

**Maximum Levels of Aviation Terminal Services
Charges of the Irish Aviation Authority**

Draft Determination and Explanatory Memorandum

Commission Paper CP10/2006

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1. FOREWORD

Since the launch of its initial consultation process by way of the publication of two Commission papers¹ on the 5 October 2006 the Commission for Aviation Regulation (the "Commission") has been gathering and analysing data and information in order to carry out its function regarding aviation terminal services charges under the Aviation Regulation Act 2001 ("the 2001 Act") as amended by the State Airports Act, 2004 ("the 2004 Act"). That process has culminated in the preparation of this Draft Determination and Explanatory Memorandum in respect of maximum levels of aviation terminal services charges that may be levied by the Irish Aviation Authority ("IAA").

In accordance with the requirements of section 35(5) of the 2001 Act, the Commission now provides, by way of publication of this Draft Determination and accompanying Memorandum, formal notice of its intention to make a new aviation terminal services charges determination and thereby commence the period of statutory consultation of two months from the date of publication of this notice as provided for in Section 35(5)(c).

The Commission has retained outside expertise in a number of important areas to assist it in making the new Determination. It has also received a considerable amount of information by cooperation with the Irish Aviation Authority. High-level findings arising from this analysis are referred to in this document. The Commission envisages receiving more detailed information from the IAA prior to making a final determination and may publish this information as appropriate.

The primary purpose of publishing a Draft Determination is to allow interested parties to consider in general terms, the impact of the proposed levels of maximum aviation terminal services charges. Section 7 sets out indicative levels of aviation terminal services charges, which are in turn explained in Section 8. By way of further assistance to interested parties and the public, the Commission has also published, details of significant figures and other inputs relied upon by the Commission in calculating the indicative maximum levels of aviation terminal services charges.

The attention of interested parties is drawn to Annex I which sets out the strict conditions that apply to the receipt of statutory representations.

¹ CP7/2006 and CP8/2006.

Given the high level nature of the analysis thus far, the Commission has given some indicative price caps based on different assumptions to emphasise to interested parties the importance of information on certain issues to the price cap calculation. The indicative maximum levels of aviation terminal services charges contained herein are, therefore, preliminary in nature, and based on the information that the Commission has received to date. The Commission has made no final conclusions, and will not do so until it has considered any and all representations that it receives, and has decided either to accept or reject them.

2. EXECUTIVE SUMMARY

1. Under Section 5 of the 2001 Act one of the principal functions of the Commission is the regulation of aviation terminal services charges that may be imposed by the IAA.
2. The Commission made its first determination on 26 February 2002, which specified a price cap on aviation terminal charges to apply for the five years beginning 26 March 2002.
3. The Commission proposes to make a new determination specifying maximum levels of aviation terminal services on the expiration of the current determination on 26 March 2007.
4. The Commission has calculated two indicative price caps to facilitate interested parties understand the impact of different assumptions on various elements on the price level based on the information to hand. The indicative maximum levels of aviation terminal services charges for 2007 that the Commission proposes are (i) € 2.21 and (ii) € 2.07 in nominal terms. The table below sets out the price paths of each scenario.

Indicative price limits (i)	2006/07	9m 2007	2008	2009	2010	2011
X factors			9.76%	9.76%	9.76%	9.76%
CPI forecast		4.00%	3.45%	3.00%	3.00%	3.00%
Nominal price	€1.94	€2.21	€2.50	€2.82	€3.18	€3.59

Average in 2006 price terms = €2.61

Indicative price limits (ii)	2006/07	9m 2007	2008	2009	2010	2011
X factors			2.59%	2.59%	2.59%	2.59%
CPI forecast		4.00%	3.45%	3.00%	3.00%	3.00%
Nominal price	€1.94	€2.07	€2.20	€2.32	€2.45	€2.59

Average in 2006 price terms = €2.12

5. In determining maximum levels of aviation terminal services charges, Section 36 of the 2001 Act obliges the Commission to "aim to facilitate the development and operation of safe, cost-effective terminal services which meet international standards." Section 36 of the 2001 Act also requires the Commission to have due regard to seven specified factors.

6. The Commission proposes having the second Determination come into effect on 26 March 2007 with a move to a calendar-year basis on 1 January 2008. This involves a Determination with an opening price cap to apply for a period of some 9 months, followed by annual price caps thereafter for four years until end December 2011.
7. The Commission intends continuing with a regulatory till that only includes revenue earned by the IAA from aviation terminal services.
8. The Commission notes that price cap regulation tends to shift traffic outturn (or "volume") risk more towards service providers, as occurred for the IAA over the period of the first determination. This aspect of price regulation alternative approaches to risk will be the subject of substantive discussion with the IAA in January 2007.
9. The Commission has reviewed the IAA's operating cost projections for the period of the second determination at a high level from an efficiency perspective and has included in the indicative price caps operating expenditure ("opex") allowances sufficient to cover those operating costs necessary for the maintenance of safety and for a given level and quality of service. A number of aspects of expenditure remain to be further discussed by the Commission and the IAA such as wage increases, training expenses and aeronautical meteorological service ("MET") costs.
10. The Commission determined in 2002 that aviation terminal services were being provided by the IAA at a level below the fully allocated cost of providing the service. The determination set the maximum charge at a level to cover all such costs. The IAA has informed the Commission that, by the end of the period of the current determination, it will have allocated 20 per cent of MET costs to the aviation terminal services cost base. The Commission accepts this proportionate 80/20 allocation of MET costs within the IAA for the next price control period.
11. At the time of the first determination, the Commission examined evidence of the IAA's international cost competitiveness and found that the IAA's (albeit en route) costs were significantly below those of the other service providers in the study. It appears to the Commission, having studied the

Eurocontrol Performance Review Commission ACE 2004 Report², that this picture has little changed in the interim. However, one must note this reflects a pre 2004 position. The Commission believes some additional analysis looking to the future is appropriate.

12. The IAA has informed the Commission of the evolution of a technology plan, setting out its future investment needs. The Commission plans to further review the IAA's planned capital expenditure ("capex") for the period of the second determination. A high level review of the capex figure provided thus far has been undertaken and those results are referred to below. Further explanation and justification will be sought. The impact of various projects on the regulated asset base is of central importance to the consideration of the IAA capex plans.
13. At the last review, the Commission made allowances for an assumed level of capital expenditure for aviation terminal services ("ATS") of €19.6 million over the five year period 2002-2006 in 2001 price terms (about €23 million in 2006 price terms). After general inflation, that assumption represents expenditure of about €21.6 million while the company's actual and forecast expenditure turned out lower at €18.3 million, a difference of €3.3 million. The pattern of expenditure was rather more accelerated than assumed in 2002. The total planned CAPEX attributable to ATS for the new 5 year period (2007-2011) is planned to be at a rather higher level of €103.0 million in 2006 price terms, of which €44.3 million relates to technology and €54.5 million relates to the construction of two new control towers at Cork and Dublin airports.
14. The Commission's has received a new assessment of the IAA's cost of capital for the purposes of its second determination. The Commission proposes to allow the IAA a real, pre-tax rate of return of 6.7%.
15. The Commission notes that there has been little or no support for an explicit system of financial bonuses and penalties linked to service quality to be incorporated into the Commission's price cap on the IAA.

² Annual Air Traffic Management Cost Effectiveness Benchmarking Report 2004. www.eurocontrol.int

16. The Commission for Aviation Regulation requests interested parties to submit responses to the questions posed in this consultation paper by **5 p.m. on 22 February 2007**. Interested parties should feel free to contact the Commission before that date.

3. CONSULTATION

3.1 Consultation to date

CP7/2006 announced the process that would be used by the Commission in connection with the making of its determination on maximum levels of aviation terminal services charges. It also announced the Commission's intention to give notice of its proposed determination by publishing a draft determination and explanatory memorandum.

In CP8/2006, the accompanying paper to CP7/2006, the Commission discussed a number of issues relating to economic regulation of aviation terminal services charges, as well as the range of factors to which the Commission must have due regard to under Section 36 of the Act. In response to CP8/2006, the Commission accepted and published submissions from British Midland Airways Limited (bmi) and the Irish Aviation Authority. Those submissions are annexed to this document. The Commission would like to thank those respondents for their assistance. It has taken those submissions into account in the preparation of this Draft Determination.

