# Maximum level of aviation terminal services charges that may be imposed by the Irish Aviation Authority Draft Determination CP1/2011

## Response to 2011 ATSC Draft Determination

## Irish Aviation Authority

**July 2011**

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## Introduction

The IAA is a commercial state-sponsored company which was established on 1 January 1994 to provide air navigation services in Irish-controlled airspace, and to regulate safety standards within the Irish civil aviation industry. These are two distinct activities. Many of the activities of the IAA are international obligations relating to the International Civil Aviation Organisation, European Aviation Safety Agency, EUROCONTROL, the European Civil Aviation Conference, and in the North Atlantic, the North Atlantic Systems Planning Group, exercised by direct delegation from the State. The IAA employs approximately 700 persons, mainly pilots, air traffic controllers, radio officers and aeronautical engineers.

The IAA receives **no funding** from the Exchequer and is wholly dependent on charges and fees raised in respect of its operational and regulatory activities from its airline customers and regulated entities. The IAA generates about 83% of its overall income from international business.

The IAA controls over 90% of all air traffic from Europe/North America in over 451,000 square kilometres of Irish-controlled airspace. The IAA has one of the most advanced Air Traffic Management Systems in Europe and has invested over €200 million in Air Traffic Management facilities and systems over the past decade, all entirely funded by the IAA without recourse to the State. The IAA also provides North Atlantic aeronautical communications services to aircraft in the eastern half of the North Atlantic out to 30 degrees west longitude.

The IAA has successfully overseen a major growth in the aviation industry in Ireland and it now regulates the Europe-wide operations of a range of carriers that carried over 88 million passengers in 2010. In addition, a range of ancillary activities such as aircraft leasing, maintenance, and technical training all rely on its high standard of oversight.

In Europe, the European Union is implementing major structural changes to the industry on a trans-national basis via the Single European Sky (SES) Regulations 2009 and the centralisation of Safety Regulation via the new European Aviation Safety Agency. These changes will fundamentally affect both main activities of the IAA (Air Traffic Management and Civil Aviation Safety Regulation).

Terminal navigation services provided by the IAA at the three State airports Dublin, Shannon and Cork account for 14% of the IAA's total revenue and charges for these services are regulated by the Commission for Aviation Regulation (the Commission). The IAA welcomes the opportunity to respond to Commission Paper 1/2011 draft determination on the maximum level of aviation terminal service charges that may be imposed by the Irish Aviation Authority. For ease of reference, the results of the IAA's review have been presented, as much as possible, in accordance with the structure of the Commission's own draft determination. Each chapter comprises a summary of the IAA's key responses followed by a detailed discussion of the points in question.

The IAA notes the intention of the Commission to issue a final determination in October 2011. The IAA recommends that the final determination is issued by mid-October at the latest so that terminal reporting obligations to the European Commission, due in November, can be met.

The IAA would appreciate the opportunity to meet with the Commission, in due course, in order to discuss its response.

## Executive summary

The primary function of the IAA is to ensure safety in the aviation industry in Ireland. All of its decisions are underpinned by the principle of safety.

The IAA does not accept the Commission's draft determination on aviation terminal charges 2012 to 2015, as it is currently presented. However, the IAA proposes an equitable alternative plan which will ensure that safety remains its overriding priority while, simultaneously, providing a reduction in the price cap.

The IAA welcomes important aspects of the Commission's draft determination including the introduction of a price cap calculation that is compliant with European Commission (EC) requirements; the introduction, in principle, of a service quality term and the claw-back of the opening Regulated Asset Base (RAB) to take account of CAPEX under-spend in the previous regulatory period.

However, the IAA has significant concerns over a number of the Commission's initial proposals including:

- Proposed cuts in the OPEX allowance which are based on a flawed elasticity model of 0.3;
- Failure to appreciate that OPEX costs incurred in the 2007 regulatory period were often outside of the control of the IAA and which now form the basis for the forecast OPEX into the next determination;
- A conservative measure of cost of capital which fails to take account of the financial markets to which the IAA has access and the rating of Irish debt to junk bond status;
- The introduction of a service quality model which promotes counterproductive responses to the detriment of both the IAA and its airline customers;
- The use of the baseline forecast for traffic growth which, in the current times of unpredictable traffic patterns, exposes the IAA to excessive volume risk.

<u>OPEX</u>

The Commission's draft determination focuses a significant amount of effort on the question of OPEX. The IAA takes issue with a number of the proposals/claims made by the Commission. Firstly, the Commission has proposed an OPEX allowance based on a flawed assumption of elasticity of 0.3. This assumption is not justified by the Commission and data provided in this response does not support this elasticity factor. The Commission's proposal to relate 2015 OPEX levels to 2006 levels ignores the fact that increases in payroll, pension and training costs have happened since 2006 which were beyond the control of the IAA and were independent of any movements in traffic. Movements in terminal OPEX are driven by factors other than traffic and the Commission must look to understand the drivers behind the OPEX increases. Both the UK Regulator and the Single European Sky II Regulations acknowledge that pension costs, in particular, are outside of the control of the air navigation service provider (ANSP) and both allow for these costs as "pass through" costs in the ANSP's cost base.

