More generally, the question of peak hour pricing is highly complex. There is a considerable history to peak load pricing at Dublin Airport, in particular the experiences learned during the 2001-5 regulatory period. Peak Load pricing was recognised at that time to be extremely complex and indeed was dropped with the support of the whole industry. Not only is reopening a matter which was decided in the September 2005 Determination inconsistent with the scope of the Interim Determination review procedure, but there does not seem to be any changes which would suggest that it should be reviewed.

Fundamentally, the role of the DAA and CAR is to ensure that the capacity is delivered to accommodate the airline services the market would normally provide. CAR’s proposals seem to imply CAR may be more focused on rationing scarce capacity than delivering additional capacity. There is still scope for growth at Dublin and thus the possibility of delivering the

<sup>2</sup> Appendix 1 - Review of High Level Analysis of DAA’s Investment plans by IMR

capacity to serve the full requirements of the market. CAR's focus should be on ensuring this additional capacity is delivered, not on restricting it.

More generally, peak load pricing makes sense in the form of economic efficiency under the Statutory Objectives when peak-loads are capacity constrained. Peak load pricing is desirable where there are economically non-storable commodities whose demand varies by time; see the UK CAA, *Peak Pricing and Economic Regulation* (2001). It could then be used to reflect the incremental costs of meeting demand in different periods, to promote a more efficient allocation of resources, by giving users an incentive to shift demand to off-peak periods. However, this should not obscure CAR's statutory duty, which is to incentivise delivering additional capacity not restricting the availability of additional capacity.

The construction of T2 will remove the capacity constraints for some years and therefore negates the logic in introducing peak charging when the terminal first opens. When T2 eventually opens it would be more in line with the Statutory Objectives to encourage utilisation, not deter it (all the time, recognising the CAR's statutory duty to ensure SFV). By introducing peak load pricing at that time, the CAR would risk influencing the total volume of demand (rather than promoting a spreading of the volume to non-peak hours). This would not only reduce the financeability of T2 as such but also conflict with the Statutory Objectives.

Furthermore, the CAR has published little research into the interests of the airlines on this point before. There would be no point in introducing peak load prices if there is insufficient demand by the airlines to justify shifting flights to a different time of the day. In the wider context, the economic loss of not providing capacity at the times needed by the users could well surpass the gains in spreading a limited volume of traffic to non-peak hours.

It could also distort competition since many other airports do not use peak load pricing and lead to less direct employment at Dublin Airport. Experience shows that airlines are most likely to add new routes if they have a base at an airport. Peak load pricing would deter these airlines from basing additional aircraft at Dublin since it would mean they could not use the aircraft as efficiently as they would like, given that any base operator's incentives are to make the maximum use of its assets and thus maximum daily flying time. Efficient utilisation of short haul fleets can only be achieved by 'loading' the early morning peak, getting the aircraft generating revenue up in the air as soon as possible and permitting the maximum number of

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<sup>3</sup> European Commission Proposal for EU Directive on airport charges – Explanatory memorandum



rotations per aircraft per day of the airport. It is worth pointing out that as Dublin is on the western fringe of Europe, with the differences in local time from Continental European destinations, the need to get out earlier is greater for Irish based airlines than for airlines based in central Europe which also have the option of ‘gaining time’ on routes leading west. This effectively puts more pressure towards peaking on airlines located in such areas.

The lack of a significant “based fleet” not only forces airlines to adopt commercial strategies they would not otherwise do but also deprives Dublin of the significant advantages of a larger fleet of based aircraft, namely more new routes, more frequencies and greater competition. It would also mean less direct employment in the form of less airline staff and need for maintenance and other facilities necessary to support the based fleet.

Accordingly, the DAA considers that CP1/2007 does not capture these parts of the market dynamics at Dublin Airport. CAR should not pursue peak load pricing any further in the course of the Interim Determination review procedure.

**Question 12: What calculations should the CAR 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?**

The DAA would welcome the opportunity to respond, if and when, the CAR decides that peak load pricing should be introduced at Dublin Airport. It would be premature to expand on the alternatives given the limited detail of information set out in CP1/2007. However, the DAA would point out that any calculations will be highly complex, as they need to consider not just the capital expenditure but also operating expenditure and commercial revenues. The resulting complexity is likely to be such that airlines will find it difficult to be reassured the charging is set at an appropriate level and the financial markets will struggle to understand DAA’s revenue base, leading to on the one hand significant distortions of competition in the downstream markets and an increased cost of capital for DAA. This is supported by the fact that peak load pricing was dropped at Dublin Airport in the 2005 Determination for precisely many of these reasons.

## **5. Differential pricing**

**Question 13: How much would users be willing to pay in airport charges for the improved quality experience that they expect T2 to provide?**

The DAA would first of all note that the question rests on two assumptions, namely (a) that there will be a different level of service in T2 from T1, and (b) that there is a cost of Euro 259M in providing a different level of service between the two terminals. Neither assumption is justified. This is explained in more detail below.

### **T1 and T2 will offer the same level of services**

Both T2 and T1 will provide the same level of service, namely IATA level C. The commissioning of T2 will be accompanied by an upgrading of T1 also detailed in the DAA's capital expenditure plans. It will also free up capacity in T1 and eliminate overcrowding in that terminal to be benefit of all passengers at the airport. There is therefore no justification for assuming that T2 will offer an increased level of service. The examples quoted by CAR of differential pricing at other airports are cases where there is the intention to provide a different level of service at the different terminals. That is not the case at Dublin.

There are many airports with single pricing yet different terminals each offering the same level of service yet with facilities of different ages. A single price is set on the basis that terminals benefit from continuous upgrades and therefore if one terminal is more modern at one point in time, a few years later upgrading of the other terminal will lead it to have the more modern facilities. In these situations the perception of service levels can vary quite a lot with respect to different terminals but this is not reflected in differential pricing for many reasons, a key reason being that such differentials introduce barriers to airport development, adversely impact downstream competition and add complexity to the allocation of airport facilities when there is a need to switch users between terminals in the interests of greater all round efficiency.

There is no basis to assert that Euro 259M is the cost of providing a different level of service. Assuming that Euro 259M represents the cost of providing better service in T2 is completely unjustified. The DAA has noted in its earlier response that CAR's reading of the cost of delivering T2 is simply incorrect. CAR appears to have simply subtracted Euro 350M from Euro 609M to come up with the Euro 259M figure. Yet Euro 350M is absolutely not the correct capital cost incurred in respect of T2. The Euro 609M figure also included numerous costs such as infrastructure works external to the building, fees, planning levies etc. CAR also appears to be ignoring the independent verifier's verification of the cost plan. It should also be noted that lumping pier E investment with T2 is completely unsound. There will be a need for additional pier capacity whether or not T2 is built and failure to provide it at Pier E would

impact on all airport users, not just the users of T2. In addition there will be no surplus of gate served stands at any stage for the foreseeable future.

The DAA refers CAR to its earlier response for the detail but would note here that engaging in consultation exercises on the basis of such basic misinterpretations of the cost of delivering T2 renders the consultation process at best meaningless and at worst will lead to a skewed process with comments being received which are premised on a totally inaccurate understanding of the relevant facts.

### **Airline Choice**

The question also presumes that airlines and passengers have a choice. In practice, the majority will not. Intercontinental flights will be based in T2, Aer Lingus will use T2 and Ryanair will use T1. Passengers will normally choose an airline or terminal, but cannot choose both. Many airlines will not have a choice of terminal. Differential pricing would therefore unfairly penalise some carriers and could seriously affect competition between them, in particular between Aer Lingus and Ryanair.

For example, as T2 will have additional facilities suitable for long haul flights, Aer Lingus is basically compelled to use T2 at least for its long haul flights. Having a differential pricing structure would mean that Aer Lingus would then be faced with a choice of locating its short haul operations in T2 but paying higher charges than Ryanair for these flights which are largely operated in direct competition or basing its short haul fleet in T1 which would have a significant operational disadvantage and also inflict a significant cost penalty on Aer Lingus given the split operations.

### **No consideration of the impact in airline markets**

As noted above, differential prices may have a significant impact in the downstream airline markets. CPI/2007 contains no consideration of this impact. If this idea is to be pursued further much more detailed consideration of this will be required.

### **Differential prices may infringe competition law**

The DAA would expect a high risk of complaints by users claiming that the differential prices have been set discriminatorily and without objective justification pursuant to Article 82 EC (prohibition of abuse of dominant position). As the CAR is no doubt aware of, a violation of Article 82 EC carries the risk of significant fines in addition to liability for damages to users.

Differential pricing by an entity such as the DAA (and indeed CAR) must be very carefully assessed against Article 82 in particular to ensure that any price differential can be objectively justified by reference to different levels of service received and the relevant cost base. Allocation of costs between T1 and T2 would need to be done in the minutest detail before any price differential could be considered objectively justified. Yet cost allocation is extremely difficult particularly in a single till environment as consideration of both operating expenditure and commercial revenue must also be taken into account.

To give a flavour of the difficulties, T2 will accommodate most of the airport's long haul flights and thus a disproportionate number of non-EU passengers. The retail revenues from non-EU passengers are approximately 4.5 times those of an EU passenger. It is also reasonable to assume that foreign exchange and car hire revenues are likely to be higher from T2 passengers than T1 given the fact that almost all (if not 100%) of passengers to/from North America will use T2.

At the same time, the operating expenditure for T2 is expected to be lower than for T1 due to the smaller size of T2 and Pier E combined compared with T1 and associated Piers, and the varying age of the buildings and systems. Thus even if costs were higher in T2, potentially commercial revenues could also be larger and therefore it is the overall balance which would need to be considered when setting differential charges between T1 and T2. A differential charge may not actually be warranted on a costs and revenue basis irrespective of LOS or downstream competition issues.

Absent a very detailed cost allocation taking into account both capital and operating costs and commercial revenues, there can be no sound basis for introducing differential pricing. The CAR previously ruled out the implementation of a dual till arrangement on the grounds that "such detailed information was not available" (CP8/2001 p12).

In accordance with the Aviation Action Plan, the operation of T2 will be the subject of a tender process. It is therefore possible that the operation of T2 will be independent of the DAA. Any price differential between T1 and T2 will have a significant impact on both the tender process and the operator of T2. For example, the possibility of airlines switching from T2 to T1 because of the price differential will at a minimum significantly complicate the tender process. This is yet another reason why the proposal raises issues of such magnitude that they require much more detailed consideration than is envisaged by CPI/2007.

As the DAA has explained on several occasions earlier, the quality of T1 will improve once T2 opens (users in T1 will benefit from lower congestion as other users move to T2, both T1 and T2 will meet the same IATA C service level standard and there will be additional upgrades of T1 coming into effect soon afterwards). Seen from the perspective of Article 82 EC, these facts will increase the likelihood of a violation if differential pricing between T1 and T2 were introduced. The DAA must therefore reserve its right to contest the decision of the CAR, to the extent that the CAR compels the DAA to introduce unlawful pricing. In that perspective, the CAR may have an independent duty under EU law, in particular Article 86(1) EC, to ensure that its decisions will not compel the DAA to act in violation of Article 82 EC. Neither of these issues have been identified and discussed in CP1/2007, which brings further support to the need for the CAR to consult properly before rushing through a pricing regime, which could very well be unlawful.