3.2 Remaining Elements of Consultation Process

In accordance with Section 35 (5)(c) of the Act, the Commission must allow a period, not being less than two months from the date of publication of notice of the making of a new determination, within which representations with respect to the notice may be made by interested parties or the public. That period will run until 22 February 2007, and the conditions that apply in respect of receipt of statutory representations are set out in Annex I. These conditions will be strictly applied without exception.

The Commission encourages interested parties to make submissions as soon as possible and to feel free to contact the Commission in relation to such submissions if they so desire. A new determination must be made by 26 March 2007, thus early receipt of submissions would allow the Commission greater time to engage with the industry on the content of submissions received.

4 SCOPE OF REGULATION

4.1 Meaning of “Terminal Services”

Section 2 of the 2001 Act states that “terminal services” should have the meaning assigned to it by the Irish Aviation Authority Act, 1993 (“the 1993 Act”). The 1993 Act defines terminal services as “the air navigation services provided for aircraft landing at or taking off from an aerodrome or while in the vicinity of an aerodrome before landing at or taking off from that aerodrome.” Air navigation services are defined by the 1993 Act as including “services providing, giving, or issuing information, directions or instructions, or other facilities, for the purposes of or in connection with the navigation or movement of aircraft.”

According to the recommendations and charging principles of the International Civil Aviation Organisation (ICAO)³, the provision of air navigation services is divided between the three main phases of a flight:

1. Aerodrome (movement at and around an airport);
2. Approach (including initial climb on departure and final descent on arrival);
3. En route.

The ICAO principles also distinguish between “approach and aerodrome control charges” and “route air navigation services charges,” which appears to imply that terminal services comprise air navigation services provided to aircraft in the aerodrome control and approach control phases of flights. This is how the Commission, for the purposes of its first determination, interpreted the meaning of terminal services in the 1993 Act, that is, that the reference to “aircraft landing at or taking off from an aerodrome” in the 1993 Act corresponds with aerodrome control in the ICAO principles and that the reference to “while in the vicinity of an aerodrome before landing at or after taking off from that aerodrome” in the 1993 Act corresponds with approach control in the ICAO principles.

³ See ICAO (2004), “Policies on Charges for Airports and Air Navigation Services,” Seventh Edition, Doc 9082/7.

The Commission intends to continue to use this interpretation of the meaning of air terminal services charges.

As set out in CP 8/2006, the Commission believes that the cost base for aviation terminal services is likely to include the costs incurred by the IAA in respect of the Dublin, Shannon and Cork towers and certain proportions of the costs of the Dublin and Ballycasey ACCs.

4.2 Other Services Provided by the IAA

As well as aviation terminal services at each of Dublin, Shannon and Cork airports, the IAA provides en route navigation for movements in Irish-controlled airspace,⁴ Shanwick Communications,⁵ safety regulation, air navigation for exempt air traffic⁶ and commercial and training activities. Table 1 below shows both the absolute and proportional shares of turnover attributable to each of the IAA's services in 2005, along with a diagrammatic representation of these services in Figure 2.

Table 1: The IAA's Services and 2005 Shares of Turnover

IAA Service	<i>Turnover</i>	
	<i>(€'000)</i>	<i>Proportion</i>
En Route ANS	84,160	66%
Terminal ANS	16,140	13%
Shanwick		
Communications	14,192	11%
Safety Regulation	9,083	7%
Exempt Air Traffic	1,853	1%
Commercial and Training	2,253	2%
Total	127,681	100%

Source: IAA Annual Report and Accounts 2005

⁴ Aircraft that fly through Irish airspace en route between Europe and North America, generally above 28,000 feet and that do not touch down in Ireland.

⁵ Shanwick Communications provides a long-range voice communications service for Oceanic air traffic control in the eastern half of the north Atlantic, the Volmet Broadcast Service and is the AFTN (Aeronautical Fixed Telecommunications Network) COM for Ireland.

⁶ Exempt air traffic includes military, search and rescue, flights with heads of State and any aircraft with a weight under two tonnes.

Some resources that are used in the provision of aviation terminal services are simultaneously used in the provision of these other services, particularly en route air navigation services. Therefore, cost-reflective maximum aviation terminal services charges require the proportion of use of these common resources to be distinguished from the proportion used in the provision of the other services. Having examined the IAA's systems, Eurocontrol, in 1993, provided a set of allocations for costs that were common to the provision of terminal and en route services. This involved, approximately, a 25/75 split respectively. These allocations were aimed at ensuring full cost recovery in accordance with ICAO principles. The recovery of costs allocated to aviation terminal services is now subject to economic regulation as described in the 2001 Act.

In its response to CP7 and CP8 bmi proposed that the Commission should revisit the cost allocation split between ATS and En-Route services. While in principle a full cost allocation study could be undertaken it is not clear that the benefits outweigh the costs. The 25:75 cost-allocation is primarily used for common costs with some specific allocations being used when the actual allocation differs significantly. The Commission accepts the relevant proportions of costs to be allocated to terminal services as determined by Eurocontrol.

5. DESIGN & SCOPE OF THE PRICE CONTROL

5.1 Legal basis

Section 35 (4)(a) of the 2001 Act states that a determination, specifying the maximum level of aviation terminal services charges, may “provide

- (i) For an overall limit on the level of aviation terminal services charges;
- (ii) For limits to apply to particular categories of such charges, or
- (iii) A combination of any such limits.”

By virtue of section 35 (4)(b) a determination may “operate to restrict increases in any such charges, or to require reductions in them, whether by reference to any formula or otherwise” or, as stated in section 35(4)(c), “provide for different limits to apply in relation to different periods of time falling within the period to which the determination relates.”

5.2 Current Control

The current price control takes the form of a cap on the average revenue per metric tonne of departing aircraft weight. The cap imposes annual limits, although any shortfall (or under-recovery) in outturn average revenue compared with the maximum may be added to the following year’s allowed revenue and, likewise, any over-recovery is deducted from future revenue. This system of collection is restricted to the five-year price control. The annual caps are adjusted according to a $CPI+X$ formula, where “X” is the permitted real percentage increase in maximum allowed average revenue. The equivalent nominal increase is, therefore, $CPI + X$, where CPI is the annual percentage change in the value of the Consumer Price Index in Ireland. The Commission intends to continue to use this approach.

5.3 Form of the Control

The prevailing price control on the IAA in respect of terminal services is a $CPI+/-X$ price cap. However, the price control was determined, and the Commission intends to follow this practice, with reference, in part, to the IAA’s cost base. Therefore, in practice, the prevailing price control is a hybrid of price cap and cost pass-through methodologies. Given the superior incentive properties of this hybrid approach over the cost pass through alternative, as discussed in

CP8/2006, the Commission currently sees no reason to alter its approach in favour of another.

5.4 Structure of the Control

The Commission favours efficient charging structures, with individual users paying charges that reflect the costs they impose on the IAA. This is consistent with ICAO policies in respect of charges for airports and air navigation services⁷, which, as a general principle, state that:

"...where air navigation services are provided for international use, the providers may require the users to pay their share of the related costs; at the same time international civil aviation should not be asked to meet costs which are not properly allocable to it."

The ICAO policies also state that:

"...where charges for approach and aerodrome control are levied, whether as part of the landing charge or separately, the charge should, so far as possible, be a single element of the landing charge or a single charge per flight that could take aircraft weight into account but less than in direct proportion."

At present, the manner in which these principles are applied is agreed with Eurocontrol's Central Route Charges Office (the CRCO).⁸ Specifically, the IAA has entered into a bi-lateral agreement with Eurocontrol, entrusting the latter with the calculation, billing, accounting and collection on its behalf of charges for the use of terminal services in accordance with the laws and regulations in force in Ireland. Pursuant to this agreement and in accordance with the recommendations of ICAO, Eurocontrol has published "*Rules Governing Terminal Charges in Ireland*".⁹ Article 3 of these rules states that, "the terminal charge (**R**) shall be calculated in accordance with the following formula:

⁷ See ICAO (2004), "Policies on Charges for Airports and Air Navigation Services," Seventh Edition, Doc 9082/7, p. 15.

⁸ Although the principal function of the CRCO is the operation of a common route charges system pursuant to a multi-lateral agreement relating to route charges, the CRCO also offers Member States a calculation, billing and collection service for terminal charges.

⁹ These rules are incorporated in a document titled "Information Circular: Terminal Charges in Ireland", effective 1 January 2006 (Ref. EI 2006/01), www.eurcontrol.int/crco

$$R = t \times N$$

where **t** is the unit rate of charge and **N** is the number of service units. Article 4 of the rules states “that for a given departing flight, the number of service units in respect of terminal charges, designated (**N**), shall be equal to the maximum certified take-off weight (MTOW) for the aircraft concerned, expressed in metric tonnes...”