Secondly, it is unfair of the Commission to comment that IAA staffing costs have not been controlled "especially carefully". The Commission is fully aware that, as a public sector organisation, the IAA applies public service pay agreements, nationally brokered, and coupled with local bargaining provisions, underpinned by improvements in efficiency and effectiveness. The IAA's response enhances the benchmarking data included in the draft determination to show that the IAA compares very favourably with its peers in terms of payroll costs and productivity. The

additional suggestion by the Commission that staff costs should be compared with average industrial earnings levels indicates a complete lack of understanding of the nature of the work of the IAA, with its focus on safety and efficiency of operations. The Commission also chooses to disregard the international context in which an air traffic controller operates as compared to the local environment of manufacturing industry earnings.

The IAA is concerned that the Commission does not foresee the consequences of its proposals of staff cost reductions, whether delivered by reductions in rates of pay or reduced numbers of air traffic controllers. The potential for reduced service levels at the State airports, at which the IAA provides a twenty four hour (H24) service, seven days per week, cannot be ruled out in response to the inevitable consequence of pay-cuts and/or headcount reductions. This would also have implications for the State's responsibilities under ICAO for over-flights on the North Atlantic where Shannon airport is an alternate for aircraft flying on the North Atlantic.

Cost of Capital

The Commission's cost of capital calculation is too conservative, being based on incorrect and inappropriate assumptions. While the IAA is in agreement with the approach used by the Commission, a re-evaluation of the assumptions underpinning the model results in a real pre tax cost of capital of 6.9%. This rate is significantly lower than quoted ten year national bond rates of 13.98% (FT 15.07.11) as the exceptional nature of the Irish economic situation has not been considered in arriving at an appropriate cost of capital.

Service Quality

The IAA does not support a service quality term which is not robust. The IAA is extremely concerned that the Commission has proposed to expose any, let alone 10%, of IAA's terminal revenues, per annum, to delay criteria which have not been clearly defined and which will have unintended effects on, for example:

- the safe and efficient operation of air traffic control;
- the right of management to control industrial action;
- the right of staff to engage in industrial action;
- the exposure of airline customers to additional expenditure on CAPEX contingency projects.

IAA fully supports the European Commission in its implementation of European-wide delay KPIs (key performance indicators), effective 2015. The metrics proposed by the Commission are not in any way consistent with the EC model. IAA recommends that the Commission defer consideration of this issue until the European Commission's proposals have been implemented and when there is a consensus among European States on how this can be best implemented.

Traffic Forecast

The IAA has absorbed a significant amount of financial pain in the regulatory periods gone by as a result of traffic variations with forecast. IAA recommends that the Commission use the low growth forecast in order to reduce the cost to the IAA of variations in traffic which are outside of the control of the IAA. Clearly, airlines are incentivised to increase traffic levels in return for a reduction in charges which would automatically follow.

The IAA believes that adjustments to the price cap proposed in this response document which address the concerns raised above will ensure a fair determination, which protects the principle of safety of operations, while at the same time delivering price cap reductions to the IAA's airline customers.

# 1. Draft Determination (CAR chapter 3)

IAA key responses

1. The application of the draft determination will generate operating losses for the IAA's terminal business and will leave the business without cash to invest in essential new CAPEX;

2. The two year deferral of the volume risk sharing adjustment imposes a financial penalty on the IAA which is unfair and has no basis for implementation;

3. The introduction of a service quality term is welcome, in principle. However, the metrics proposed by the Commission are unreasonable and unworkable;

4. The low growth STATFOR forecast is the most appropriate traffic forecast;

5. OPEX incurred in the 2007 regulatory period, which was beyond the control of the IAA, should be rolled forward to the next determination; the proposed reduction in OPEX going forward will lead to a reduction in service quality and may impact on the IAA's ability to provide a public safety service;

6. Capital expenditure amounts not incurred should be reflected in a reduced opening RAB;

7. The Commission's calculation of cost of capital is too conservative and fails to take account of the current European financial crisis and the capital markets to which the IAA has access.

**Introduction**

The IAA supports the Commission's intention to set a price cap which aims to "facilitate the development and operation of safe, cost-effective terminal services which meet international standards" (section 36, Aviation Regulation Act, 2001).
The IAA fully appreciates the work carried out by the Commission in setting the draft determination and supports many of its key proposals, including:

- a price-cap calculation that is compliant with Single European Sky (SES) II requirements in terms of revenue calculation and volume risk sharing;
- the introduction of a quality of service term;
- the claw-back of the opening RAB to take account of capital under-spent in the previous regulatory period.

However, the IAA is extremely concerned that the application of the draft determination undermines its ongoing ability to provide a safe and cost-effective service. While the IAA is mindful of the challenges facing its airline customers and wishes to do everything possible to minimise the charges for its services, at the very least, the financial viability of the IAA as a terminal service provider must be maintained so that the key objective of safety of operations is maintained and, preferably, enhanced. The main conclusions of the IAA are addressed in the sections of the report that follow.

1) ***The application of the draft determination will generate operating losses for the IAA's terminal business and will leave the business without cash to invest in essential new CAPEX – see section 2***

The draft determination will impact seriously on the financial viability of the IAA's terminal business through:

a) a failure by the Commission to take account of OPEX incurred in the previous regulatory period which was outside of the control of the IAA;
b) simultaneously clawing back all CAPEX under-spend from the previous regulatory period;
c) application of an elasticity factor (0.3) where there is no evidential relationship between traffic growth and OPEX growth;
d) application of a cost of capital which is too conservative;
e) use of baseline traffic forecasting, thereby exposing the IAA to considerable potential volume risk while not compensating it through an increased rate of cost of capital;

leading to:

- accounting losses in excess of € 3 million (nominal) over the four-year period of the determination; and
- a shortfall in cash, leaving the IAA unable to fund its capital expenditure programme.