**Question 14: What are the merits of using differential pricing when setting airport charges for T1 and T2 users at Dublin Airports?**

The DAA would welcome the opportunity to consult on this issue at the time the CAR has clarified that differential pricing will not involve a violation of competition law. However, the DAA notes that the question is leading in that it only asks for “the merits” rather than advantages and disadvantages of using differential pricing. It will not be proper for the DAA to enter into discussions about “the merits” for using differential pricing before the CAR has clarified that this will be done in compliance with Article 82 EC.

**Question 15: What calculations should the CAR 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?**

We refer to our answer to Question 14 above.

**The cost benefit analysis model**

The DAA has explained in its submission dated [7 March 2007] why the cost benefit analysis is at best purely academic and serves no useful purpose in that taking account of it would contradict CAR’s Statutory Objectives. The DAA would also observe at this point that the model and the accompanying paper is seriously flawed as well. Attached to this response is a

paper prepared by NERA Economic Consulting<sup>4</sup> which shows that the cost benefit analysis undertaken by CEPA does not follow a conventional cost benefit analysis model and when it comes to estimating specific impacts fails to follow international best practice. When these basic errors are corrected, the net benefits generated by T2 are strongly positive whenever it is constructed.

### **Paper on “Airline involvement”**

It is unclear what the purpose of this document is. However, a common theme of the document is airline investment in the airport, either in the form of a financial or volume commitment or actual investment. The State Airports Act 2004 does not envisage the possibility of airline investment in a terminal at Dublin Airport. Likewise the government’s Aviation Action Plan specifically required the DAA to build T2. The Aviation Action Plan also envisages that the operator of T2 will be chosen following a competitive tender. The Aviation Action Plan is binding on the DAA and clearly the State Airports Act sets out the binding statutory framework. The paper engages in a discussion, which is at odds both with the legislation and the binding government policy and accordingly must be given no weight.

In addition to that, the paper contains a number of basic errors or fails to address certain important and widely publicised recent findings. Even on their own these are such as to deprive the paper of any credibility. For example the views expressed in the opening section on context relies on assumptions which are not supported by evidence but form some of the analysis in the entire text e.g. the statement that the “LCC’s were largely responsible for the significant growth in passenger numbers witnessed throughout the 1990’s and into the current decade.”

In fact the most comprehensive study available to date the UK CAA study published in November 2005 “No Frills Carriers – Revolution or Evolution” reached entirely different conclusions . Thus at page 3 the CAA found that “ [I]t is less clear that the growth of the no-frills sector has significantly affected overall rates of traffic growth. There is an apparent conundrum here ... there has been little change in long-term aggregate passenger traffic growth rates” and “[T]here is little evidence of any major change in the type of people who are flying today as compared to a decade ago, particularly in the leisure market.”

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<sup>4</sup> Appendix 2 – Review of the Cost Benefit Analysis of Terminal 2 and Runway 2 undertaken by CEPA on behalf of the Commission for Aviation Regulation

Even when focusing on UK domestic and UK/EU traffic segments the report concludes at page 9 “there is little evidence of overall growth acceleration since the advent of no frills carriers.”

It is true to say that LCC’s have urged airport owners to offer differential charges and even differential levels of service and to reflect this in their proposed expansion also. The search for differential charges is a search for competitive advantage and it is irrelevant to the carriers in question whether this is cost related or not. In some cases airports actually increase their average passenger handling costs in attempting to offer differential charges to LCC’s which is a market based decision rather than a cost based one. In some cases these decisions are based on a serious misreading of market dynamics similar to the view expressed by CEPA and in others are based on responses to State Aid provision at competing airports.

Another example occurs when addressing the apparent disconnect between the proposed development of a parallel runway at Stansted and the requirements of airline users at Stansted. There is no reference to stated UK Government objectives for airports in the southeast including the new runway at Stansted. This raises questions with respect to the airport body and the regulator working to the same Government policy objectives.

#### Schiphol airport

It appears that the author is not fully informed re Pier H at Schiphol which is a 7 gate pier rather than a terminal. Passengers only enter the pier some 30 minutes before departure as there are no toilets, facilities or even seats – only 8 per gate. Shops, catering and facilities are all located in the main terminal. It is not clear that the differential in charges is cost based or justified in relation to single till contribution.

#### Section on airline financial commitment

It is not clear what purpose this comment serves. Airports build facilities to meet anticipated demand. Unless there is a totally dominant airline at the airport the providers of funds are more influenced by market trends than specific carrier assessments. Most airlines do not like to tie up scarce capital in a non-core asset and it is not clear that commitments from the majority of airlines would reduce the cost of capital.

The reference to Lubeck illustrates the significance of differential pricing for downstream competition and the fact that airport deals of this nature are not cost related and are also frequently subsidised by the taxpayer at local, regional or national levels – something which

distorts competition. It is also puzzling that Lubeck is referred to at all given the court judgement on State Aid.

### Airline specific investment

This section is introduced with a statement to the effect that this is a model long favoured in the US for its perceived competition benefits. On the contrary this model is not favoured in the US for its competition benefits, but is recognized as being anti-competitive as it frequently inhibits competitive market entry. It is a legacy from the old regulated airline market where carriers wished to compete on service quality and brand identification at major airports. Airports like JFK which had and has many branded terminals are rated as being among the most costly to use in the world and even carriers using their own branded terminals have very high internal pricing for those terminals.

### Other observations

The key objective for an airline becoming involved in airport investment is to strengthen its competitive position via-a-vis other airlines. For airports there are very few cases where airports have sought such arrangements, which invariably reduce the airports ability and flexibility in responding to changing market dynamics. The key issue is the affect on downstream competition.

### Unfair advantage

This section appears to be written from a fixed perspective. The reference to an LCC having to struggle to achieve fast turnarounds in a terminal configured to maximize retail expenditure is an example of this as the two are unrelated. Fast turnarounds are related to apron and gate availability and efficient airfield management. Dublin Airport, for example, has a long record of facilitating fast turnarounds while earning a high proportion of commercial revenue in a congested facility.

Indeed failure to achieve strong retail and commercial revenues would make an airport less attractive to a LCC as airport charges would be forced up accordingly.

### Ring fencing

There is an implicit acceptance in this section that if an airport consults with an intended user to ensure that it designs a terminal which is fit for purpose then the designated airline should



pay a differential charge for the terminal. This places both airline and airport in a catch 22 position if the regulator demands consultation as a requirement for approving the capex. It also offers a view which says that a design standard such as IATA level of service A, B, C or D is irrelevant.

The conclusion that there should be multiple RABS conjures up some sort of utopian vision which is simply not a practical or feasible option in the real world.

### Conclusion

In the light of the basic errors in assumptions, and in the examples cited, it is difficult to know what purpose is served by placing essays of this nature into a formal consultation process.

### **Paper on “Congestion charging”**

It is unclear what the purpose of this paper is and how it fits in with CP1/2007. CAR has not requested comments on this paper. However, elsewhere in CP1/2007 CAR has requested comments on certain aspects of peak load pricing. Accordingly, DAA will endeavour to set out some preliminary comments.

The first comment relates to a point of principle. The focus of the paper is on congestion charging with a view to efficient allocation of scarce capacity. That implies that the CAR’s role may move from ensuring that adequate capacity is delivered to meet the need of current and prospective users to rationing capacity between users. This appears to be a breach of CAR’s statutory duty, which is to ensure that the DAA provides sufficient capacity to accommodate air services the market is willing to provide. It also appears to run contrary to government policy, which is that the DAA must deliver T2 by 2009. Anything else is a continuation of the old “too little too late” investment policy which has not worked and is inconsistent with the legislation.

Dublin Airport has space for expansion and indeed has plans to expand both by building T2 and Runway 2, relieving the existing capacity congestion. Any regulatory solution to prevent or delay the delivery of this additional capacity would not only be contrary to CAR’s statutory duty but also seriously hinder the economic development of the State by limiting air services, which the market is willing to provide. The paper therefore seeks to engage in a debate, which is at best academic. No follow up can be given to it without infringing CAR’s statutory duty.

As regards runway congestion, the paper focuses on payments made as part of slot exchanges as a proxy for congestion values. As a matter of regulatory policy this is flawed for, inter alia, the following reasons:

- As the CAR is aware, there is an ongoing debate about explicitly authorising slot sales as part of a revision to the EC Slot Code of Conduct (Regulation 95/93 as amended). If such slot sales are allowed, then as a matter of regulatory policy, runway congestion can be addressed through slot sales, which may obviate the need for runway peak time charging, by the airport operator;
- The paper makes the assumption that slots at Dublin have broadly the same value as London Heathrow on the basis of a “similar mix of passengers travelling between Dublin and Heathrow or New York.” This is an assumption, which is totally unjustified. As is well known, Heathrow is an exceptional airport by any measure: congested throughout the day, significant excess of demand over supply, a very high proportion of long haul traffic, etc. Quite simply Heathrow is the “must serve” airport for many carriers. It is no exaggeration to say that the debate around the EU-US open skies agreement has largely centred on Heathrow. The DAA is not in a similar commercial position to Heathrow.
- Indeed, whilst no concrete figures are publicly available, it appears that slot values at different European major airports including the other major European hub airports are very different from Heathrow.
- The value of Heathrow slots can be assumed to be calculated by reference to the revenue earning potential of a flight that can be operated on that slot. In the case of Heathrow, these tend to be long haul flights with a high proportion of business passengers. These are services the DAA would be very interested in seeing operated from Dublin but realistically this is not likely to be the case. The paper mentions for example slots transferred to Qantas. These are clearly used for services to Australia via the Far East with a 747 aircraft. Such services are not operated from Dublin and have vastly different revenue earning potential for the airline than the short haul Aer Lingus or Ryanair flights that form the largest number of flights using Dublin Airport at its busiest period for the existing runway.

- As the paper itself admits, there is no publicly available reliable information about slot values at Heathrow. The figures given are merely estimates gleaned from press reports whose accuracy cannot be measured. It would be unsound to base policy on such estimates.
- Finally, it is incorrect to say that meaningful data about slot values can be obtained from the USA. The USA gave up its system of slot control many years ago except for the unique case at Reagan National Airport in Washington. Thus not only did the USA determine as a matter of policy that slot trading was not an appropriate instrument for addressing congestion but the data is so old and reflects a very different era in aviation that it cannot credibly be said to shed any light on current slot values.

As regards terminal congestion, apart from the comment that in some areas of the existing terminal, congestion has led to some of the lowest service level standards possible (which supports the case for T2), the paper is at best academic. A very summary (2 pages) analysis leads to the statement that “the existing assumptions would suggest that the case for terminal 2 is unproven from the congestion charging evaluation”. Not only is this inconsistent with the statement that certain areas of Dublin Airport experience the lowest level of service possible due to congestion, which would suggest an urgent need for additional capacity, but the statement is irrelevant. The government’s Aviation Action Plan, which is binding on the DAA mandates the DAA to build T2 by 2009. There is no scope for discussion about the case for T2, whether congestion charging might alter the case for it, etc. The CAR must accept the Aviation Action Plan’s directions to the DAA and remunerate the DAA for delivering T2.