The Commission is required, under Section 36 (a) of the 2001 Act, to have due regard to these principles, which it did for the purposes of its first determination. Although the Commission raised the question of whether the existing per MTOW basis for charging is the most appropriate there was no support for changing the basis. In fact, bmi strongly supported the suitability of the existing approach and argued for its retention. The Commission does not propose to specify the maximum levels of aviation terminal services charges according to alternative principles.

5.5 Single Till vs. Cost-Based Approach

Section 36(d) of the 2001 Act requires the Commission to have due regard to “the level of the Authority’s income from aviation terminal services and other revenue earned by the Authority generally.” This factor requires the Commission to assess what are the appropriate revenues to be taken into account in determining maximum levels of aviation terminal services charges. As outlined in section 4.2 above, the IAA’s revenues consist of those for aviation terminal services, the control of en route movements in Irish controlled airspace, Shanwick communications, safety regulation, exempt air traffic and commercial and training activities.

When making its first determination, it was the Commission’s view that there was no justification for taking into account revenues earned by the Authority for activities other than the provision of terminal services. In the case of en route control and Shanwick communications, charges are set according to ICAO cost recovery principles and are determined only after appropriate allocations from the total cost base. This rendered the application of a single till type principle redundant. Demand for the remainder of the IAA’s services bears little or no relationship to the demand for aviation terminal services. The Commission intends continuing with a regulatory till that only includes revenue earned by the IAA from aviation terminal services.

5.6 Over and Under Recovery of Charges.

The Commission uses and will continue to use a formula by which the price changes from year to year within the period of the determination. There is a correction factor in that formula that amends the yearly price in the light of actual charges the year before by the IAA. Simply put, if the IAA over-recovers in year one, the price would be decreased proportionately year two and so on. By contrast if the IAA under-recovers in year 1 the price would be increased proportionately in year 2 and so on. This mechanism is designed to protect the integrity of the incentive effects of the determination such that the average price recovered over the period is consistent with the determination. An aspect of this form of price regulation is that the final year over or under recovery may need to be taken into account when making the succeeding price determination. The Commission intends to take the actual recovery for the last year of the present price determination and factor it into the next price determination. It proposes to factor in these actual figures when they become available. This entails an information time lag. As a matter of fact these actual figures can only be factored into the price calculation of the second year of the next determination and this is what the Commission intends to do.

6. DURATION OF THE DETERMINATION

Section 35(3) of the 2001 Act (as amended by the 2004 Act) states that, “a Determination shall – (a) be in force for such period of not less than 4 years, and (b) come into operation on such day, as the Commission specifies.”

For the purposes of the first Determination, a period of 5 years was prescribed by the legislation. The Commission has discretion in choosing the duration of the second Determination, provided it is equal to or longer than 4 years. The Commission sees merit in making a Determination with duration in excess of the statutory minimum. The longer the duration, the stronger the efficiency incentives implied by the price cap. It would also provide greater stability to facilitate long-term planning in relation to the operation and development of terminal services.

The Commission also believes it makes sense for regulatory years to be aligned with the financial year of the regulated firm. The IAA’s financial year-end is 31 December, so the Commission proposes that the second Determination come into effect on 27 March 2007 with a move to a calendar-year basis on 1 January 2008. This involves a Determination with an opening price cap to apply for a period of some 9 months, followed by annual price caps thereafter.¹⁰ After this initial nine-month period the Commission proposes that the price cap will remain in force for a further four years. Thus, the price cap will commence on 27 March 2007 and expire on the 31 December 2011.

¹⁰ This would give a price control of 4 years and nine months from March 2007 to December 2011.

7. DRAFT DETERMINATION

- a. The Authority shall ensure that, for the regulatory year 2007, the revenue yielded for the provision of aviation terminal services to flights departing from Dublin, Shannon and Cork airports shall not exceed:

$$R = t \times N$$

where t = the average revenue per metric tonne forecast from air terminal services charges in 2007 and N is the number of service units.

In scenario (i) below at section 8.9, t = € 2.21 in 2007 in nominal terms and

in scenario (ii) below at section 8.9, t= € 2.07 in 2007 in nominal terms.

- b. In each subsequent regulatory year during the period of operation of the determination, t will be subject to an annual CPI-X adjustment, where the value of X (which may be positive or negative) for each of those years will be determined on the basis of the Commission's consideration of a number of factors such as, for example, the scope for operational and capital efficiency improvements by the Authority and the coming into operation of the proposed ATM system upgrade, once further information, which allows a detailed evaluation, is obtained. In scenario (i), mentioned above, "X" for 2007 is plus 9.76%. In scenario (ii), mentioned above, "X" for 2007 is plus 2.59%. The assumptions leading to this figure are set out more fully in section 8.9 below.

c. **Definitions**

"Regulatory year 2007 means the period beginning on 27 March 2007 and ending on 31 December 2007."

For a given departing flight, the "number of service units" (N) shall be equal to the maximum certificated take-off weight (MTOW) for the aircraft concerned, expressed in metric tonnes, as shown in the certificate of airworthiness, the flight manual or any other equivalent official document.

"CPI" means the percentage change in the consumer price index in Ireland in the relevant periods.

8. EXPLANATORY MEMORANDUM

8.1 Information Relied on to Calculate Maximum Charges

In preparing the draft determination and explanatory memorandum, the Commission has had due regard to all of the information which it received in response to requests for information from the IAA. In particular, this includes forecasts for traffic volumes, operating expenditure (opex) and capital expenditure (capex) and supporting information as appropriate. Such information provides the basis for the Commission to calculate charge levels that would cover the cost of operating the aviation terminal services (opex), the cost of financing the assets involved (an appropriate return on the Regulatory Asset Base, reflecting past and future levels of capex) and an appropriate allowance for the renewal and maintenance of those assets (depreciation).

These are the building blocks of the calculation of maximum charges. Each component of the building blocks involves forecasts, which are inherently uncertain. The existence of uncertainty is acknowledged as a risk factor which informs the assessment of an appropriate rate of return on the RAB, the cost of capital.

The Commission has yet to receive justification or reasons for some important assumptions made by the IAA for their forecasts and so the Commission is, at this stage, only able to prepare indicative calculations for the draft determination. It has adopted two indicative price scenarios based on a centerline forecast for traffic volumes plus certain varying assumptions in the IAA's projections on capex and opex.

8.2 Traffic Forecasts

Traffic forecasts made at the time of the last determination in 2002 turned out to significantly underestimate the impact of the terrorist attacks in the United States of America on 11 September 2001, on average by about 11%. However, more rapid growth in traffic volumes in 2005 and 2006 means that the forecast for 2006 is only 6.7% below the 2002 assumptions.

ATS traffic	2002	2003	2004	2005	2006
<i>MTOW 000s</i>					
Assumptions in 2002	8,277	8,674	9,073	9,472	9,857
Outturn volumes	7,196	7,593	7,729	8,658	9,200
Growth		5.5%	1.8%	12.0%	6.3%
Variances %	(13.1%)	(12.5%)	(14.8%)	(8.6%)	(6.7%)

The IAA's baseline forecasts for 2007-2011 are for relatively more modest rates of growth.

ATS traffic assumptions	2005	2006	2007	2008	2009	2010	2011
Baseline volumes (MTOW 000s)	8,658	9,200	9,568	9,922	10,309	10,732	11,161
MTOW growth		6.3%	4.0%	3.7%	3.9%	4.1%	4.0%

The IAA claims that being a small company in terms of European Air Navigation Service Providers (ANSPs) it does not have a fully staffed statistical department responsible for traffic forecasts and trend analysis in developing future traffic scenarios. Consequently, the Authority relies on traffic forecast data produced by other aviation bodies, in particular, EUROCONTROL Statistics and Forecast Service (STATFOR).

The IAA forecast uses three scenarios: high-growth, low-growth and baseline. In the three scenarios inputs such as economic growth and load factors are varied in order to capture the most likely range of future growth in flight movements. The low-growth and high-growth scenarios capture the most likely range; the baseline scenario indicates a "most likely" position within the range. In the three scenarios inputs such as economic growth and load factors are varied in order to capture a realistic range of future growth in flight movements. Given the experience of past years and especially the lack of stability in the aviation sector, which has existed since the terrorist events of 2001, the Commission acknowledges that uncertainty in traffic forecasts is a significant source of risk.