2) ***The IAA believes that the two year deferral of volume risk sharing adjustment imposes a financial penalty on the IAA which is unfair and has no basis for implementation – see section 3***

While the IAA welcomes the decision of the Commission to set a price cap per terminal service unit, in compliance with European Regulations, IAA believes that the two year deferral of the risk sharing adjustment is biased against the service provider and should reflect the provisions of the EC regulations which provide for adjustments to be made in a period up to two years.

3) ***The IAA, in principle, welcomes the introduction of a service quality term. However, the Commission has not considered the potentially damaging implications of its proposal – see section 4***

IAA fully supports the introduction of a service quality term which is consistent with European Commission regulations and forms part of a Europe-wide delay management programme. The service quality scheme proposed by the Commission is at variance with the European Commission's proposals, is unclear, punishes the IAA for delays beyond its control and is counterproductive.

4) ***The IAA believes that the low growth STATFOR forecast is the most appropriate traffic forecast – see section 5***

The previous two determinations have used the baseline STATFOR traffic forecast in order to establish a price cap and, as a result, because this forecast has been shown to have been over-optimistic, the IAA has paid the price of significant traffic variations from forecast with overall traffic in the 2007 regulatory period expected to deviate by some 17% from forecast. With traffic levels continuing to be volatile, it is appropriate to use the low growth forecast in this determination rather than persist with the baseline forecast.

5) ***The Commission has failed to take account of OPEX incurred in the previous regulatory period which was beyond the control of the IAA, while at the same time, proposes a reduction in OPEX in the future which may lead to a reduction in service quality and may impact on the IAA's ability to provide a H24 public safety service – see section 6***

Significant OPEX costs, including payroll-related, pension and training costs were incurred by the IAA in the previous regulatory period. These costs were beyond the control of the IAA. The over-spend should be rolled forward into the draft determination. Meanwhile, the proposal of the Commission to reduce the OPEX allowance in the future is reliant on a flawed elasticity model.

6) ***The IAA supports the principle that capital expenditure amounts not incurred should be reflected in a reduced opening RAB – see section 7***

IAA introduced cost containment measures in 2008 and in 2009 in order to help its airline customers through challenging times. These measures included the cancellation and deferral of capital expenditure projects resulting in an overall under-spend when compared with forecast.

7) ***The Commission's calculation of cost of capital is too conservative and fails to take account of capital markets to which the IAA has access – see section 7***

IAA believes that an appropriate cost of capital for the IAA is a pre-tax real rate of return of 6.9%.

## 2. Financial Stability

The present draft determination will result in operating losses over the four year period and negative cash flows from which to fund capital expenditure.

| **Nominal P&L** | **2012 € '000** | **2013 € '000** | **2014 € '000** | **2015 € '000** |
|---|---|---|---|---|
| Allowed revenues | 21,718 | 21,855 | 21,931 | 21,208 |
| Accounting depreciation (submitted by IAA) | 4,857 | 4,884 | 5,144 | 5,025 |
| OPEX (submitted by IAA) | 16,914 | 17,216 | 17,600 | 18,120 |
| Profit/(Loss) | (53) | (245) | (813) | (1,936) |
| Cumulative | (53) | (298) | (1,111) | (3,047) |

This is not a sustainable outcome of the current consultation process and while the IAA is mindful of the difficulties faced by its airline customers, as well as appreciating the role that aviation can play in stimulating the local Irish economy, the IAA seeks an equitable determination which will deliver a profit to the air navigation service provider in the four year regulatory period, provide a mechanism to recover over-spends on OPEX to date which were beyond the control of the IAA while at the same time reducing the charges paid by the airlines.

The impact of the RAB claw-back is serious for the ongoing viability of the IAA's terminal business. The over-recovery of CAPEX in the previous regulatory period has not left IAA with a net profit or cash build up for the period. Instead, the over-recovery is more than compensated for by the increase in OPEX levels which have not been recovered. The IAA submits that it has no accumulation of cash or profit to carry into the next regulatory period to offset the impact of the RAB claw-back. The reason for this situation can be traced directly to the under-recovery of OPEX in the last determination. It is conventional for other regulators to take account of this in setting a future price cap. For example, the UK regulator has accepted that NATS was unable to foresee or control the level of pension overrun and has allowed the over-spend to be rolled forward into the next period. The exact mechanism employed in the UK is to adjust the initial RAB upwards.