\* \* \* \* \*

8 March 2007

**Review of the Cost Benefit Analysis  
of Terminal 2 and Runway 2  
Undertaken by CEPA on Behalf of the  
Commission for Aviation Regulation**

Report for Dublin Airport Authority

**NERA**

Economic Consulting

## **Project Team**

Stuart Holder  
Emily Bulman

NERA Economic Consulting  
15 Stratford Place  
London W1C 1BE  
United Kingdom  
Tel: +44 20 7659 8500  
Fax: +44 20 7659 8501  
[www.nera.com](http://www.nera.com)

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## **Executive Summary**

This report, by NERA Economic Consulting for Dublin Airport Authority (DAA), is a brief review of the cost benefit analysis (CBA) of Terminal 2 and Runway 2 carried out for the Commission for Aviation Regulation by Cambridge Economic Policy Associates (CEPA). In particular, we consider whether the methodological approach and general parameters adopted by CEPA is consistent with that used for the appraisal of transport and other major infrastructure projects elsewhere, rather than assessing the specific assumptions and forecasts relating to Dublin Airport and the two projects under consideration.

### **Overall Approach**

One important conclusion is that the unconventional way in which CEPA's results are presented – comparing the projected benefits in the first year of operation with an estimate of the annualised costs of the project – gives a potentially misleading impression of both the potential net benefits of the projects (including whether or not they are positive) and the optimal timing of either investment project.

Instead, using the same assumptions as CEPA but adopting a more conventional approach (ie calculating the net present value of benefits over a number of years), we can show that the net benefits generated by Terminal 2 are strongly positive whenever it is constructed, and that any potential benefits from delaying its in-service date are marginal at best. Runway 2 also generates positive net benefits for any in-service date from 2011 onwards.

The reason that CEPA's approach conveys a somewhat different impression, even with the same data and assumptions, is that it fails to reflect either the costs of delays, disruption and poor service quality that will be caused if the new runway and terminal are delayed, or the longer term benefits that will be delivered during the remaining life of the new terminal or runway (when traffic volumes and therefore benefits will be greater).

### **Parameter Values**

In addition, there are several cases where CEPA's approach to estimating specific impacts fails to reflect best practice in the appraisal of major transport investment projects. Its assumptions in relation to the value of time, in particular, appear lower than the values used or recommended for similar exercises elsewhere, and it does not adjust these parameters to reflect the specific disbenefits associated with delays. If we make a conservative adjustment for these factors, in addition to adopting a more conventional approach to comparing benefits and costs, but retain the rest of CEPA's assumptions, we find that:

- the net benefits from either or both projects are strongly positive; and
- for either Terminal 2 or the combined project, the net benefits are highest if investment is carried out as soon as possible.

In addition, CEPA has failed to take account of the additional costs that DAA will need to incur, in the event of delays to the new terminal and runway, to cope with expected traffic volumes with its existing infrastructure. Including these in the analysis will further increase the net benefits generated by both projects and bring forward the optimal in-service date.

## **1. Introduction**

This report, by NERA Economic Consulting for Dublin Airport Authority (DAA), is a brief review of the cost benefit analysis (CBA) of Terminal 2 and Runway 2 carried out for the Commission for Aviation Regulation by Cambridge Economic Policy Associates (CEPA). In particular, we consider whether the methodological approach adopted by CEPA is consistent with that used for the appraisal of transport and other major infrastructure projects elsewhere. We have not carried out a detailed assessment of the specific assumptions and forecasts that CEPA uses in relation to Dublin Airport and the two projects under consideration.

The report is structured as follows:

- in Section 2 we assess CEPA's overall approach, in particular the way it has taken account (or not) of benefits and costs at different times during, and before, the life of the project;
- in Section 3 we discuss several impacts and the approach CEPA has adopted to estimating these; and
- in Section 4 we consider other issues, including possible impacts that CEPA has not taken into account.

The Commission for Aviation Regulation has very recently released a spreadsheet model that provides details of CEPA's analysis. We have used these data to show, using the same assumptions as CEPA, the impact of adopting an alternative (and more conventional) overall approach. We have then extended this analysis slightly, by demonstrating the impact of relatively conservative departures from CEPA's assumptions.



## 2. Overall Approach

The conventional approach to cost-benefit analysis, which is frequently used to appraise proposed projects in the transport sector and other industries, involves:

- defining a counterfactual case – what will happen if the project does not go ahead? and
- estimating the change in benefits and costs over the lifetime of the project if it goes ahead. This analysis may be carried out separately for several different potential projects.

In CEPA’s case, the counterfactual case is not defined explicitly. Implicitly, it is the case where neither Terminal 2 nor Runway 2 is ever constructed. But, as noted in Section 4.1 below, CEPA has not taken account of any additional costs that DAA would need to incur, in the absence of new investment, in order to handle large traffic volumes through its existing terminal and runway. In addition to the other factors noted in this report, this omission will lead to an underestimate of the net benefits of the new terminal and/or runway.

### 2.1. CEPA’s “Snapshot” Comparison

CEPA has adopted an unconventional approach to the CBA. Rather than setting out the benefits and costs of specific projects over time, CEPA has focused on a simple comparison between the benefits and costs in one particular year – the year in which the new facility comes into operation.

In theory, a “snapshot” approach could generate meaningful results - but only if the estimated benefits and costs for the year in question are properly representative of the average benefits and costs over the entire period. To ensure this is true, it is necessary to analyse the pattern of benefits and costs over time – in other words to carry out a conventional CBA before converting the results into annual equivalents.

CEPA’s approach, in contrast, is to compare an estimate of the annualised cost of the new terminal/runway with the benefits generated in the first year of operation. This approach is used, for example, to generate Figures 3.1 to 3.3 and the charts in Annex 9 of CEPA’s report, and provides the basis for the “core time frame” and “feasible time frame” reported by CEPA.

CEPA does not explain why it has adopted this approach. Compared to conventional CBA, the results can be misleading. In particular:

- the net benefits are understated, because the comparisons shown in CEPA’s charts fail to reflect either
  - the benefits generated by the runway/terminal in future years, which because of expected traffic growth (and also the impact of real income growth on the value of time) are very likely to be higher than the benefits generated in the first year, or
  - the fact that, if investment is delayed, the potential benefits that would be generated in the early years are lost; and
- the impression given of the optimal timing of investment is distorted, because of the failure to take account of benefits foregone by delaying the project.

## 2.2. Comparison with the Conventional Approach

In order to provide a comparator to CEPA's methodological approach, we have carried out a conventional CBA calculation of the benefits, but retained its annualised cost estimate (since the distortions created by this are much smaller). Furthermore, with one exception, we have used only CEPA's own data and assumptions – the one exception, which is necessary because CEPA's estimates do not go beyond 2020, is a conservative assumption that from 2021 onwards the total benefits associated with each project increase by 3.5 per cent a year.<sup>1</sup>

An example of the results, for Terminal 2 entering service in 2009, is shown in Table 2.1 below. The data and assumptions are the same as in CEPA's "high benefit/high cost" assumptions (ie the black lines in Figure 3.2 of its report), which suggest that the terminal will not be viable before 2013. In contrast, the comparison of costs and benefits shown in Table 2.1 suggest that the terminal will generate significant net benefits even if it is introduced a long time before 2013.

Table 2.2 shows a similar calculation for Runway 2 entering service in 2011. On the basis of CEPA's data and assumptions plus our own assumption of a 3.5 per cent annual increase in benefits after 2020, 2011 is the first in-service year for which the net present value of Runway 2 is positive. But we believe this significantly understates the likely benefits of the runway. In addition to the adjustments discussed in Section 3, the assumed 3.5 per cent increase in benefits after 2020 is particularly conservative in the case of the runway, as can be seen in Table 2.2 by comparing the path of benefits after 2020 with the strong growth shown in the previous five years.

Still retaining CEPA's data and assumptions, we have used this approach to calculate the total net benefits for Terminal 2, Runway 2 and the combined project, over the period from 2007 to 2049, with a range of different in-service dates.<sup>2</sup> The results are shown in Figure 2.1 to Figure 2.3 below. Compared with the results shown in CEPA's report, these suggest:

- positive net benefits in nearly all cases, the only exceptions being the introduction of Runway 2 before 2011; and
- very little advantage from delaying the investment in Terminal 2 – this is in contrast with Figure 3.2 in CEPA's report, which shows a "core time frame" of 2013 to 2017.

Importantly, these calculations have not been adjusted for other ways in which CEPA has departed from standard practice in transport sector CBA, which we discuss in Section 3.

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<sup>1</sup> This is lower than the increase in benefits estimated by CEPA for the period before 2020. The benefits generated by Runway 2, for example, increase by more than 20 per cent a year during the last five years of CEPA's analysis. The calculations shown in Table 2.1 are based on a 40 year timeframe, which corresponds to the asset life assumed by CEPA.

<sup>2</sup> For simplicity, we have not allowed for any final asset value at the end of the period. In practice, we would expect any difference in the economic (as opposed to accounting) value of the asset(s) at this time to be small, and the impact on the overall net present value will be muted by the impact of discounting over 40 years.

**Table 2.1**  
**Costs and Benefits over Time for Terminal 2 Operating from 2009**

£million	Benefits	Costs	Net benefits	Discount factor	Discounted net benefits
2007				1.00	
2008				0.93	
2009	137	159	-22	0.87	-19
2010	142	159	-17	0.81	-14
2011	147	159	-12	0.75	-9
2012	152	159	-7	0.70	-5
2013	157	159	-2	0.65	-1
2014	162	159	2	0.61	1
2015	165	159	6	0.56	3
2016	170	159	11	0.53	6
2017	176	159	17	0.49	8
2018	182	159	23	0.46	11
2019	190	159	30	0.42	13
2020	198	159	39	0.40	15
2021	205	159	46	0.37	17
2022	212	159	53	0.34	18
2023	220	159	60	0.32	19
2024	227	159	68	0.30	20
2025	235	159	76	0.28	21
2026	244	159	84	0.26	22
2027	252	159	93	0.24	22
2028	261	159	101	0.22	23
2029	270	159	111	0.21	23
2030	279	159	120	0.19	23
2031	289	159	130	0.18	23
2032	299	159	140	0.17	23
2033	310	159	150	0.16	24
2034	321	159	161	0.15	23
2035	332	159	172	0.14	23
2036	343	159	184	0.13	23
2037	356	159	196	0.12	23
2038	368	159	209	0.11	23
2039	381	159	221	0.10	23
2040	394	159	235	0.09	22
2041	408	159	249	0.09	22
2042	422	159	263	0.08	22
2043	437	159	278	0.08	21
2044	452	159	293	0.07	21
2045	468	159	309	0.07	20
2046	485	159	325	0.06	20
2047	501	159	342	0.06	20
2048	519	159	360	0.05	19
2049	537	159	378	0.05	19
<b>Total</b>					<b>632</b>