Theoretically, risk could be factored in by assigning a probability figure to each possible outcome (the probability of each event taking place) and the final forecast estimate would be the expected value of air traffic taking into account these events. The Commission is of the view that the IAA's baseline forecasts

have been prepared on a reasonably robust basis, taking some such risk into account.

Further enquiry and analysis, however, is required to ensure that the forecasts reasonably reflect all relevant information and risks. Consequently, a consideration that includes, but is not limited to, the following is envisaged:

- Consistency between the IAA forecast and those prepared by DAA and other stakeholders for other purposes, such as the coordination assessment underway;
- Consistency of the implicit IAA assumption of no change in the fleet mix (and so no change in the average MTOW) given the explicit statements made by Ryanair, Aer Lingus etc about their future plans; and
- Incorporation of possible impacts from oil prices, security threats other risks and their implications for the base line estimate as well as any high/low growth figures.

For the purposes of the indicative price scenarios in this draft determination, the Commission is using the baselines traffic forecast mentioned above which is effectively a centreline growth scenario using the IAA projections based on Eurocontrol's forecasting methodology.

8.3 Volume Risk

The Commission considers that the uncertainty in traffic forecasts is material to the judgments that the Commission must make, affecting both its own assumptions for traffic volumes and its assessment of the risk premium in the business's cost of capital. At present the IAA bears this risk. As discussed in CP8/2006 other approaches exist that seek to share this risk with users. These approaches will be the subject of substantive discussions between the Commission and the IAA in January 2007. The IAA has suggested an approach, set out in their submission at Annex IV, which the Commission understands as a simple cost pass through mechanism. To accept such an approach would be to alter economic regulation of aviation terminal services charges from an incentive based regime to a cost pass through regime. The Commission has not been persuaded by this approach in the past in relation to any of its price regulation functions. Indeed it is arguable that such an approach is incompatible with its statutory remit. The Commission invites submissions from users regarding their

interest in accepting a greater share of volume risk in return for lower ATS charges than would otherwise be calculated.

8.4 Capital Expenditure & the Regulatory Asset Base

Section 36(b) of the 2001 Act requires the Commission to have due regard to “the level of investment in aviation terminal services by the Authority, in line with safety requirements and commercial operations, in order to meet current and prospective needs of the airline industry.” In making its first determination, the Commission assessed the IAA’s capex against the future needs of the airline industry and allocated the cost of a portion of that capex to users (through regulated charges) of aviation terminal services.¹¹

The provision was made such as to allow the IAA to maintain and enhance the safety and quality of the Air Traffic Management (“ATM”) services it supplies, including resources to upgrade its ATM system to enable it to provide increases in capacity, to achieve increases in productivity and safety as well as to comply with its international commitments under the European Air Traffic Management Programme (managed by Eurocontrol).

The Commission intends to continue with this approach to deciding capex allowances for the purposes of determining maximum levels of aviation terminal services charges.

At the last review, the Commission made allowances for an assumed level of capital expenditure for ATS of €19.6 million over the five year period 2002-2006 in 2001 price terms (about €23 million in 2006 price terms). After general inflation, that assumption represents expenditure of about €21.6 million while the company’s actual and forecast expenditure turned out lower at €18.3 million, a difference of €3.3 million. The pattern of expenditure was rather more accelerated than assumed in 2002.

¹¹ The Commission was assisted by Infrastructure Management Group (IMG) whose report was published as Appendix II to CP3/2002.

ATS: capex assumptions in 2002		2002	2003	2004	2005	2006
€000s - 2001 prices	CPI:	98.2	98.2	98.2	98.2	98.2
ATS Capex		1,325	2,050	14,200	1,000	1,000
Capex, with inflation		2002	2003	2004	2005	2006
€000s - outturn prices	CPI:	102.7	106.3	108.6	111.3	115.5
2002 assumptions		1,387	2,220	15,715	1,134	1,177
ATS capex outturns/forecast		7,236	2,282	1,855	2,383	4,544
ATS capex variances		5,849	62	(13,860)	1,249	3,367
Cumulative variances		5,849	5,911	(7,949)	(6,700)	(3,333)

The Commission will seek further explanations and analysis of these variances to confirm that the net under-spend fairly reflects lower traffic volumes rather than a deferral of capital expenditure, partly remunerated in the current period, into the next control period.

The total planned capex attributable to ATS for the next 5 year period (2007-2011) is planned to be at a rather higher level of €103.0 million in 2006 price terms, of which €44.3 million relates to technology and €54.5 million relates to the construction of two new control towers at Cork and Dublin airports.

IAA ATS capex assumptions		2006	2007	2008	2009	2010	2011
€000s - 2006 prices	CPI:	115.5	115.5	115.5	115.5	115.5	115.5
Communications		78	1,793	465	90	500	500
Navigational aids		3,084	3,694	5,800	500		
Surveillance		528	5,276	3,313	3,507	500	250
Flight Data Processing (FDP)		121	2,436	2,267	1,750	7,639	1,500
Data Communications		379	443				
Other projects			1,047	250	250	250	250
Total technology		4,190	14,689	12,095	6,097	8,889	2,500
ICT		145	692	375	375	375	375
Training		9	491	175	175	175	175
Buildings & Security		200	307	125	125	125	125
Cork Tower				10,500			
Dublin Tower						44,000	
Total		4,544	16,179	23,270	6,772	53,564	3,175

The technology total of €44.3 million for 2007-2011 forms part of a forecast for the company as a whole of some €142 million over the same period. With the exception of €14.0 million of projects identified as specific to ATS, the amounts attributed to ATS are generally calculated as a 25% share of the cost of projects that will be used for both ATS and En Route services.

The Commission has yet to be informed of the methodology employed by IAA in determining the cost of their planned projects, other than a reference to some existing quotes and contracts. Consequently, the assessment of capex in this report is a high level one, not a detailed one, based on such information as the Commission has received to date from the IAA. The Commission intends to seek further more detailed data from the IAA.

The IAA's capex programme appears to have evolved from the Authority's Technology Strategy 2006-2015 that was developed in 2005, and which provided some detailed explanations for the investment need. There have been updates to the 2006-2015 Technology Strategy with the most significant updates being an increase in the expected level of expenditure on technology projects over the period 2002-2011 from about €76 million to €142 million and the provision for the construction of two new control towers; one at Cork airport during the period 2007-2008 amounting to €10.5 million and one at Dublin airport during the period 2009-2010 amounting to €44.0 million. These projects as presented have a significant impact on the regulatory asset base during the forthcoming price control period. The Commission is also aware of some uncertainty over which party will have responsibility for constructing and financing the proposed control towers. The Commission will thus will require further clarification of how the IAA and DAA will liase on these projects.

The Commission has calculated that the steady state level of ATS capital expenditure, that would permit both charge levels and the value of the RAB to remain broadly stable in real terms, would be about €29 million over the five years of the IAA plan relating to the next price control period. The proposed higher levels of expenditure on technology projects would require charges to rise by about 3.5% per annum, and charges would rise by a further 3.2% per annum to cover the costs of constructing the two control towers¹².

The Commission will require evidence from the IAA to justify the inclusion of expenditure on these projections in the final determination. Specifically:

- the appropriate treatment of a contingency for any of the projects;
- whether any delivery dates could slip and lead to projects being delivered in later price control periods rather than the next one – our assumption is

¹² These calculations adopt a policy of remunerating depreciation over the assumed lives of the assets from half way through the year in which expenditure is incurred.

that this is not a risk given our understanding of the proposed delivery dates but this needs to be investigated further (and compared to the experience of the first price control period);

- the impact of the various investments on service levels and operating costs; and
- for the two proposed control towers what the impact on rents and other fees for the use of the existing control towers will be.

For this draft determination, the Commission makes two alternative assumptions:

- That the IAA's capex assumptions are incorporated into the calculations in full;
- That 100% of the cost of constructing the control towers and 20% of the cost of all other projects are excluded from the calculations¹³.

The Regulatory Asset Base (RAB)

The Commission has calculated the value of the RAB at the end of the current control period, on 26 March 2007, on the basis of forecast capital expenditure for 2006 and an allocation of forecast capital expenditure for 2007. The Commission has followed the same policy it has established for airport regulation of rolling forward the RAB in general price terms based on outturn capital expenditure and depreciation allowed for in price cap calculations. Assuming the forecasts supplied by the IAA for 2006 and 2007, and adjusting the balance on 27 March 2002 for inflation and outturn capex in 2002, this calculation results in a RAB balance at the end of the current price control period (at the start of the new control period on 27 March 2007) of €28,116,000.