The IAA, therefore, proposes the following adjustments to the draft determination:

- The IAA has demonstrated a strong commitment to returning its pension fund to surplus through an agreement which shares the financial burden of the pension fund deficit between the IAA, its employees and its pensioners (pension costs are considered in detail in section 6). The IAA proposes that the over-spend in pension costs in the 2007 determination should be rolled forward in the calculation of the next determination. This proposal is consistent with the provisions of the Single European Sky II Charging Regulation and also with regulatory practice in the UK whereby pension costs are deemed to be a "pass through" cost;

- In section 6, the IAA explains how wage settlements were strongly influenced by wage agreements negotiated nationally and that productivity awards were negotiated to provide significant productivity gains. The IAA proposes that the

over-spend in payroll costs should be rolled forward in the calculation of the next determination;

- Training costs exceeded forecast in the last determination. In section 6, the IAA explains how training requirements are determined by International standards and cannot be anticipated with certainty at the beginning of a five year period. As all training carried out was to ensure that air traffic controllers operated to the highest possible standards of safety and effectiveness, IAA proposes that the over-spend should be rolled forward into the next determination;

- Since increased pension costs and wage agreements set the basic staff costs for the next regulatory period, the IAA has little flexibility to influence them. The comparison made by the Commission of 2015 cost levels with 2006 levels is not valid (see section 6) and the proposal to reduce staff to meet 2006 cost levels is simply not sustainable. Nevertheless, the IAA appreciates the expectation that efficiencies, where possible, will continue to be delivered and therefore proposes an OPEX budget based on a 2% (real) reduction per annum on total IAA planned OPEX expenditure over the four year period;

- The IAA proposes that an acceptable method of allowing past OPEX overruns to be rolled into the next determination period could be to adjust upward the opening RAB, allowing for the impact on airline customers to be spread over a longer period, perhaps eight years;

- The IAA agrees with the approach taken by the Commission in establishing a cost of capital. However, as explained in detail in section 7, IAA is concerned about a number of assumptions made by the Commission and proposes a real pre tax rate of return of 6.9%;

- The IAA proposes that costs incurred to date on bringing the deferred visual control tower at Dublin Airport to planning stage (€ 1.6 million) should be rolled forward into the opening RAB adjustment on the grounds that the expenditure was incurred in good faith in the clear understanding at that time that a parallel runway would be built shortly thereafter (see section 7);

- The IAA proposes that the price cap should be established on a low growth traffic profile on the basis that actual outturn traffic growth has significantly underperformed baseline growth forecasts, thereby exposing the IAA to considerable volume risk which is not compensated for in a higher cost of capital. The last two regulatory periods have been dominated by traffic variations from forecast and the next determination period is also likely to be fragile in terms of traffic growth. Given that the IAA cannot influence traffic patterns at the airports, it is not reasonable to expect the IAA to absorb volume risk on baseline growth, without any justification.

The IAA proposes that the effect of the adjustments provided above will allow it to maintain its key objective of safety of operation of its terminal business while at the same time, providing a reduction in the price cap to its airline customers.

## 3. The Commission's approach to regulation (CAR Chapter 4)

IAA key responses

1. The IAA welcomes the decision of the Commission to set a price cap per terminal service unit, in compliance with European regulations;

2. The two year deferral of volume risk sharing adjustment imposes a financial penalty on the IAA which is unfair;

3. The IAA suggests that the Commission should seek the necessary amending legislation allowing for a determination period which would coincide with the Single European Sky (SES) II Reference Period (RP) 2 process, covering the years 2012 to 2014.

***1) The IAA welcomes the decision of the Commission to set a price cap per terminal service unit, in compliance with European regulations***

IAA's terminal airline customers have been receiving invoices with reference to terminal service units since 1 January 2010. IAA welcomes the move by the Commission to bring the price cap into line with European regulatory requirements.

***2) The IAA believes that the two year deferral of volume risk sharing adjustment imposes a financial penalty on the IAA which is unfair***

Paragraph 4.20 of the draft determination says that adjustments to the price cap arising from deviations in forecasts will be deferred for two years. IAA disagrees with this proposal.

- Where traffic levels are below forecast, the IAA is impacted through reduced cash flows. Imposing a two year wait before lost funds can be recovered is unreasonable given that the costs of the IAA's terminal business are predominantly fixed in nature, comprising mainly payroll and pension-related expenditure.

- This proposal is contrary to the SES II provisions in the Charging Regulation, which allows for adjustments arising from traffic variations and variations in determined costs (articles 11 and 6 respectively) to be carried over to a period "no later than in year N+2". Consistent with EC regulations, the IAA should be afforded the opportunity to recover any shortfall within one year if it so wishes. Given that this regulation will apply to terminal operations in Ireland from 1 January 2015, it does not make sense for the Commission to introduce a different set of rules at this stage.

Of course, the IAA accepts that where traffic levels exceed forecast, adjustments to the price cap should be reflected at a date no later than in year N+2.

***3) The Commission should seek the necessary amending legislation allowing for a determination which would coincide with the Single European Sky (SES) II RP2 process***

The IAA reiterates its statement made in the Issues Paper that the 2012 determination should be aligned with the SES reference period (RP) 2 process.
The draft determination proposes an end date of 31 December 2015. This date does not coincide with any period defined by the two main EC regulations applicable to the determination of terminal charges (EC 1191/2010 for charging and EC 691/2010 for performance regulation). The IAA proposes that the determination period aligns with the EC regulations.

- Regulation EC 1191/2010 states: *"Member States may decide not to apply the provisions of Regulation (EC) No 1794/2006 as amended by this Regulation to terminal charges until 31 December 2014".* This is the case for Ireland, and it implies that from 1 January 2015, Ireland will have to apply regulations 191/2010 and report terminal costs for the period 2015 - 2019.