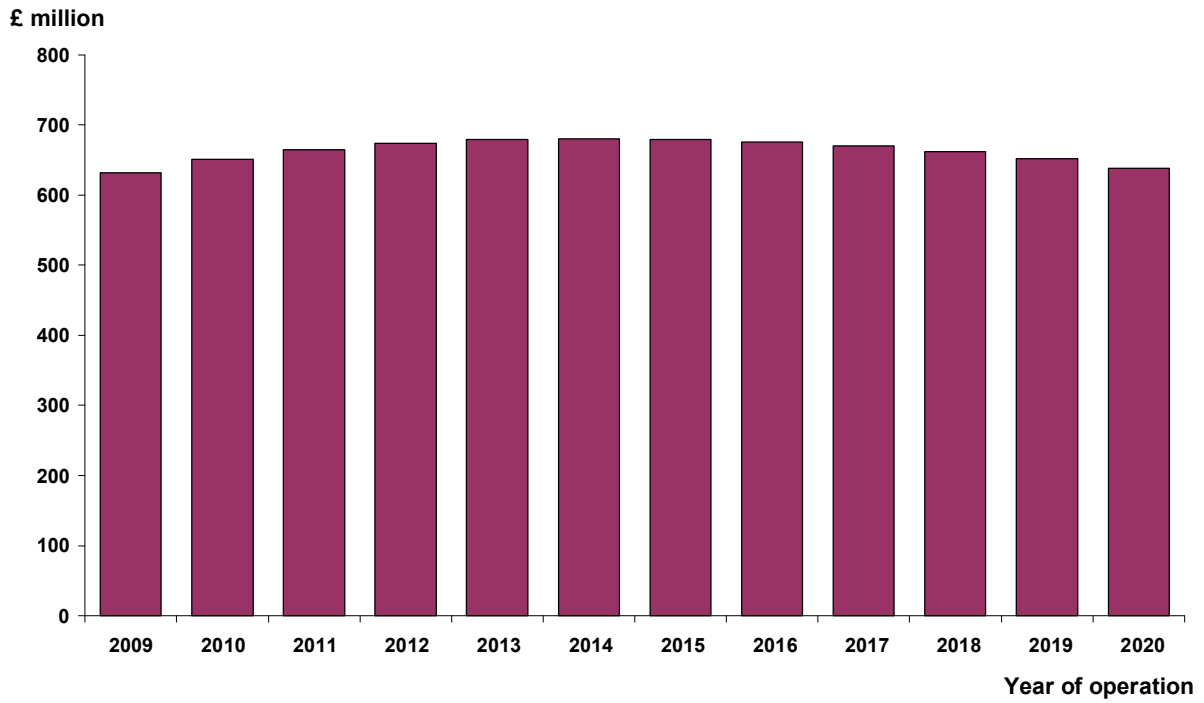
Sources: *Benefits to 2020 - from CEPA model ("Orig ben", Summary!X4-X18)*  
*Benefits from 2021 - increased by 3.5% pa (NERA assumption)*  
*Costs - from CEPA model ("Orig cost", Summary!Y7-Y18)*  
*Discount rate - 7.4%, as used by CEPA*

**Table 2.2**  
**Costs and Benefits over Time for Runway 2 Operating from 2011**

£million	Benefits	Costs	Net benefits	Discount factor	Discounted net benefits
2007				1.00	
2008				0.93	
2009				0.87	
2010				0.81	
2011	13	39	-26	0.75	-19
2012	13	39	-25	0.70	-18
2013	14	39	-25	0.65	-16
2014	14	39	-24	0.61	-15
2015	17	39	-22	0.56	-12
2016	20	39	-18	0.53	-10
2017	25	39	-14	0.49	-7
2018	30	39	-9	0.46	-4
2019	36	39	-2	0.42	-1
2020	44	39	5	0.40	2
2021	45	39	6	0.37	2
2022	47	39	8	0.34	3
2023	48	39	10	0.32	3
2024	50	39	11	0.30	3
2025	52	39	13	0.28	4
2026	54	39	15	0.26	4
2027	55	39	17	0.24	4
2028	57	39	19	0.22	4
2029	59	39	21	0.21	4
2030	61	39	23	0.19	4
2031	64	39	25	0.18	5
2032	66	39	27	0.17	5
2033	68	39	30	0.16	5
2034	71	39	32	0.15	5
2035	73	39	34	0.14	5
2036	76	39	37	0.13	5
2037	78	39	40	0.12	5
2038	81	39	42	0.11	5
2039	84	39	45	0.10	5
2040	87	39	48	0.09	5
2041	90	39	51	0.09	5
2042	93	39	54	0.08	4
2043	96	39	57	0.08	4
2044	99	39	61	0.07	4
2045	103	39	64	0.07	4
2046	107	39	68	0.06	4
2047	110	39	72	0.06	4
2048	114	39	76	0.05	4
2049	118	39	80	0.05	4
<b>Total</b>					<b>20</b>

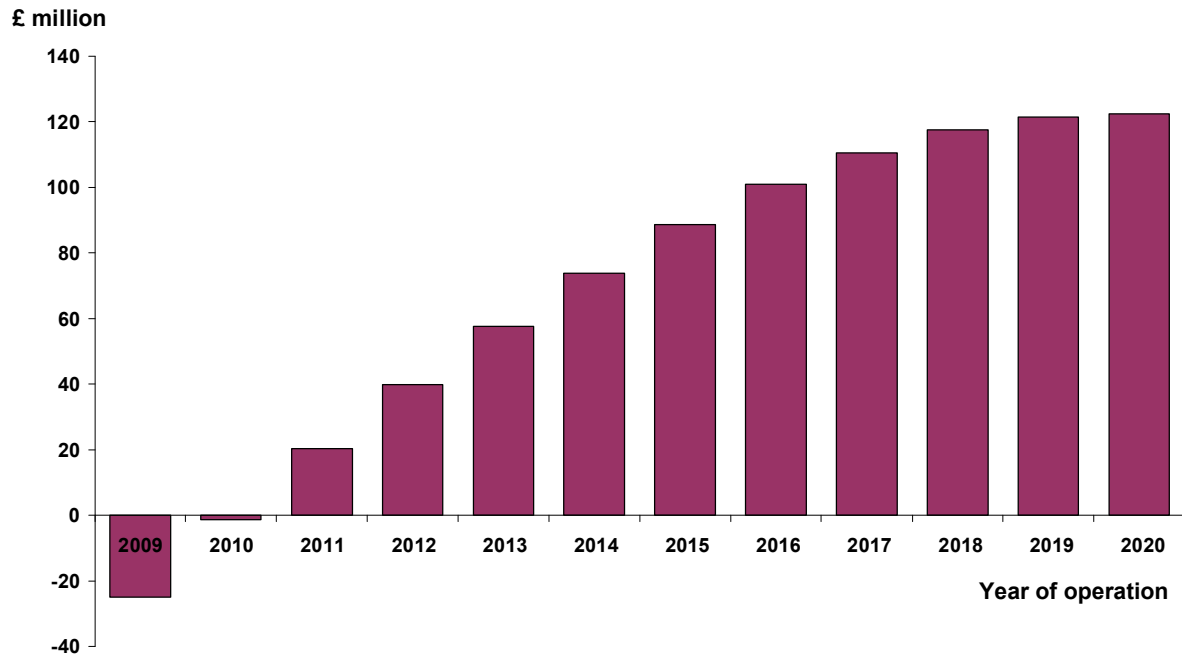
Sources: *Benefits to 2020 - from CEPA model ("Orig ben", Summary!X4-X18)*  
*Benefits from 2021 - increased by 3.5% pa (NERA assumption)*  
*Costs - from CEPA model ("Orig cost", Summary!Y7-Y18)*  
*Discount rate - 7.4%, as used by CEPA*

**Figure 2.1**  
Discounted Net Benefits of Terminal 2 - Using CEPA Assumptions



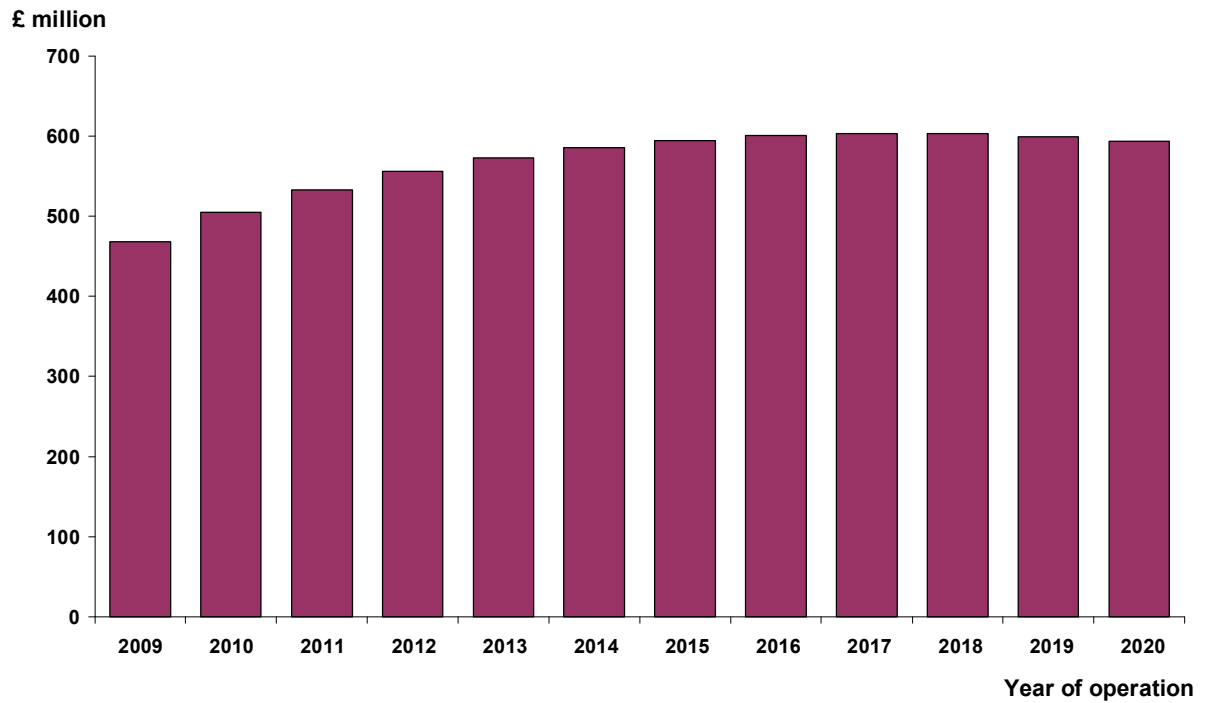
Source: NERA calculations based on CEPA data and assumptions

**Figure 2.2**  
Discounted Net Benefits of Runway 2 - Using CEPA Assumptions



Source: NERA calculations based on CEPA data and assumptions

**Figure 2.3**  
**Discounted Net Benefits of Terminal 2 and Runway 2 Combined - Using CEPA Assumptions**



*Source: NERA calculations based on CEPA data and assumptions*

### 3. Approach to Estimating Specific Impacts

#### 3.1. Value of Time

For business travellers, CEPA has used values of time of between €13 and €21 per hour (for its “low cost” and “high cost” cases respectively). The top end of this range is based on a consultancy study for the Department of Transport (though using the “all” estimate rather than the significantly higher “traveller” estimate) and a figure used by the National Road Authority. The lower end is based itself on the lower end of a surprisingly wide range of estimates, apparently taken from government statistics, on average wages in Ireland.

For leisure travellers, CEPA has adopted a standard approach of using a percentage (in this case 40 per cent) of the value of business time. But this will only provide an appropriate assumption if the initial estimate for business travellers is accurate.

Even CEPA’s “high” value of time for business passengers appears very low. There are several likely reasons for this, including:

- the use of wage/salary rates is incorrect. The value of time for business passengers should also reflect non-wage labour costs, including pension contributions and other benefits and taxation;
- air passengers will tend to have higher incomes, and therefore higher values of time, than the working population as a whole;<sup>3</sup> and
- these values should be assumed to increase over the appraisal period, in line with rising incomes.