¹³ This reflects assumptions for cost elasticity used by the CAA for NATS in the UK, see paragraph 7.37, NATS Price Control Review 2006-2010: CAA's Initial Proposals, November 2004.

RAB at 27 March 2002

€000s

As reported in 2002 (CPI = 98.2)	14,530
----------------------------------	--------

Adjusted to 2006 prices (CPI=115.5)	17,102
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0.25 of 2002 overspend in 2006 prices	1,645
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RAB at 26 March 2002 in 2006 prices	18,747
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RAB: rolling forward	2002/03	2003/04	2004/05	2005/06	2006/07
€000s - 2006 prices	CPI: 115.5	115.5	115.5	115.5	115.5
RAB at the start of the regulatory year	18,747	24,394	25,260	24,383	24,018
Additions (calendar years split 25:75)	6,724	2,353	2,098	2,992	7,453
Depreciation allowed for in 2002	(1,077)	(1,487)	(2,975)	(3,356)	(3,355)
RAB at the end of the regulatory year	24,394	25,260	24,383	24,018	28,116

The calculation of this opening balance for the new period is liable to vary before the final determination, depending on outturns for 2006 and the forecast for 2007.

8.5 Operating Expenditure

Section 36(e) of the 2001 Act requires the Commission to have due regard to the "operating and other costs incurred by the Authority in providing aviation terminal services." In making its first determination, the Commission sought to include in the price cap on aviation terminal services charges only those operating costs necessary for the maintenance of safety and for a given level and quality of service. The Commission is also required, under Section 36(c), to have due regard to the "efficient and effective use of all resources by the Authority". In that context, the Commission noted in its report on the first determination that the IAA had lowered its cost base (in response to the post-9/11 economic climate) by €7 million in 2002 on foot of staff reductions (including secondment of staff outside the Authority) as well as reducing discretionary spending. Those reductions partially funded the IAA's policy of maintaining terminal charges for most of 2002 at 2001 levels, which amounted to a real reduction in charges as the effects of inflation and reduced volumes would otherwise have put upward pressure on terminal charges. Accordingly, the Commission noted that the IAA was attempting to provide a cost-effective service to its customers in what was a difficult trading environment.

While the company has experienced lower traffic levels than the Commission assumed in 2002, its operating expenditure over the whole period also appears to

have been lower than assumed (though not as markedly), after taking into account the effects of inflation.

ATS opex assumptions in 2002		2002	2003	2004	2005	2006
€000s 2001 prices	<i>CPI:</i>	98.2	98.2	98.2	98.2	98.2
Personnel costs		4,693	4,741	5,120	5,172	5,225
Pension		972	987	1,070	1,086	1,103
Training		860	873	947	961	976
Administration etc.		2,136	2,168	2,352	2,388	2,423
Met		279	567	923	1,249	1,585
Regulation		225	100	100	100	100
Total		9,165	9,435	10,513	10,957	11,411
ATS opex assumptions in 2002		2002	2003	2004	2005	2006
€000s outturn inflation	<i>CPI:</i>	102.7	106.3	108.6	111.3	115.5
Personnel costs		4,911	5,134	5,667	5,863	6,149
Pension		1,017	1,068	1,185	1,232	1,298
Training		900	945	1,048	1,090	1,148
Administration etc.		2,235	2,348	2,603	2,707	2,852
Met		292	614	1,021	1,416	1,865
Regulation		235	108	111	113	118
Total		9,592	10,218	11,635	12,421	13,431
ATS outturn/forecast opex		2002	2003	2004	2005	2006
€000s outturn inflation	<i>CPI:</i>	102.7	106.3	108.6	111.3	115.5
Personnel costs		5,062	5,417	5,596	5,704	6,073
Pension		826	1,104	1,780	1,616	1,398
Training		613	788	786	570	1,061
Administration etc.		1,928	3,070	2,762	2,800	2,789
Met		210	474	735	1,087	1,504
Regulation		311	36	27	28	355
Total		8,950	10,889	11,686	11,805	13,180
Variance against 2002 assumptions		(642)	671	51	(615)	(252)

The IAA has made submission to the Commission regarding its forecast levels of operating expenditure. The Commission has reviewed these forecasts at a high level from an efficiency perspective. The Commission has calculated that cost projections based on outturn 2006 expenditure and projected forward for volume growth would be broadly consistent with stable charge levels but has identified two areas where the IAA's forecasts would require charges to rise. These relate to costs of training, which is forecast to increase by the end of this year (2006) to some 43% above the average level for 2002-05 (having an impact of 0.8% per annum on charge increases) and the IAA's assumptions for cost inflation in excess of the Commission's estimate of future consumer price inflation (an impact of 2.3% per annum).

IAA ATS opex assumptions	2005	2006	2007	2008	2009	2010	2011
€000s - forecast prices	CPI: 111.3	115.5	119.0	122.6	126.3	130.0	133.9
Personnel costs	5,704	6,073	6,403	6,939	7,521	8,152	8,836
Pension	1,616	1,398	1,707	2,045	2,219	2,408	2,612
Training	570	1,061	1,328	1,441	1,563	1,696	1,840
Administration etc.	2,800	2,789	2,850	2,993	3,412	3,599	3,809
Met	1,087	1,504	1,658	1,741	1,828	1,919	2,015
Total	11,777	12,825	13,946	15,159	16,543	17,774	19,113

IAA ATS opex - deflated	2005	2006	2007	2008	2009	2010	2011
€000s - 2006 prices	CPI: 115.5	115.5	115.5	115.5	115.5	115.5	115.5
Personnel costs	5,922	6,073	6,217	6,541	6,883	7,243	7,622
Pension	1,678	1,398	1,657	1,928	2,031	2,139	2,253
Training	592	1,061	1,289	1,358	1,431	1,507	1,588
Administration etc.	2,907	2,789	2,767	2,821	3,123	3,198	3,286
Met	1,129	1,504	1,610	1,641	1,673	1,705	1,738
Total	12,228	12,825	13,540	14,289	15,140	15,792	16,487

NB: these figures exclude ATS share of Commission costs

Some additional high-level analysis has been undertaken by consultants working for the Commission. This has focused on:

- expected levels of efficiency based on national data; and
- implied levels of efficiency based on IAA's submission.

At a national level evidence on total factor productivity (TFP) suggests that:

- over the period 2000 to 2004 the annual average TFP has been 2% while over the period 1980 to 2004 the figure was 3%; and
- labour productivity has been 3.8% per annum when measured against hours and 3% per annum when measured against the number of people employed.

If the mix of industries is controlled for, to try to provide something closer to the services provided by the ATS, then figures slightly, but not significantly, lower than the national ones are found for labour productivity of 3.2% (hours) and 2.3% (people employed) respectively.

All this national data suggests that labour productivity should increase. Yet the submission by IAA on unit labour costs shows an increase of:

- 0.8% in 2007;
- 5% per annum for 2008 and 2009; and
- 3% per annum for the remainder of the price control period.

Thus, the further investigation of specific issues relating to training and labour costs highlighted above acquire even greater significance and the Commission will require persuasive information from IAA to view these costs as submitted as appropriate given the implications they have for relative cost effectiveness.

8.6 Meteorological (MET) Costs

The Commission determined in 2002 that aviation terminal services were being provided by the IAA at a level below the fully allocated cost of providing the service. This was because the IAA did not allocate any portion of the cost of the provision of meteorological services to aviation terminal services charges. The determination set the maximum charge at a level to cover all such costs. The IAA has informed the Commission that, by the end of the period of the current determination, it will have allocated 20 per cent of aeronautical meteorological service ("MET") costs to the aviation terminal services cost base. The Commission accepts this proportionate 80/20 allocation of MET costs within the IAA for the next price control period.

The Commission believes the service area allocations of aeronautical MET costs (i.e., an 80/20 split between en route and terminal respectively) is appropriate, and consistent with the ICAO principle that "the allocation of aeronautical meteorological costs should be determined in such a way as to ensure that no users are burdened with costs not properly allocable to them?"¹⁴

8.7 Cost-Effectiveness & Benchmarking

Section 36(g) of the 2001 Act requires the Commission to have due regard to "the cost competitiveness of aviation terminal services with respect to international practice." At the time of the first determination, the Commission examined evidence of the Authority's international cost competitiveness and found that the Authority's (albeit en route) costs were below those of the other service providers in the study.

¹⁴ See ICAO Manual on Air Navigation Services Economics – Appendix 6.