- Regulation EC 691/2010 has set a first reference period covering calendar years 2012 - 2014 inclusive. The second reference period will start in 2015 and last until 2019. For the second reference period, key performance indicators will be applicable to terminal air navigation services.

Alignment of the determination period with the SES reference periods would prevent significant one-off adjustments because of the lack of compliance between the Commission's proposals and the SES II requirements. It would also assist IAA's terminal customers, most of whom operate across several European destinations, in avoiding confusion between a uniform charging regime throughout Europe and a separate standalone charging regime in Ireland. If a four year price cap is insisted on, it will cause unnecessary difficulties for all stakeholders to put the two overlapping regimes in line and make any future comparisons misleading.

## 4. Quality of Service (CAR Chapter 5)

IAA key responses

1. The IAA welcomes the introduction of a service quality term which is consistent with the ATMAP framework and European Commission (EC) regulations and forms part of a European-wide delay management KPI programme;

2. The IAA believes that the scheme proposed by the Commission is unclear, punishes the IAA for delays outside of its control and is counterproductive.

***1) The IAA welcomes the introduction of a service quality term which is consistent with the ATMAP framework***

The IAA supports the Commission's intention to include a metric that will capture service quality through a scheme that is simple to implement, provides appropriate incentives and is introduced at the right time. However, the proposed scheme does not meet these objectives.

**European plans**

In earlier consultations, the IAA indicated to Steer Davies Gleave, the Commission's consultants, that the EUROCONTROL ATMAP (ATM Airport Punctuality) project was on-going and that, in the SES II Reference Period 2 (2015 onwards), a number of delay KPIs (Key Performance Indicators) from this project will be implemented for delay management of all European Commission (EC) air navigation service providers (ANSPs), under EC regulation 691/2010. While delay KPIs have been identified, the EC has not yet specified which particular KPIs they intend to use. However, early indications are that the following are being strongly considered:

- ATFM (Air Traffic Flow Management) arrival delays: This indicator is calculated for the inbound flow at a destination airport. For all flights arriving at the airport, it takes that portion of the pre-departure delay which is caused by landing restrictions at the destination airport. The indicator is the average generated ATFM delay per inbound flight
- Taxi-out additional time: The purpose of the Taxi-out additional time indicator is to provide an approximate measure of the average departure runway queuing time and taxiway congestion on the outbound traffic flow, during times that the airport is congested.
- ASMA (Arrival Sequencing and Metering Area) additional time: The purpose of the ASMA additional time indicator is to provide an approximate measure of the average inbound queuing time on the inbound traffic flow, during times when the airport is congested.

The Commission's proposals are not consistent with the ATMAP framework and are not consistent with the KPIs which IAA is confident will be used by the EC in the new SES II performance regulation in Reference Period (RP) 2.

The IAA supports the EC in the implementation of the new performance regulation 691/2010 and the introduction of delay KPIs in RP2.

***2) The IAA believes that the scheme proposed by the Commission is unclear, punishes the IAA for delays outside of its control and is counterproductive***

**Obscurity of the terms**

The Commission's consultant's report explores two options but gives little indication as to how the service quality metric would be put into practice. There is no firm indication as to the specifics of how this would be implemented, appearing to demonstrate a lack of awareness concerning air traffic control (ATC) operating procedures. In particular:

- is the Commission referring to average delay per *delayed flight* or average delay per *flight*?
- is the penalty the same if just one flight is affected or is it multiplied according to the number of flights?
- is it based on time?

Furthermore, paragraph 5.13 of the draft determination places the onus on the IAA to be responsible for notifying the Commission of any such delays. This raises the question of the time, manpower and cost involved in ensuring that accurate information is provided at all times**.**

**Using ATFM delays**

Whilst the Commission seeks to impose financial penalties upon the IAA based on delay criteria, there is an immediate question arising from their choice of delay criteria – they show, indisputably in the Consultant's report paragraph 2.4, that IAA delays for ATC capacity are low and industrial action is extremely rare prompting the questions why such criteria have been selected and why they attract a penalty?

Ireland has one of the lowest levels of ATFM delays in Europe and they are proactively managed:

- 2007 - 1,253 flights delayed by 26,133 minutes of total delays (11,226 minutes relate to weather)
- 2008 - 14,137 flights delayed by 344,554 minutes of total delays (15,471 minutes relate to weather)
- 2009 - 833 flights delayed by 22,224 minutes of total delays (14,948 minutes relate to weather)
- 2010 - 624 flights delayed by 16,192 minutes of total delays (14,805 minutes relate to weather)
- 2011(to date) - 169 flights delayed by 2,962 minutes of total delays (largely relate to one-off events such as the Europa League, visit of the President of the United States of America, COOPANS implementation)

In 2008, the year in which the IAA flight delays were at their peak, ATFM delays accounted for just 1.6% of total European ATFM delays. In the same year, other ANSPs produced 18.8 million minutes of delays, as demonstrated in the 2008 ACE Report.