One useful comparator is work undertaken for the UK Government’s SERAS study (CEPA refers to SERAS as a “detailed/comprehensive” example of the standard approach to CBA). This used a range of £42 to £48 (€61 to €70) for the value of business time per hour on scheduled airlines in 1988, and £20 (€29) on low cost carriers. For comparison with CEPA’s much lower assumptions, the SERAS figures should also be increased to reflect inflation and rising real incomes in the period since 1988. And leisure time was valued at £7 (€10), which would need to be similarly increased.

Another aviation industry source is EUROCONTROL, which conducted a review of values of time.<sup>4</sup> In all sources quoted, the value of business time was substantially higher than that used by CEPA. For business passengers, EUROCONTROL’s 2005 guidance recommends a range of €47 to €63 per hour (and we understand this to be net of indirect taxes), compared to CEPA’s value of €21 per hour, gross of indirect taxes. For tourist trips, EUROCONTROL uses values in the range €20 to €23 per hour.

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<sup>3</sup> We note also that CEPA’s direct comparison with wage rates is incorrect. Values of time for business passengers should include an allowance for non-wage labour costs, which include pension contributions and other benefits and taxation.

<sup>4</sup> EUROCONTROL (2005), *Standard inputs for EUROCONTROL Cost Benefit Analysis*, p12  
<http://www.eurocontrol.int/ecosoc/gallery/content/public/documents/CBA%20examples/standardinputs.pdf>

If CEPA had adopted a higher assumed value of business (and hence also leisure) time, consistent with the assumptions adopted in other similar studies, the impact would have been:

- to increase the estimated net benefits generated by the terminal and/or runway; and
- to bring forward the point at which these net benefits are maximised.

These impacts are in addition to those already discussed in Section 2.

### **3.2. Treatment of Delays**

A further feature of CEPA's analysis is that it applies this assumed value of time to estimate the cost of delays, without any further adjustment to reflect the specific disbenefits associated with delays. It is standard practice in transport sector appraisal to apply a higher value of time when estimating the impact of unexpected delays.

Research on other transport modes suggests that such delays can have disbenefits equivalent to two or three times those of the same amount of scheduled travel time. Consistent with this, we note that the values of time used in the SERAS study were multiplied by 2 when applied to time spent waiting for or interchanging between services.

If CEPA had adopted this approach, it would have increased the estimated net benefits, and brought forward the point at which they are maximised, still further.

### **3.3. Forecasts of Delays**

While we have not reviewed CEPA's specific assumptions for delays at Dublin Airport (30 minutes' delay in the terminal for peak passengers, and 15 minutes' delay for off-peak passengers, plus two minutes per flight), we note that CEPA appears to assume the same ratio of peak to off-peak passengers – based on current proportions - throughout the evaluation period.

In contrast, if provision of the new terminal and runway is significantly delayed, the proportion of "peak" time at Dublin Airport is likely to increase very substantially. Eventually, serious congestion will occur throughout the day, so that all daytime passengers might need to be regarded as peak passengers.

In addition to the low value of time and the non-standard approach adopted, therefore, this is a further reason to believe that CEPA is likely to have underestimated the benefits associated with the new terminal and runway.

### **3.4. Displaced Passengers**

We agree that it is sensible to calculate the benefits of passengers being able to travel (ie not being displaced) using the consumer surplus approach rather than the cost of alternative travel methods. The latter approach is problematic for a number of reasons, not least the data and assumptions required.

However, CEPA appears to have underestimated the impact of capacity constraints on passengers by only considering the case of passengers no longer using the airport at all.



There will also be disbenefits to passengers that are forced to travel at less convenient times. These impacts could be estimated by using a similar approach to that adopted by CEPA, but disaggregating demand by different times of day (as a minimum peak and off peak). The estimated costs associated with capacity constraints would increase as a result.

In addition, we note that airport take-off and landing slots at congested airports are currently allocated on the basis of administrative criteria rather than according to market principles. This means that the passengers that are unable to travel are not necessarily the marginal passengers (ie those that derive the lowest value from being able to use the airport). Therefore the “rule of a half” than CEPA applies to estimate the change in consumer surplus has less validity than usual, and this will also tend to underestimate the costs associated with displaced passengers.

### **3.5. Impact on Estimated Benefits**

In order to illustrate the potential impact of the various factors discussed above, we have repeated the calculations described in Section 2 above but this time departed from CEPA’s assumptions in two specific ways. In particular, we have assumed:

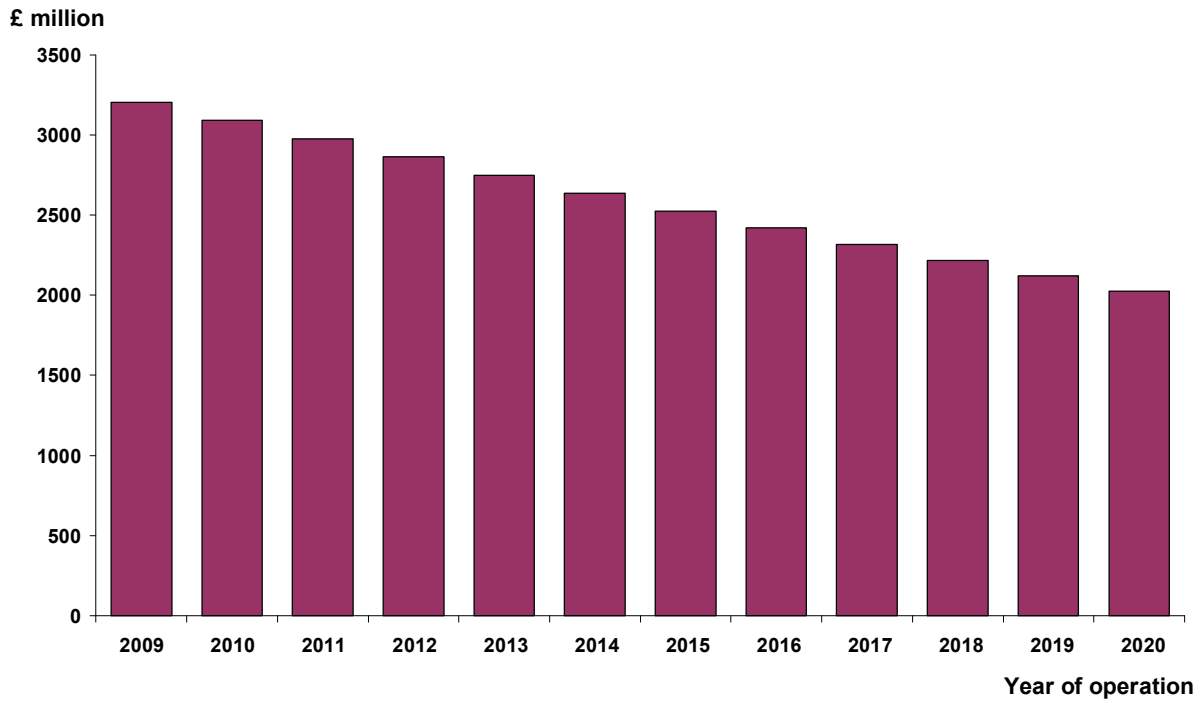
- a value of time of €30 per hour for business travellers (and hence a similar increase in the value of time for leisure travellers); and
- a value of time for unexpected delays which is twice the “normal” value of time.

These adjustments are still conservative, as the revised value of business time is still very much lower than those adopted in the other studies discussed above, and we have not made any adjustments for the problems noted in Sections 3.3 and 3.4.

Our revised estimates, again shown for different starting dates, are set out in Figure 3.1 to Figure 3.3. These show very clearly the effects noted above – both a significant increase in the estimated net benefits of each project and a significant advancement of the date when net benefits are maximised. Indeed, these revised results suggest that the net benefits from either Terminal 2 or the combined project are realised by implementing these investments as soon as possible.

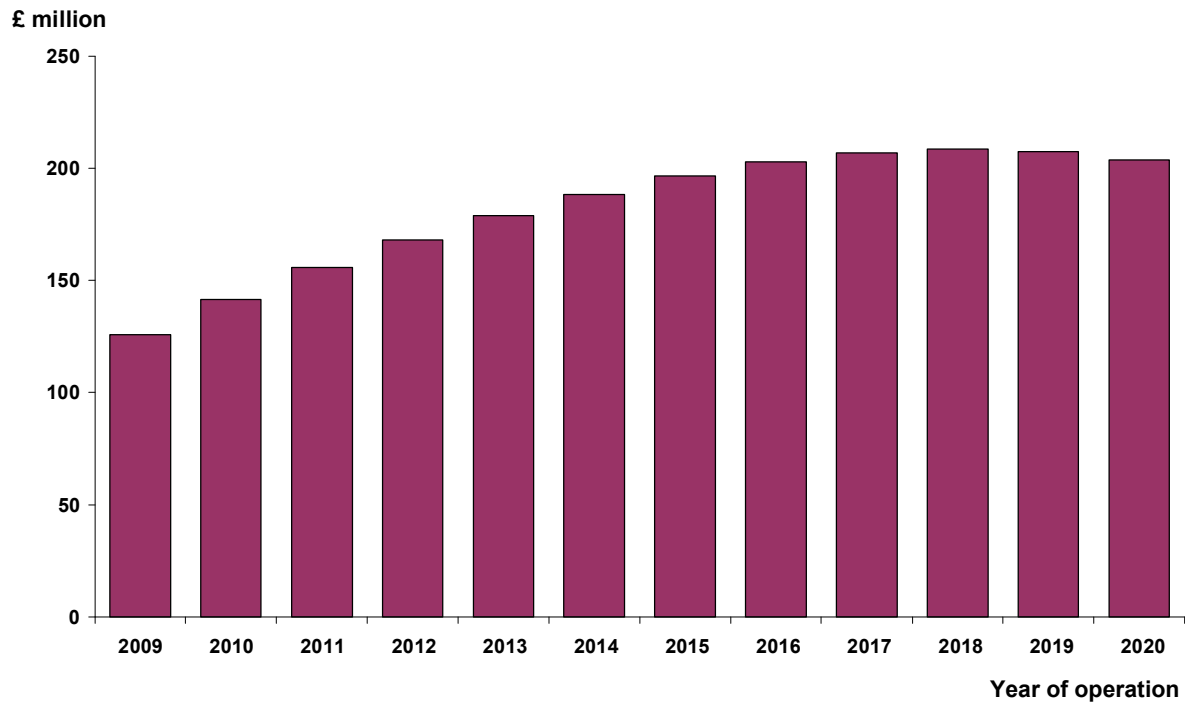
If we adopted an even higher value of time, or assumed a higher proportion of peak passengers, then the impact on the estimated net benefits would have been even greater.