As mentioned in CP8/2006, it appears to the Commission, having studied the ATM Cost Effectiveness ("ACE") 2004 Benchmarking Report¹⁵ that this picture has little changed in the interim.

Eurocontrol's Performance Review Commission notes that the ACE 2004 Benchmarking Report is a purely factual analysis of the cost-effectiveness indicators and that a normative analysis would require a proper consideration of exogenous factors, especially input prices and traffic complexity. European Air Navigation Service Providers ("ANSP") are characterised by significant heterogeneity and comparing their data is a complex task, with particular difficulties in the areas of the categorisation of non-air traffic control staff, differences in ownership structure and hence costs, different methods used to finance assets, the treatment of regulatory costs and of costs that are recovered outside of ANS.

In May 2005, consultants Steer Davies Gleave (SDG) with the Solar Alliance produced a report for the UK Civil Aviation Authority benchmarking NATS¹⁶ costs relative to a select group of 13 European ANSPs. Comparators were chosen on the basis of similarities in unit labour costs and in airspace density and included the IAA. The principal added value of the report was a more comprehensive analysis and isolation of NATS costs of ANS/CNS provision.

As stated earlier, the Commission believes that in addition to the productivity and cost-effectiveness rankings implied by the PRC ACE 2004 and the SDG/Solar Alliance Benchmarking Reports an independent assessment of IAA efficiency making it the focus of such a report and taking into account such factors as input prices and traffic complexity would be useful in making a new determination specifying maximum levels of aviation terminal services charges. It also notes that information supplied by the IAA on its cost forecasts tend to suggest a decline in productivity and cost effectiveness that could have a significant bearing on its relative cost competitiveness. The Commission believes this should be further examined.

¹⁵ See "ATM Cost-Effectiveness (ACE) 2004 Benchmarking Report" prepared by Eurocontrol's Performance Review Unit (PRU) with the ACE Working Group and commissioned by Eurocontrol's Performance Review Commission (PRC), MM 2006.

¹⁶ NATS is the IAA's equivalent in the United Kingdom.

8.8 Cost Of Capital

The Commission must have due regard to the relevant charging principles of ICAO, which state that “air navigation services may provide sufficient revenues to exceed all direct and indirect operating costs and so provide for a reasonable return on assets (before tax and cost of capital) to contribute towards necessary capital improvements.” At the time of its first determination, the Commission deemed that the principles espoused in this extract recognise the link between the ability of the provider of air navigation services to undertake investment in improving its service and the rate of return that is earned by that firm. It also deemed that, in order for the Commission to have due regard to the level of investment by the Authority, there is an implicit requirement that the IAA be allowed a rate of return at least equal to its cost of capital, so that it may obtain funds for the purposes of investment. The Commission remains of this belief.

Accordingly, at the request of the Commission, Dr. Colm Kearney, Professor of International Business, Trinity College Dublin and Elaine Hutson, Lecturer in Finance, University College Dublin have prepared an expert report, estimating the IAA’s cost of capital (on a real, after-tax basis).

Their estimates of the inputs to the WACC calculations provide estimates of the IAA’s cost of capital as follows: Post-tax WACC: = 5.9; Pre-tax WACC: = 6.7.

The estimate of the post-tax real WACC at 5.9 percent is 0.6 percentage points below the estimate of 6.5 percent for the IAA in 2002, and the pre-tax real WACC of 6.7 percent is 0.8 percentage points below the 2002 estimate of 7.5 percent.

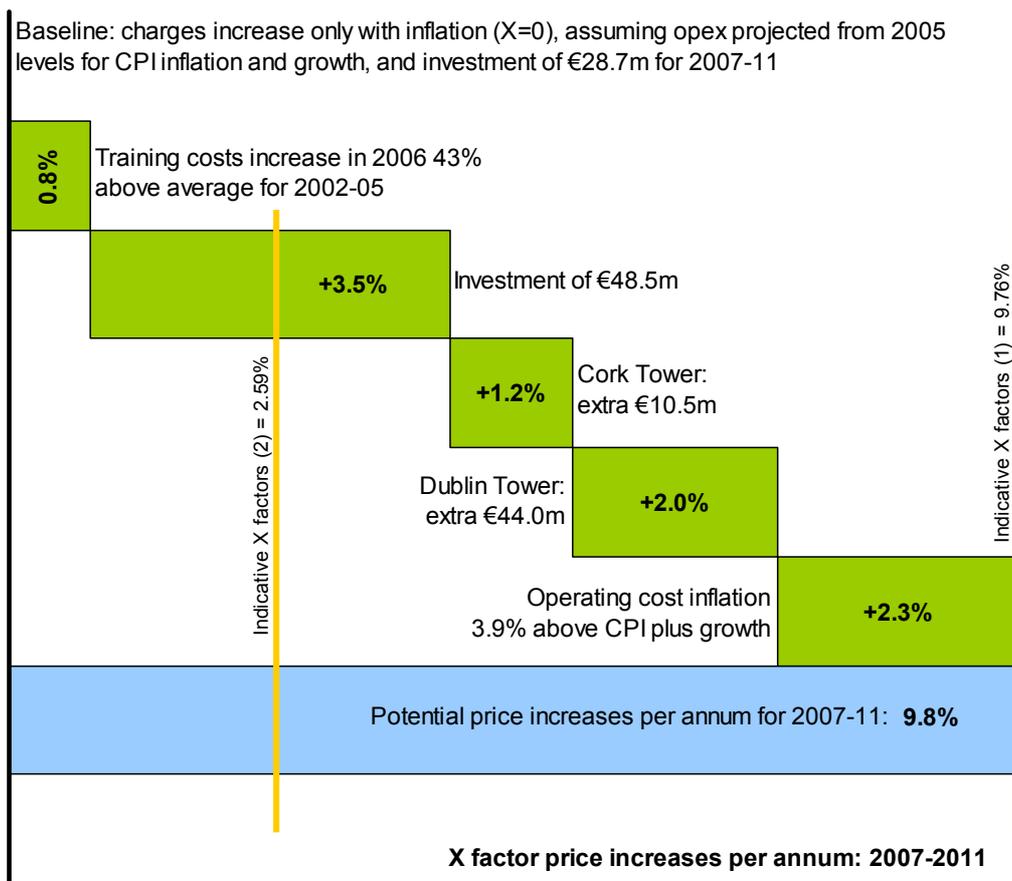
The reasons for this include: lower world real interest rates; further recent academic studies of equity risks and corresponding lower equity risk premiums in regulatory determinations; higher debt to equity ratio and lower corporate tax rate; use of actual recent debt-to-assets ratio rather than assumed “optimal”; lower estimates for the real risk-free rate, equity beta and the equity risk premium; equilibrium corporate tax rate now reached; more recent estimates of international debt premiums, and evidence of the IAA’s actual cost of debt; lower risk-free rate and lower debt premium.

The Commission proposes to allow the IAA a real, pre-tax rate of return of 6.7%.

8.9 Calculating the price cap

The Commission has considered a range of possible assumptions for the draft determination. To inform its judgements, the Commission has characterised the causes of charge increases with reference to the key assumptions in the IAA forecasts. The following diagram illustrates these causes.

Build-up of potential ATS charge increases



The two vertical orange lines represent the results of using the Commission's two alternative sets of assumptions for the draft determination.

The first set of assumptions, which result in X factors of 9.76% for each period (at the right hand end of the diagram above), adopt the IAA's baseline forecasts for traffic volumes, opex and capex and the advice received by the Commission on the pre-tax real cost of capital (6.7% per annum). The calculation is summarised in the following table.