In the subsequent and more normal year, for statistical purposes, 2009, Ireland's contribution to total European ATFM delays plummeted into almost statistical insignificance, accounting for just 0.0016% of total European ATFM delays, as shown in the table below.

| ANSPs | (1) Gate-to-gate ATM/CNS provision costs (in €'000) | (2) ATFM delays < 15 min. ('000 minutes) | (3) ATFM delays > 15 min. ('000 minutes) |
|---|---|---|---|
| Aena | 1 187 505 | 426 | 1 483 |
| ANS CR | 106 203 | 53 | 154 |
| ARMATS | 6 286 | N/A | N/A |
| ATSA Bulgaria | 76 951 | 0 | 0 |
| Austro Control | 165 934 | 309 | 830 |
| Avinor | 163 865 | 27 | 83 |
| Belgocontrol | 150 222 | 57 | 246 |
| Croatia Control | 64 323 | 71 | 209 |
| DCAC Cyprus | 40 717 | 87 | 545 |
| DFS | 887 594 | 649 | 2 570 |
| DHMI | 242 508 | 142 | 893 |
| DSNA | 1 157 658 | 249 | 977 |
| EANS | 9 804 | 0 | 0 |
| ENAV | 656 342 | 30 | 320 |
| Finavia | 57 118 | 3 | 11 |
| HCAA | 166 869 | 149 | 1 208 |
| HungaroControl | 74 035 | 10 | 29 |
| IAA | 106 922 | 3 | 20 |
| LFV/ANS Sweden | 166 213 | 8 | 31 |
| LGS | 20 134 | 0 | 0 |
| LPS | 46 367 | 5 | 13 |
| LVNL | 179 842 | 28 | 119 |
| MATS | 13 364 | 0 | 1 |
| M-NAV | 10 941 | 0 | 0 |
| MoldATSA | 6 619 | 0 | 0 |
| MUAC | 134 603 | 20 | 54 |
| NATA Albania | 16 462 | 5 | 14 |
| NATS | 686 714 | 173 | 943 |
| NAV Portugal (FIR Lisboa) | 134 269 | 10 | 38 |
| NAVIAIR | 108 941 | 12 | 39 |
| Oro Navigacija | 17 631 | 0 | 0 |
| PANSA | 116 452 | 229 | 701 |
| ROMATSA | 147 767 | 0 | 0 |
| Skyguide | 217 815 | 260 | 599 |
| Slovenia Control | 24 355 | 2 | 4 |
| SMATSA | 69 502 | 0 | 2 |
| UkSATSE | 137 114 | 0 | 12 |
| Total European System | 7 575 961 | 3 019 | 12 147 |

**Overview of ATFM delays in Europe in 2009**

In addition, the CFMU only measures the ATFM delays which can be traded off against other delays, such as airborne holding, and relies on ATC coding of the delay cause.

ATFM delays only capture the most penalising regulation along the flight route while masking less penalising delays. Therefore, ATFM affords an individual ANSP the opportunity to balance/trade-off ATFM delays between the various components of airspace under its control, e.g. a terminal ATFM delay could be shifted to an en route delay either through declared capacity or operationally by shifting resources from one section of airspace to another.

CFMU information is also unbalanced in that it does not penalise out-of-area flights that can contribute to delays very significantly, especially at peak times.

The flow measure is demand rather than supply driven, ie the flow rate will necessarily be reduced if the demand is not there irrespective of whether or not the supply is operating properly. The flow rate is driven by many more things than simply ATC, many of which are beyond the control of ATC. The majority of delays, see for example eCoda (electronic information supplied by the Central Office for Delay Analysis in EUROCONTROL), are driven by airline and other processes and not ATC. These airline driven delays will impact on flow rates compared to the schedule (plan) and can impact on ATFM restrictions through bunching where regulations might need to be applied because of the ebb and flow of regulations or disruption upstream. Clearly it is not appropriate to penalise an ANSP for delays necessary to regulate an actual flow rate of 50 aircraft per hour when the schedule would result in a flow rate of 30 aircraft per hour. The overall scheme does not appear to compensate for periods when the flow rate is higher than planned. IAA is already delivering an hourly runway capacity which is in excess of the declared runway capacity as identified by an independent study. The biggest contributor to delays at Dublin Airport is the ground infrastructure. Improvements in efficiency require a holistic approach based on collaborative decision-making, facilitated by the airport authority.

**Credibility of the CFMU data**

The CFMU is a valid source of information at the level of ATFM delays. However, it can be difficult to attribute delays to a single source and allocate an adequate delay code. The allocation of the delay is done by local operational staff and practices differ among ANSPs. Experience in the UK indicates that in a flow rate scheme much time and effort is expended discussing the cause of the event that gave rise to the flow restriction, resulting in additional resources being tied up in the task of analysing delays. Given the insignificant level of ATFM delays in Ireland, incurring additional costs associated with such detailed analysis would not be justified.

**A counterproductive scheme**

The IAA believes that the service quality scheme proposed by the Commission is counterproductive, fostering potentially inappropriate behaviour and acting as a disincentive towards good practice. The IAA does not foresee any instance where service quality will be enhanced through penalties applied on the delay metrics chosen by the Commission – Industrial Action ATC, ATC Equipment, ATC Staffing and ATC Capacity – and recommends that the Commission should not pre-empt the EC implementation of a European-wide delay management system. Although the IAA's performance in relation to service quality has been excellent, clearly any scheme that puts 10% of the IAA's terminal revenue at risk must be scrutinised more thoroughly in order to avoid unintended consequences. IAA suggests that this issue could be further pursued in a meeting with the Commission.

The IAA also notes that the scheme is one-sided, choosing to penalise perceived poor behaviour while ignoring incentives when targets are achieved or exceeded.