**Figure 3.1**  
Discounted Net Benefits of Terminal 2 - Adjusted CEPA Assumptions



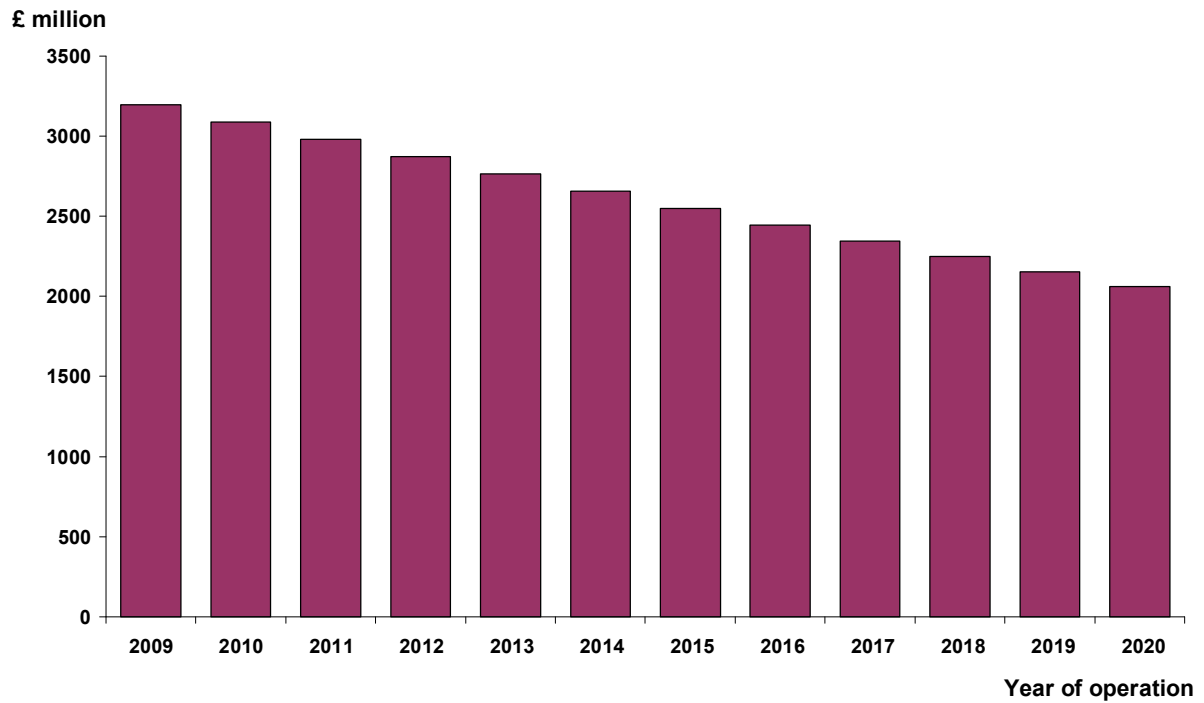
Source: NERA calculations based on CEPA data and assumptions

**Figure 3.2**  
Discounted Net Benefits of Runway 2 - Adjusted CEPA Assumptions



Source: NERA calculations based on CEPA data and assumptions

**Figure 3.3**  
**Discounted Net Benefits of Terminal 2 and Runway 2 Combined - Adjusted CEPA Assumptions**



*Source: NERA calculations based on CEPA data and assumptions*

## **4. Other Issues**

We recognise that CEPA was not asked to carry out a very detailed CBA study. But the simple adjustments discussed in the previous sections (including the adoption of a conventional approach of estimating the level of benefits over time) could all have been adopted within the scope and scale of CEPA's study.

In this section, in contrast, we refer to some more complex issues. Whether or not these could have been taken into account by CEPA, they are still important and need to be borne in mind when considering the implications of CEPA's analysis or the revised estimates presented in Section 3 above.

### **4.1. DAA Costs in the Counterfactual Case**

While CEPA has used DAA's own analysis of the passenger volumes and movements that could be accommodated without the new terminal and runway, it has not made any allowance for the additional costs that DAA will incur in this case. These costs fall into two main categories:

- specific projects designed to enhance the ability of existing assets to cope with greater than expected traffic volumes; and
- more general expenditure, that might otherwise have been avoided, to replace worn out assets and to deal with congestion problems.

Good estimates of this additional expenditure may not be available, not least because DAA's own plans are based on the investments going ahead. But they could be significant. During the 2002 UK Competition Commission review, for example, BAA identified capital expenditure of £200 million at Heathrow and £65 million at Gatwick that it regarded as mitigating the effect of the delay in Heathrow's Terminal 5, plus a further £100 million of fixed expenditure on minor projects.

If such additional costs are included in CEPA's analysis, this could increase still further the benefits from undertaking investment at an early stage.

### **4.2. Wider Impacts**

Finally, we note that CEPA's analysis does not attempt to take account of the possible wider impacts of investment in transport infrastructure on the regional/national economy or the environmental impacts. Inclusion of the former would be likely to increase the estimated net benefits, whereas the latter are difficult to predict but could decrease the estimated benefits.

#### **4.2.1. Impacts on the Irish economy or the Dublin area**

Proponents of major transport investment projects often point to benefits to the local, regional or national economy. However, these are difficult to measure and reliable estimates are rarely included in formal CBA studies.

In the case of Dublin Airport, we note that the impacts on tourism and inward investment could be especially strong. These might reflect, for example:

- the loss of visits from travellers looking for a low cost break, perhaps with a range of possible destinations in mind, but unable to find a cheap flight to Dublin;
- the impact on air fares of restricted capacity (and therefore limited ability for new entry or competition) at Dublin; and
- the strong negative impression created for passengers when the existing terminal is severely congested.

#### **4.2.2. Environmental impacts**

Environmental impacts fall into two main categories:

- CO<sub>2</sub> emissions, which are likely to increase if investment allows an increase in the number of flights; and
- aircraft noise, which is difficult to assess as it will depend on factors such as the configuration of the new runway, and whether aircraft using this runway will pass over more or fewer homes than those using the existing runway.

# NERA

Economic Consulting

NERA Economic Consulting  
15 Stratford Place  
London W1C 1BE  
United Kingdom  
Tel: +44 20 7659 8500  
Fax: +44 20 7659 8501  
[www.nera.com](http://www.nera.com)

NERA UK Limited, registered in England and Wales, No 3974527  
Registered Office: 15 Stratford Place, London W1C 1BE

09-Mar-2007

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## Review of High Level Analysis of DAA's investment plans by IMR.

### 1.1 Introduction

This document addresses a number of issues raised by the IMR document 'High Level Analysis of DAA's Investment Plans'. That document states that the T2 airlines will show a significant change in the profile of their "peakiness" between 2006 and 2013. The DAA discusses how in fact the proposed T2 airlines currently exhibit similar traits to what is envisioned in 2013 in T2. IMR indicates in its paper that it carried out studies for subgroups of the total airlines but the DAA cannot replicate its analysis. The IMR document also compares all airlines in 2006 to T2 airlines in 2013, which is not a like for like comparison and analysing the set of proposed T2 airlines in both years is more appropriate. It is very important that IMR review its analysis since, as will be seen below, the T2 airlines are not expected to change their profile significantly as part of the T2 assumptions. The case for T2 is thus convincing.

There are a few general points to note. In some of its graphs, IMR averages across 2002 to 2006. The DAA does accept that the profile of T2 airlines has changed since 2002. This is in line with how airlines like Aer Lingus have restructured substantially since 2001, buying bigger aircraft, increasing aircraft configuration (A320s been changed from 156 seats to 174 seats) etc. It would be very dangerous to focus on the early years in this analysis since it would mask any trends away from these early features. It would be fair to say that it is very unlikely that Dublin Airport will see a shift back to these 2001/2002 features, considering how unprofitable airlines were in this timeframe.

Furthermore, to ensure a clean and comprehensive analysis, the DAA considers 3 time periods:

- o The day used by IMR
- o The 95% Busy day for departing passengers in 2006
- o The peak summer period 1<sup>st</sup> June to 30<sup>th</sup> Sept.

This allows for a more complete analysis of the passenger flows through Dublin Airport.

It is difficult for the DAA to fully review all IMR's points since these points are mainly driven by the mistaken belief that DAA is expecting a major shift in profile for T2 users. The DAA is eager to work with IMR to resolve this misunderstanding.

### 1.2 DAA Conclusions

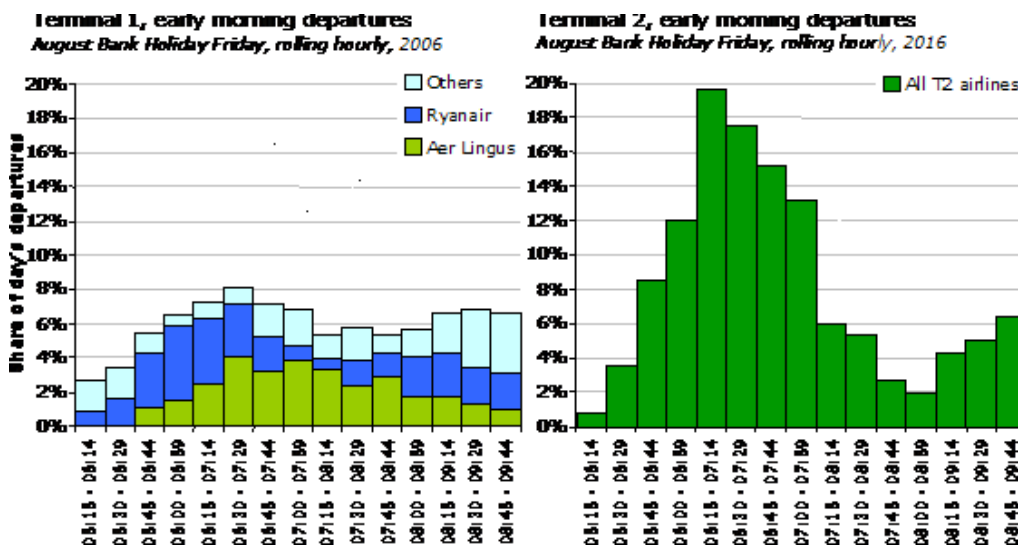
From the analysis outlined below, it will be seen that when the DAA reviews the peak day, it finds that operations by the proposed T2 carriers in the peak hour are only a little "peakier" in 2013 compared to 2006. In fact, when the full June to Sept period is reviewed, the level of

change is from over 16% to almost 20%, rather than from over 8% to almost 20% as suggested by IMR.

Furthermore, the current profile and the 2013 profile for T2 airlines are extremely similar, in that in both schedules around 30% of passengers are scheduled to depart in the 06:00 to 09:14 period. The only difference is that the peak hour itself gets slightly “peakier”, which is natural considering the extra capacity developed (i.e. more of the departures in the 06:00 to 09:14 period can leave in the peak hour instead of being spread into the rest of the period). There is therefore no reason for concern as to whether “passengers leaving Dublin can be persuaded to fly more often in the early morning”. As the profile in 2013 is in fact similar to that in 2006 for the airlines concerned, it is a reasonable and proportionate representation of the operating patterns in the future and so involves no significant business model shift.

## 2.1 Peak Hour

Chart 10 of Ian Rowson’s “High level analysis of DAA’s investment plans” set out the below graphs on early morning departing passengers, comparing T2 in 2013 with T1 in 2006, highlighting what it considered the considerable change in profile from T1 to T2 (8% of departures leaving in the peak hour in 2006 compared to almost 20% in 2013).



At paragraph 3.36 of the document, it is suggested that the T2 peakiness reflects a significant shift in Aer Lingus’ current profile of passenger departures and that this raises a question as to the appropriateness of the T2 design. The DAA does not believe that there is a significant change in Aer Lingus’ and the other T2 airlines’ departure patterns.

DAA examined the 2006 data to see how this difference in interpretation arose, bearing in mind that it used the 2006 schedule as its base schedule<sup>1</sup> and added movements to it to get the 2013 schedule (also allowing for a certain amount of re-peaking).