Indicative X factors and yield table - 1	9m 2007	2008	2009	2010	2011	NPV
€000s - 2006 prices	CPI:	115.5	115.5	115.5	115.5	115.5

RAB

RAB at the start of each period	28,116	36,628	52,927	51,235	94,811
Capex (0.75 of 2007)	12,134	23,270	6,772	53,564	3,175
Allowed depreciation	(3,622)	(6,971)	(8,464)	(9,988)	(11,079)
RAB at the end of each period	36,628	52,927	51,235	94,811	86,908

Calculation of regulated revenues

X factors	9.76%	9.76%	9.76%	9.76%	9.76%
Forecast CPI	4.00%	3.45%	3.00%	3.00%	3.00%
CPI + X	13.76%	13.21%	12.76%	12.76%	12.76%
Nominal price*/MTOW (2006 = €1.94)	€2.21	€2.50	€2.82	€3.18	€3.59
Converted to 2006 prices	€2.13	€2.36	€2.58	€2.83	€3.10
MTOWs	7,654	9,922	10,309	10,732	11,161
Total revenues (2006 prices)	16,320	23,409	26,628	30,348	34,552

* Price rolled forward on CPI+X basis, assuming other factors in price formula are zero

Discount factors for cash flows:

- at the start of the period	1.000				
- during the period	1.025	1.085	1.158	1.235	1.318
- at the end of the period					1.362

Cash flows and NPV check

RAB at the start of the period	(28,116)					(28,116)
Capex	(12,134)	(23,270)	(6,772)	(53,564)	(3,175)	(84,903)
Opex	(10,155)	(14,289)	(15,140)	(15,792)	(16,487)	(61,445)
Regulatory fees	(234)	(47)	(46)	(44)	(345)	(609)
Allowed revenues	16,320	23,409	26,628	30,348	34,552	111,277
RAB at the end of the period					86,908	63,796
Total NPV						(0)

Note that these calculations assume a change in the reference point for the CPI term in the price formula for 2008 from the index for the previous January to the index for the previous October. This reflects the proposed alignment of regulatory year-ends to the company's financial year-ends from 31 December 2007. The calculation assumes a figure of 116.7 for the January 2007 CPI all items index, being some 4% above its January 2006 level of 112.2, and a figure of 120.7 for October 2007, some 3% above the October 2006 level of 117.2. This implies a 3.45% CPI factor in the calculation for the regulated price for 2008. The Commission's inflation assumptions will be refined before the final determination. Note also that the discount rate of 6.7% per annum is calculated to be equivalent to 5.1% over the 9 months of the short period in 2007.

The second set of assumptions, which result in X factors of 2.59% for each period (the orange vertical line towards the left of the diagram), adopt the IAA's baseline forecasts for traffic volumes but use alternative assumptions for opex and capex, assuming:

- That the underlying rate of operating cost increases in real terms after 2006 is no greater than 30% of the rate of growth in traffic volumes¹⁷; and
- That 100% of the cost of constructing the control towers and 20% of the cost of all other projects assumed by the IAA are excluded from the calculations.

The calculation is summarised in the following table.

Indicative X factors and yield table - 2							
€000s - 2006 prices	CPI:	9m 2007	2008	2009	2010	2011	NPV
		115.5	115.5	115.5	115.5	115.5	
RAB							
RAB at the start of each period		27,307	33,557	37,671	36,017	36,372	
Capex (0.75 of 2007)		9,707	10,216	5,418	7,651	2,540	
Allowed depreciation		(3,458)	(6,102)	(7,071)	(7,296)	(7,146)	
RAB at the end of each period		33,557	37,671	36,017	36,372	31,766	
Calculation of regulated revenues							
X factors		2.59%	2.59%	2.59%	2.59%	2.59%	
Forecast CPI		4.00%	3.45%	3.00%	3.00%	3.00%	
CPI + X		6.59%	6.04%	5.59%	5.59%	5.59%	
Nominal price*/MTOW (2006 = €1.94)		€2.07	€2.20	€2.32	€2.45	€2.59	
Converted to 2006 prices		€2.00	€2.07	€2.12	€2.18	€2.23	
MTOWs		7,654	9,922	10,309	10,732	11,161	
Total revenues (2006 prices)		15,291	20,543	21,881	23,351	24,895	
<i>* Price rolled forward on CPI+X basis, assuming other factors in price formula are zero</i>							
Discount factors for cash flows:							
- at the start of the period		1.000					
- during the period		1.025	1.085	1.158	1.235	1.318	
- at the end of the period						1.362	
Cash flows and NPV check							
RAB at the start of the period		(27,307)					(27,307)
Capex		(9,707)	(10,216)	(5,418)	(7,651)	(2,540)	(31,687)
Opex		(9,734)	(13,123)	(13,276)	(13,440)	(13,601)	(54,257)
Regulatory fees		(234)	(47)	(46)	(44)	(345)	(609)
Allowed revenues		15,291	20,543	21,881	23,351	24,895	90,542
RAB at the end of the period						31,766	23,319
Total NPV							0

Service Quality

In order to understand service quality in the air traffic management context, one must consider air transport delays and the importance of punctuality and predictability to airlines.

¹⁷ See footnote 13

The Commission set out its current approach to service quality in CP8/2006. Currently it does not include in its price cap an explicit system of financial bonuses or penalties linked to service quality (e.g. average delays). There does not appear to be strong support or otherwise from users for a modification or any suggestion how such a modification might be designed on the basis of robust metrics.

The Commission notes that there has been little or no support for an explicit system of financial bonuses and penalties linked to service quality to be incorporated into the Commission's price cap on the IAA. bmi suggested a system that refunds the terminal navigation charge in the event of delay attributable to the IAA. While this appears simple and workable in principle the reality may be different. How long a delay should trigger the payment? How is responsibility for delay identified? These problems may not be insurmountable and it may be possible to design a simpler, workable and equitable system. The Commission would welcome further submissions on this issue.

9. ANNEXES –

- I Deadlines
- II Legal Notice
- III Submission from bmi
- IV Submission form IAA

9.1 Annex 1 - Deadline and Process for Receipt of Representations

Where a date is expressly or impliedly stipulated as a deadline, the closing time for receipt of submissions is 5:00pm on the date in question. In order to ensure that the Commission acts at all times in a fair, transparent and non-discriminatory manner, the Commission is concerned to ensure that all parties making representations in respect of the proposed determination are clear about the meaning of the deadline set for receipt of such representations and the consequences of failing to meet the deadline. The deadline for receipt of representations with respect to the proposed determination on the maximum level of aviation terminal services charges is **5:00pm on the 22 February 2007** (the “deadline”).

Representations should be addressed to:

Ms. Brídín O’Leary
Commission for Aviation Regulation
3rd Floor
Alexandra House
Earlsfort Terrace
Dublin 2

Any party intending to make representations to the Commission on the proposed Determination should note the following conditions, which the Commission will apply with respect to the receipt of representations and the meeting of the deadline.

1. Subject, where applicable, to the specific rules set out in subsection 6 below, the time of receipt of representations by the Commission, whether in electronic form or otherwise, shall be the time when the representations are actually received at, or in, the offices of the Commission whether sent

by post, courier, hand delivery, fax, e-mail or otherwise and all references to "received by the Commission" shall be construed accordingly.

2. The onus will be on the party making representations to the Commission to ensure that the representations are received by the Commission on or before the deadline.
3. The Commission accepts no responsibility and will make no allowances for delays or technical faults, which arise otherwise than as a direct result of an act or omission of the Commission, howsoever caused, and which result in representations being received by the Commission after the deadline or which result in part only of the representations being received by the Commission on or before the deadline.
4. Representations, which are received by the Commission after the deadline, will be deemed not to have been received by the Commission and the Commission will not take them into account. If a portion of representations are received by the Commission on or before the deadline and the remaining portion received after the deadline, then only that part received by the Commission on or before the deadline will be taken into account by the Commission. The remaining part will be deemed not to have been received by the Commission.
5. In determining the time at which representations are actually received by the Commission, in accordance with the rules set out in this Annex, the Commission shall use the clock settings, time and date stamps in use in the offices of the Commission for Aviation Regulation, on its fax machine and on its information systems, as appropriate.
6. The Commission envisages that it may correspond with interested parties who have made submissions for clarification or explanation of their submission. Such correspondence is not an invitation to make further submissions.
7. Without prejudice to the generality of the foregoing, the following specific rules shall apply to the following situations: -

- (a) Post

Representations sent to the Commission by post shall be deemed to have been received by the Commission at the time when they were delivered by An Post to the offices of the Commission for Aviation Regulation at 3rd Floor, Alexandra House, Earlsfort Terrace, Dublin 2. In the event of any disagreement as to this time, the time at which the Commission received the representations will be deemed to be the time at which they are delivered by An Post unless the party sending the representations can prove otherwise.

(b) Courier or Hand Delivery

Representations sent to the Commission by courier or hand delivery shall be deemed to have been received by the Commission at the time when they were delivered by the courier company or the person effecting hand delivery to the offices of the Commission for Aviation Regulation at 3rd Floor, Alexandra House, Earlsfort Terrace, Dublin 2. In the event of any disagreement as to this time, the time at which the Commission received the representations will be deemed to be the time at which they were delivered by the courier company or the person effecting hand delivery unless the party sending the representations can prove otherwise.