**Culpability**

The IAA strongly objects to the use of the word ‘culpable’ in respect of service delays. Legal concepts defining culpability involve a recognition that a party knowingly or recklessly acted in a particular manner. This term is clearly not appropriate and not acceptable to the IAA.

## 5. Traffic Forecasts (CAR Chapter 6)

IAA key responses

1. IAA recommends the use of the low growth EUROCONTROL STATFOR forecast

***1) The IAA recommends the use of the low growth EUROCONTROL STATFOR forecast***

The Commission, in stating in paragraph 6.3 – 'We prefer to use EUROCONTROL's central forecast' – has failed to consider the impact on the IAA of significant traffic variations. Variations against forecast have dominated both the 2002 and 2007 determinations and have been very costly for the IAA in terms of under-recovered costs.

Traffic levels at the airports, Cork, Dublin and Shannon, are extremely fragile, having collapsed some 17% in the period 2007 to 2011 as compared to forecast. In the nine years to 2010, airport movements have fallen by, on average, 1.1% per annum. This compares with the STATFOR baseline forecast used in the 2002 and 2007 determinations of, on average, in excess of 3%. It is clearly not acceptable for the Commission to continue to choose the baseline growth scenario, without any justification, while a more modest traffic growth forecast for 2012 onwards would be appropriate.

The IAA contends that the volume-risk sharing arrangement is not an acceptable excuse for pitching the traffic forecast at the baseline. The IAA is not responsible for attracting traffic into the airports but, despite this, is sharing the burden of traffic variations with its airline customers in the form of a 50:50 risk-sharing arrangement (the IAA accepts that volume risk sharing is now a key aspect of the Single European Sky Charging Regulation). Given the significant traffic variation from forecast during the 2007 determination, the use of any forecast other than the low growth forecast must be accompanied by a significant increase in the cost of capital in recognition of the risk undertaken by the IAA. Currently, the cost of capital takes no such risk into account.

If the Commission were to persist with the use of the baseline forecast, the IAA requests that the Commission justify the use of this forecast and then perhaps considers a proposal from the IAA that an annual update of the forecast would help in managing the volume risk to the IAA, given the particular sensitivity of airport traffic patterns in recent times.

# 6. Operating expenditure (CAR Chapter 7)

IAA key responses

1. OPEX over-spends incurred in the previous regulatory period, which were beyond the control of the IAA, should be rolled forward to the next determination;
2. Future OPEX has been adjusted based on a flawed assumption of elasticity of 0.3; the Commission should focus on the factors behind the increase in OPEX;
3. The IAA is concerned that the proposal to reduce staff costs will lead to a significant reduction in service quality and may impact on IAA's ability to provide a public safety service;
4. The IAA is concerned that the proposal to reduce training costs has no basis and could impact significantly on public safety;
5. The IAA is an efficient air navigation service provider and compares very favourably with its European peers;
6. It is inappropriate to compare staff costs in the IAA with Irish manufacturing industry earnings;

***1) OPEX over-spends incurred in the previous regulatory period, which were beyond the control of the IAA, should be rolled forward to the next determination***

The IAA is concerned that the Commission has failed to take account of OPEX overruns in the 2007-2011 period which were outside of its control, in particular, OPEX overruns in the areas of payroll and related costs, pension costs and training costs. IAA does not look for overruns in the administration expenses areas to be rolled forward. The expenditure categories of payroll, pension and training are considered below.

Firstly, it is conventional for other regulators to take account of OPEX overruns in setting a price cap. For example, the UK regulator has accepted that NATS is unable to foresee or control the level of pension overrun and hence has allowed any over-spend to be rolled forward into the next regulatory period. The exact mechanism employed in the UK is to adjust the initial RAB upwards: since the RAB depreciates on a timescale longer than a regulatory control period, this makes it possible to spread the impact to users over a longer period. The IAA proposes that this may be an agreeable solution to the Commission in its consideration of OPEX overruns.

Secondly, in ANNEX 4, the Commission has presented various scenarios for how future CAPEX will be treated in the RAB. Many of the same arguments, particularly scenario 2, can be applied to OPEX where additional expenditure was necessary for reasons outside of the control of the IAA.

Payroll and related costs

This section addresses the framework within which pay awards are granted and therefore provides the IAA's response to the Commission's comments in paragraphs 7.16 - 7.18 of the draft determination. The Commission in Paragraph 7.28 of the draft determination concludes that: *"...in looking at the components making up the IAA's opex forecasts, it was projected staffing costs that were of most concern, and the evidence over the past decade does not suggest that the IAA has controlled these costs especially carefully."* This is an unfair judgement on IAA's performance. This section looks more closely at the development in payroll and related costs and at the factors that were behind the pay increases in the recent regulatory period.

- Public service pay agreements

Public service pay agreements have been negotiated within the framework of national agreements between the social partners since the 1970s. In addition to cost of living adjustments, these agreements also included local bargaining provisions, considered under the auspices of the State's industrial relations machinery. Since 1987, public service pay negotiations have been conducted within the framework of social partnership programmes negotiated by the Government, trade unions, employers, farming organisations and the community and voluntary sector. These social partnership programmes link agreement on pay to frameworks for the evolution of taxation, social security, social equity, public expenditure and other issues. National Wage Agreements negotiated within the 2007 determination period have been driven by the current partnership programme "Towards 2016", a Ten-Year Framework Social Partnership Agreement 2006 – 2015.