The main differences are as follows:

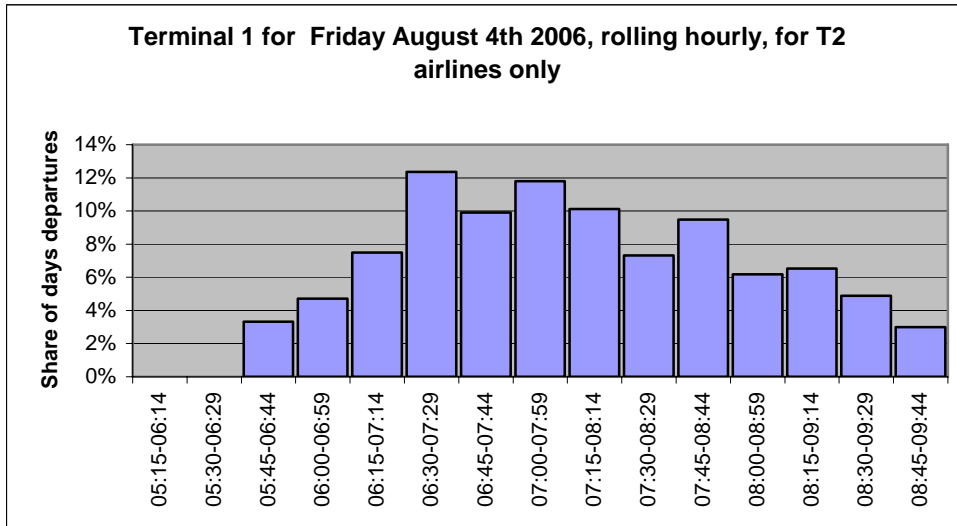
- The 2006 graph looks at all operators. The 2013 graph focuses on T2 operators only.
- The 2006 graph is based on actual time of departure. The 2013 graph is based on scheduled time of departure. This is relevant if the airport experiences considerable delay.

<sup>1</sup> Although the base schedule used by the DAA was the 28/07/2006 based on aircraft movements.

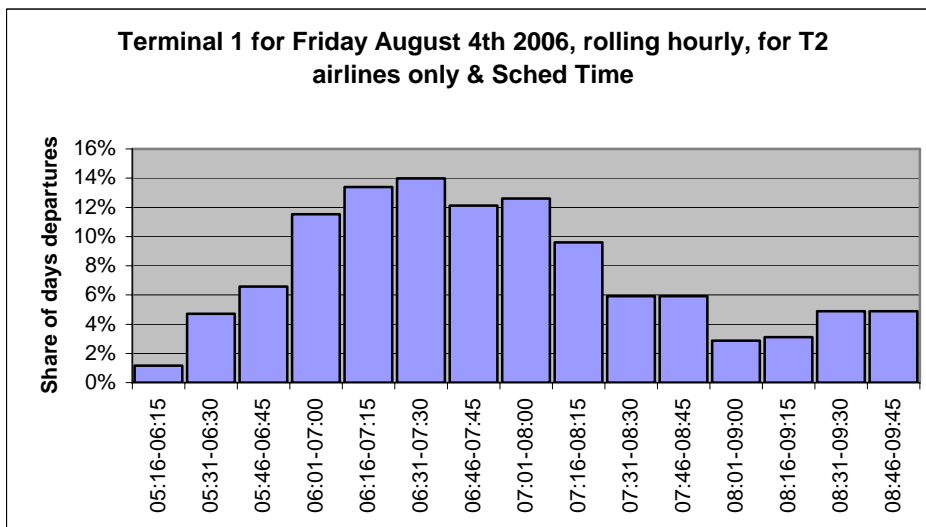


- The 2006 graph is based on one busy day in 2006. The 2013 graph is a more general profile for operations in a busy period.

Bearing these differences in mind, an analysis of the current profile of the proposed T2 airlines was undertaken, in order to verify whether these operators have changed their profile between 2006 and 2013. As one can see below, on the given day, these airlines in 2006 are “peakier” compared to looking at all operators in 2006 (i.e. over 12% of proposed T2 passengers depart in the peakiest hour in 2006 compared to over 8% for all operators).

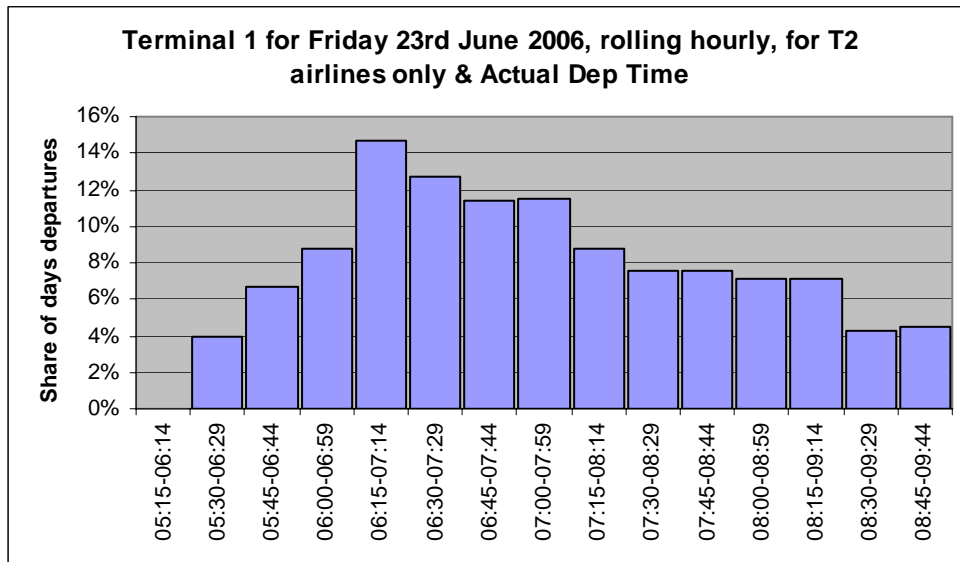


In 2006, Dublin airport experienced around 23 minutes delay on average between 07:00 and 08:00 for departures. Thus the actual time of departure would be considerably different from the scheduled time of departure. This led to a review of the schedule of Friday, August 4<sup>th</sup>, the date used by CAR, specifically based on “scheduled time of departure”. As one can see below, the proposed T2 airlines are considerably more “peaky” based on this day, compared to all airlines (i.e. almost 14% of proposed T2 passengers are scheduled to depart in the peak hour in 2006 compared to over 8% actually departing for all operators).

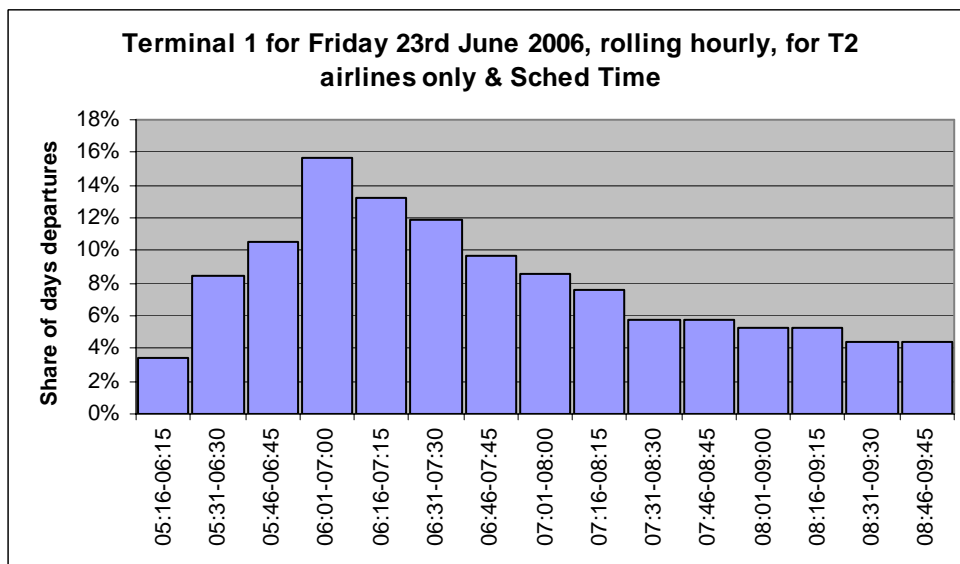


CAR used the 4<sup>th</sup> August to represent the busy day with respect to departing passengers in 2006 for this analysis. As it transpired, the actual 95% busy day with respect to departing

passengers in 2006 was Friday 23<sup>rd</sup> June and hence this was examined by DAA in the context of the CAR comment. As one can see below, almost 15% of passengers departed in the busiest hour. This is quite comparable with the T2 profile in 2013 (especially, given the fact that the peak is expected to grow strongly once extra capacity is introduced).

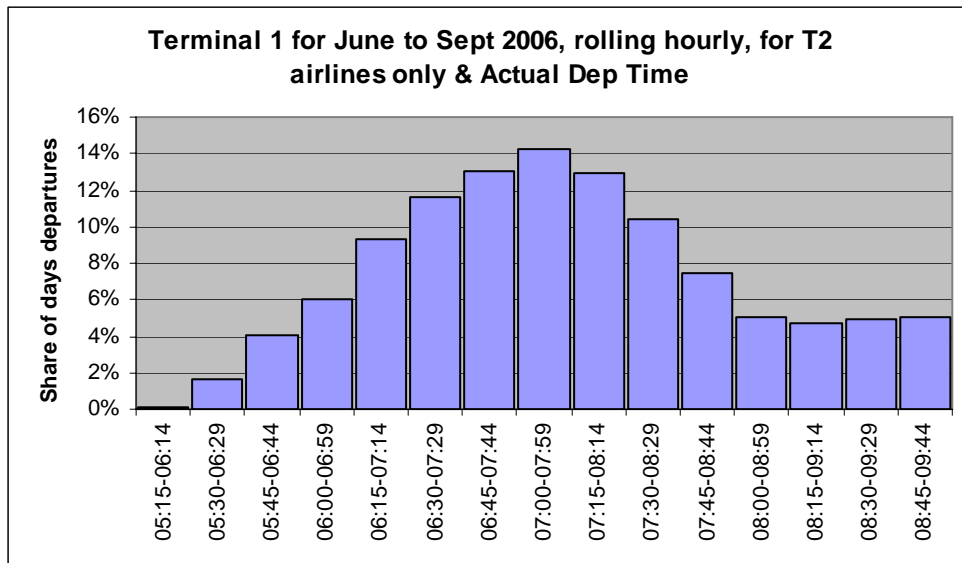


Again, this date is analysed based on scheduled time of departure below. Almost 16% of passengers are scheduled to depart in the peak hour as can be seen below.