(c) Fax

The Commission will be deemed to have received representations sent by fax at the time of receipt by the Commission of the last page of the fax transmission containing the representations. In the event that the Commission starts to receive a fax transmission prior to the deadline and the fax transmission is not completed until after the deadline, the Commission will only be deemed to have received that portion of the transmission sent on or before the deadline.

(d) Electronic Mail

The Commission will be deemed to have received representations sent by electronic mail at the time when the electronic mail containing the representations enters the information system, which the Commission has designated for the purpose of receiving electronic communications. In this case the information system represented by the electronic mailing address info@aviationreg.ie is the information system that the Commission has designated for the purpose of receiving electronic communications. No other address of the Commission or its staff should be used.

8. Delivery of Documents

The Commission requests that all written submissions be typed. Submissions sent to the Commission in electronic form either on floppy disk or by e-mail to info@aviationreg.ie should be either in Microsoft Word (".doc") or portable document format (".pdf").

In all cases the sender shall have an obligation to ensure that the information is actually received by the Commission on or before the specified deadline.

9. Information

Having regard to the principles of better regulation, the Commission is concerned to ensure that the process leading to its determination is administered in an open, accessible manner. This is reinforced by the requirements contained in Section 5(4) of the Act that the Commission ensure that its determinations and requests be objectively justified, non-discriminatory, proportionate and transparent. To that end, details of all statutory requests for information by the Commission will be posted on its website.

The IAA will be the source of much of the information that will be needed by the Commission to make a determination. It is vital that all interested parties, as well as the public, have sight of all relevant information (subject to the requirements of confidentiality) relied upon by the Commission for the purpose of its determination, otherwise their ability to fully participate in both the initial consultation as well as the statutory consultation could be impeded.

While parties are free to designate part or all of their submissions as confidential (and should do so clearly, as is their obligation) this has the potential to create difficulties for the Commission. If the Commission is to make available the information leading to its determination, then all of the information upon which it relies for the purpose of its determination should, as a general rule, be put into the public domain.

10. Confidential Information

The Commission acknowledges that circumstances may arise where the disclosure of highly sensitive confidential information may cause damage to the party supplying the information. Clearly, the Commission will have access to and will

analyse all relevant information, but it is also desirable that interested parties and the public have access in turn, to information that is relied upon by the Commission for the purpose of its determination. The Commission has a statutory obligation to give reasons for its determination. Consequently, as a general rule, unless the Commission is able to put all of the information that it is relying on into the public domain, it will be reluctant to rely on that information for the purpose of making its determination. Nonetheless, the Commission is of the view that even where information is regarded as highly sensitive by the disclosing party, it may be possible, whether by means of aggregation or otherwise, to disclose the information in a modified manner. Where justified, the process of aggregation or restatement will be performed by the disclosing party in consultation with the Commission after the Commission has seen all of the information in original form.

11. Use of the Commission's website

As indicated, the Commission proposes to place all of the submissions and representations that it receives in response to requests, on its website. Ordinarily, the Commission will not be editing this material. As a result, the content of any submission is solely a matter for the submitting party, and in that regard, interested parties are referred to the legal notice and indemnity concerning use of the Commission's website set out below.

9.2 Annex II - LEGAL NOTICE

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

INDEMNITY

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

9.3 Annex III – bmi Response to CP8

BMI Response to CP8

Maximum Levels of Aviation Terminal Services Charges of the Irish Aviation Authority CP8/2006

With reference to the report (CP8/2006) published on 5 October 2006 our comments in response to the questions raised are as follows. Where a question has not been explicitly responded to, bmi has no comment to make regarding that question at this time.

Question 2. We do believe that it necessary and appropriate for the commission to review the IAA's cost allocation methodologies. Specifically we believe that if the actual split between Terminal and en-route charges is available then, that is the split that should be used, rather than the previous split of 25-75.

Question 6. We do not believe that the Commission should approach the structure of the IAA's terminal services costs, such that allowed revenues can, in general terms, be aligned with the structure of the costs. Instead we believe the existing method of charges based on a rate per tonne to be suitable.

Question 7. bmi agrees with the Commission that it is appropriate to continue with a regulatory till that includes only the costs incurred and revenues earned in the provision of aviation terminal services.

Question 8. Regarding the appropriate allocation of future financial risks associated with traffic volatility between air navigation service providers and users as well as the appropriate mechanism to allocate those risks in practice, bmi believes that this is within the control of the Commission. User choice is affected not only by terminal charges, but also by airport charges, as there is no alternative airport to Dublin, in order to keep the airport competitive to users, charges need to be as low as possible.

Question 10. The service area allocations of aeronautical MET costs (i.e. an 80/20 split) appear to be appropriate and consistent with the ICAO principles.

Question 11. bmi believes that productivity and cost effectiveness rankings implied by the PRC ACE 2004 and the SDG/ Solar Alliance Benchmarking Reports provide an indication which may help determination of maximum levels of aviation terminal services charges. However bmi does not believe that they should be relied upon as sole evidence and the data needs to compare all relevant factors.

Question 12. The existing approach to deciding CAPEX allowances for the purposes of determining maximum levels of aviation terminal services charges needs independent review of the cost of investments. This will ensure cost effective developments which are in line with necessary safety and maintenance requirements.

Question 13. The proposed approach to calculating the IAA's allowed rate of return for the purposes of determining maximum levels of aviation terminal services charges appears very generous. There are no competitive options available and therefore no competitive risk to the IAA, the airline is obligated to pay therefore there is no commercial risk. Under these circumstances the rate of 6.5% appears to be very generous for a monopoly provider, also in the light of the fact that the investment has mostly been in upgrading and renewing the existing equipment with no significant step-change in technology. bmi would expect that the rate of return be revisited and significantly reduced.

Question 14. bmi would welcome a simple penalty term, for example whereby an airline could be refunded the terminal navigation charge in event of a delay attributable to the terminal navigation service provider.

To conclude bmi appreciates the opportunity to comment on the approach to charging for terminal navigation service in Ireland, and to shape the future of working together.

I look forward to hearing from you.

Yours sincerely,

Benj Street
Sourcing Manager

9.4 Annex IV – IAA Response to CP8

15 December 2006

Ms Brídín O'Leary
Economist
Commission for Aviation Regulation
3rd Floor, Alexandra House
Earlsfort Terrace
Dublin 2

Irish Aviation Authority Under-recovery of costs 2002 to 2005

Dear Brídín

I refer to our conversation earlier this morning in connection with the above.

Cost Recovery

The Authority is obliged by legislation to recover the costs of services provided by the Authority at the State aerodromes.

Under-recovery of Costs

As previously reported to the Commission, actual operating expenditure in the period 2002 to 2005 exceeded forecast and thus the price cap set by the Commission was insufficient to recover the actual cost of service provision. The amount of the under-recovery of costs at 31 December 2005, as stated in the Authority's statutory audited accounts was €2.9 million. There are, I believe, three principal reasons for this under-recovery as follows:

The actual volume of traffic was significantly less than the forecast during the above period. The forecast of traffic used by the Commission was based on a range of forecast information supplied by EUROCONTROL and forwarded to the Commission by the Authority in June and again in November 2001.

Actual operating expenditure in the period 2002 to 2005, mainly staff costs, exceeded forecast. The additional staff costs arose principally due to the actual level of pay awards under the national pay agreements being significantly higher than forecast. In the case of the Authority, the actual level of pay award was determined ultimately by the Labour Court.

Another factor was the decision by the Authority, in the aftermath of the terrorist attacks in the United States in 2001 and the resulting recession in aviation throughout 2002, to freeze its charges in 2002 and to delay passing on permitted increases in costs in subsequent years. This action was taken by the Authority in order to give some financial "breathing space" to airlines in a period of significant slow-down in aviation.

As stated previously, the Authority is obliged by legislation to recover the costs of services provided by the Authority at the State aerodromes. Thus, if the Commission were to set a terminal unit rate of €4 per tonne and the Authority's costs were €3.50 per tonne, the Authority is interested in recovering only its cost of €3.50 per tonne and vice versa.

Proposal

The Authority is prepared to consider any reasonable proposal that ensures the recovery of its costs of terminal services provision. It must, however, recover its costs as provided for under its founding legislation. The above under-recovery of €2.9 million has been outstanding for some years and so the Authority would wish to recover these costs during 2007. The cost recovery mechanism that the Authority operates ensures that over time the actual costs of service provision are recovered, no more, no less.

Yours sincerely

Denis J Daly
Director Finance