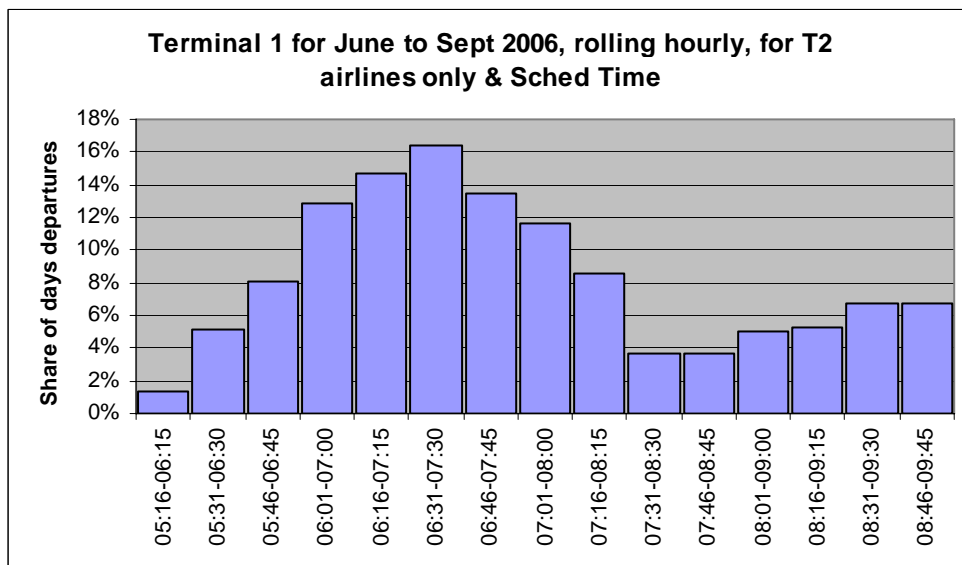


This analysis certainly suggests that the T2 profile in 2013 and that of the same operators in 2006 is quite similar. To complete our review, the final step is to look at all days in the peak months in 2006 (i.e. 1<sup>st</sup> June to 30<sup>th</sup> Sept). Based on those dates, as can be seen below, 14% of passengers depart in the peak hour.

It is worth noting that the peak hour is between 07:00 and 07:59. This is because of the significant delay between scheduled departure and actual departure time.



Doing this analysis for the June to Sept period based on the scheduled departure time, one can see below that 16% of passengers are scheduled to depart in the peak hour.



### Conclusion

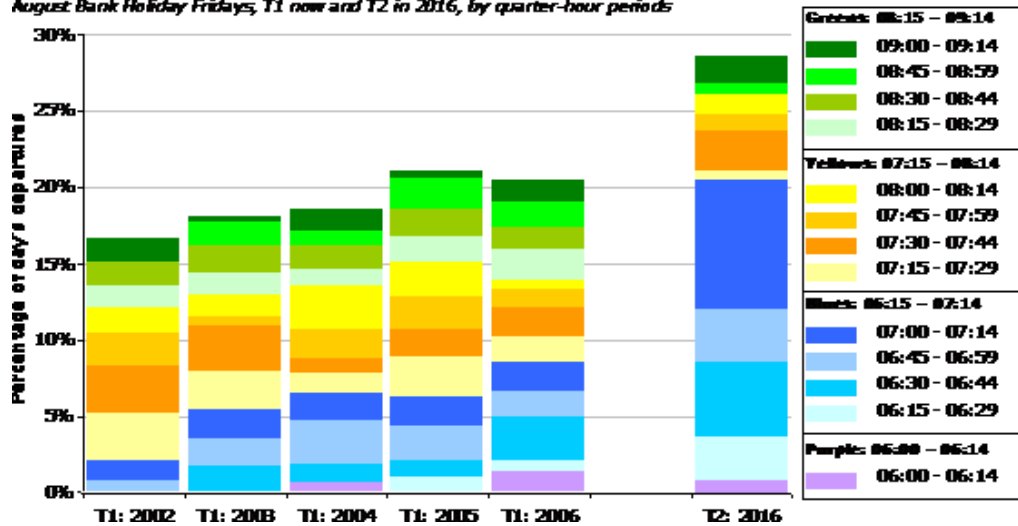
The analysis above shows that the level of change between 2006 and 2013 is not as large as assumed by CAR. If an “apples with apples” comparison is undertaken, the operations in the peak hour are only a little “peakier” in 2013. In fact, the level of change is from over 16% to almost 20%, not over 8% to almost 20%. This is not consistent with there being a significant change in the T2 airlines’ operational patterns and so the issues raised in the “High level analysis” do not warrant the attention focused on them in IMR’s analysis.

## 2.2 Early Morning departures in T1 & T2

Chart 9 of the same document reproduced a graph suggesting that around 30% of passengers in T2 in 2013 depart between 06:00 to 9:14 compared to around 20% for all passengers in 2006. The document then questions whether passengers will actually fly at these times.

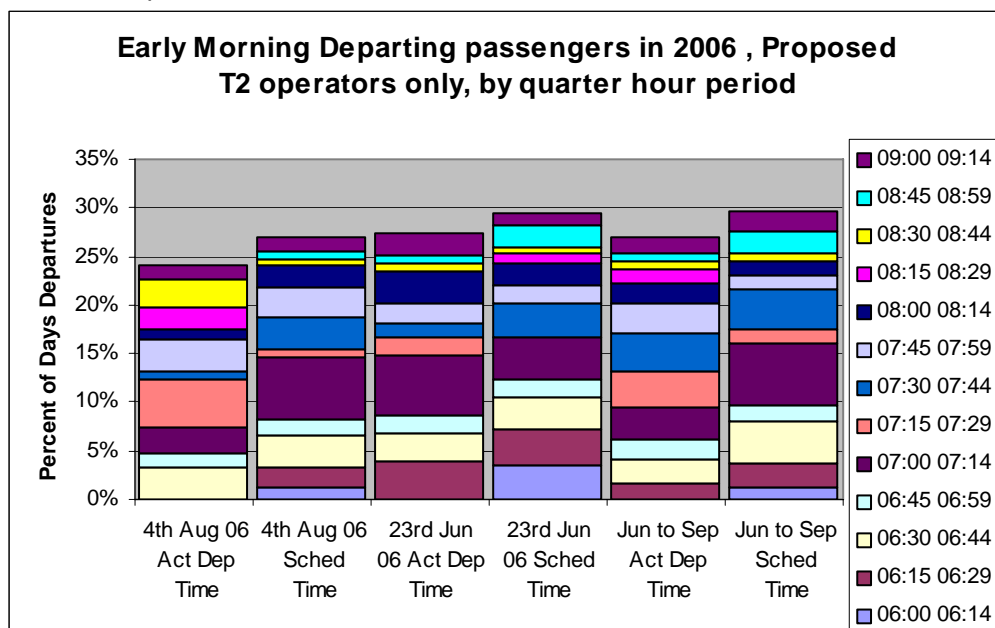
### Early morning departing passengers, T1 and T2

August Bank Holiday Fridays, T1 now and T2 in 2016, by quarter-hour periods



The DAA believes that passengers will fly at these times. Indeed, they do so already. Again the DAA focused on T2 operators only in 2006, to properly compare with these same operators in 2013. As one can see below, when one focuses only on T2 operators for the 4<sup>th</sup> August (IMR schedule date), 24% of actual passengers depart in the 06:00 to 09:14 period in 2006. This jumps up to 27% when one focuses on scheduled departure time. Furthermore, 27% of passengers actually depart in this period on the 23<sup>rd</sup> June (the actual 95% busy day in 2006 with respect to departing passenger), while almost 30% are scheduled to leave in this period.

Similarly when one focuses on all days from 1<sup>st</sup> June to 30<sup>th</sup> Sept, we see that 27% of passengers actually leave in this period, while almost 30% of passengers are scheduled to leave in this period.



### **Conclusion**

It is clear from this graph that the profile for T2 operators does not change at all between 2006 and 2013. Around 30% of passengers are scheduled to depart in the 06:00 to 09:14 period in both. The only difference is that the peak hour itself gets slightly “peakier”, which is natural considering the extra capacity developed (i.e. more of the departures in the 06:00 to 09:14 period can leave in the peak hour instead of being spread into the rest of the period). There is therefore no reason for concern as to whether “passengers leaving Dublin can be persuaded to fly more often in the early morning.” As the profile in 2013 is in fact similar to that in 2006, it is a reasonable and proportionate representation of the operating patterns in the future and so involves no significant business model shift for the airlines concerned.

## **3.0 Capacity of Dublin Airport**

As well as the peak hour analysis, IMR also discusses the capacities of the various Terminal infrastructures. DAA would suggest that the peak hour analysis is the critical piece of data to review. Once the peak hour is seen as reasonable, the corresponding capacity discussion falls out naturally from it.

The DAA will make the following points to clarify some of the high level issues.

## **3.2 Capacity of T2**

In Section 1.9, IMR suggests that T2 would be able to cater for 11.5 million passengers in a year. This is the design capacity of the terminal at Level of Service (LOS) C. In the same way that T1 currently handles more passengers than it is designed for, T2 will be able to cater for more than 11.5 million passengers (if no further capacity is added) but at a lower level of service. The issue is whether the overall level of service should be allowed to fall significantly again to the current low levels or alternatively what level of service should it be allowed to fall to before additional capacity is required.

## **3.3 Capacity of T1 + T2**

IMR suggests that T1 and T2 can cater for up to 50 million passengers.

We suggest that any proposal involving the replication of existing service standards in T2 and no further improvements in T1 would be greeted with dismay and disbelief by passengers and industry bodies (ITIC, IBEC, IHF, IDA) in Ireland. This may be theoretically possible given a very low LOS and given a certain daily profile (i.e. very flat or non-peaky) but this is not germane to the discussion since it’s not something Dublin will face in the short or medium term. Such a theoretical suggestion is an inappropriate starting point for IMR’s analysis.

It is worth noting that the 50m passenger capacity suggestion is only discussed because of the failure to accept that the profile of airlines in T2 in 2013 is comparable to the current profile of these airlines. Once this is accepted, it is clear that passenger throughput could never get close to 50m across the 2 terminals as they are currently designed (unless there was a fundamental shift in these airlines profile). In other words, for 11.5m passengers to be handled, T2 airlines would require the currently envisioned terminal. To handle significantly more passengers, the terminal would have to be bigger.

Regarding the extension. If passenger traffic does not grow as expected (higher or lower) or if the airlines' profile changes, the decision on when T2 is extended may change as appropriate (as noted in the Gateway 2 document).

## 4.0 Miscellaneous Items

### 4.1 Pier E

In Section 3.6 IMR says:

*“DAA’s projections envisage that Pier E will only handle a proportion of T2’s early morning peak passengers, the remainder being handled through Pier D and by bussing to remote aircraft stands”.*

This should be Pier B, not D and is due to DAA handling long haul aircraft as well as short haul aircraft; long haul aircraft have a far longer turnaround time compared to short haul aircraft (i.e. a long haul aircraft may arrive before the peak hour but depart after the peak hour).

### 4.2 95% Busy Days

It is also important to note that the actual 95% Busy Day based on passengers and 95% Busy Day based on movements may be quite different. When building a schedule of **movements** for a peak day (as per the DAA exercise for T2), it is reasonable to use the busy day ratio based on the 95% Busy Day Level for **movements**. When analysing (arriving/departing/total) **passengers** it is reasonable to use the 95% Busy Day Level based on (arriving/departing/total) **passengers**. CAR seems to confuse these various metrics in its analysis, and where DAA has used the 95% busy day with respect to aircraft movements, CAR has analysed on the 95% busy day with respect to passengers.

It is self evident that the 95% busy day with respect to passengers does not necessarily equate to the 95% busy day with respect to aircraft movements. The derived Busy Day Schedule for 2013 is used by DAA for a passenger analysis as well as a movement analysis but this is done by assuming a certain Load Factor, 85% (as described in the Gateway 2 document).

### 4.3 Scheduled Dep Time v Actual Dep Time

It is also worth noting that the scheduled time drives when passengers turn up at the airport for check-in and (in the main) when passengers turn up at the boarding gate. Thus, looking at the actual departing time instead of the scheduled time may lead to misleading results if the delay is quite high. Dublin airport does suffer from significant delay in the morning period. It expects that once T2 and R2 are built, delay will decrease substantially.