The IAA, as a public sector organisation, has strictly adhered to the National Wage Agreements in their review of pay increases. Clearly, the outcomes of these negotiations at the national level were outside the control of the IAA. While the IAA did plead inability to pay under the T2016 agreement, the Labour Court found otherwise. It is true that there were local negotiations with the unions, as provided for in the agreements. These negotiations focused on productivity and change. The only salary increases for air traffic control officers and engineers, other than National Wage Agreements, were the P2000 Local Bargaining Clause 2 (iii) and productivity agreements relating to the Northern Oceanic Transition Area (NOTA) handover to the IAA in 2006. The P2000 local bargaining negotiations on NOTA productivity culminated in an award from the Labour Relations Commission (LRC)/Labour Court (LC) process.

While P2000 productivity/change type increases were common-place in Ireland, the NOTA productivity/change is unique to the IAA. However, many other companies would have reached similar type productivity/change agreements.

Underpinning all agreements in the IAA has been the key principle of ongoing change and the improvement in efficiency and effectiveness that such change can deliver.

- P2000 negotiations

The P2000 local bargaining clause increase for most IAA staff delivered significant change particularly in relation to flexibility, productivity and conditions of employment. The award was within the parameters set out in the agreement and the local bargaining agreement mirrored similar agreements in other companies at that time. The P2000 Clause 2 (iii) also triggered the introduction of the crewing to workload as an underpinning principle. The crewing to workload principle has formed the basis of the IAA submissions in response to union claims and was endorsed by the Labour

Court (LC). The agreement endorsed by the Court confirmed that *"Traffic demand is the prime determinant in the deployment of staff resources. Flexible rostering, with due regard to the reasonable needs of staff, is therefore required with staggered starts/finishes a normal feature of rostering"*. The IAA has consistently used the crewing to workload principle in practice ever since and referenced it in many submissions to the Labour Court.

- NOTA handover

The NOTA airspace situated to the North West of Ireland was handed over to Ireland in 2005 and extended radar control to an additional 100,000 square kilometres of airspace. This transition increased the airspace block under the IAA's responsibility to 450,000 square kilometres, including the strategic interface between the European and North Atlantic airspace areas. Introduction of the radar service into NOTA airspace means that aircraft can make earlier transitions to optimum cruising levels and allows greater flexibility for alternative routings, climbs and descents - all with obvious economic benefits and cost savings. The move had the full support of the International Air Transport Association (IATA), the representative association for airlines.

These substantial benefits to airlines, allowed by the radar service in this airspace, also meant a significant increase in responsibilities of the air traffic control officers and engineers, and required substantial training. The increase in traffic levels resulted in a significant increase in ATCO productivity which was taken into account during the negotiations. Increasing productivity and value-for-money have been the cornerstones of all negotiations and the IAA has consistently increased ATCO productivity since its formation in 1994, as is evidenced by independent benchmarking reports. The Commission recognises that IAA ATCOs are ranked 7$^{th}$ out of 36 comparator European ANSPs. Given that the IAA does not benefit from the economies of scale that larger ANSPs enjoy, that is a significant achievement. The IAA has high ATCO productivity and below average ATCO costs as independently assessed.

The pay negotiations described above have, principally, resulted in an increase in OPEX in the last period relative to the forecast at the time of the 2007 determination. IAA recommends that the Commission includes the full costs of the overspend in the next determination noting that pay negotiations have taken place within the agreed national framework and were outside of the direct control of the IAA.

<u>Pension costs</u>

This section considers the IAA's pension costs and is in response to the comments of the Commission provided in paragraphs 7.15 and 7.16 of the draft determination and also to other references to the IAA's pension costs.

The global recession has devastated pension funds and resulted in substantially increased pension costs. The last actuarial valuation of the IAA's pension fund, on 1 January 2009, showed a deficit of € 234 million. For a number of years now, IAA has been working with the relevant stakeholders to resolve the pension fund deficit issue. The IAA has been proactive in its negotiations with its employees and has, successfully, put in place measures which should return the fund to surplus in 2018. These measures, most of which were agreed in November 2010, include:

- A new pension scheme for all new entrants since 1 April 2008 which has a member contribution, a retirement age of 65 and links future benefits to a maximum of 3% or CPI, whichever is lower;

- Pension increases limited to CPI or 3%, whichever is lower;

- An employee contribution and a freeze/cap on pensionable pay up to 31 December 2018 for existing employees who either transferred from the Department of Transport on 1 January 1994 or joined the Authority up to 31 March 2008;

- The IAA's annual contribution rate continues to be 30.5% of pensionable salary for the foreseeable future;

- An additional cash contribution to the fund by the IAA for an eight year period commencing 1 January 2011;

- Retrospective arrears due to employees under the "Towards 2016" national wage agreement to be paid into the pension fund;

- The IAA to match the value of the retrospection of the "Towards 2016" arrears as a once-off payment into the pension fund.

Whilst these solutions represent significant costs, shared by both the employees and the employer, the planned outcome is a return to surplus of the pension fund in 2018.

The IAA is not alone in experiencing such a drastic change in its pension costs. A similar shortfall has been experienced by NATS. The UK regulator has taken a sympathetic view of this situation as, similar to the IAA, the pension fund shortfall must be met from within the resources of its air traffic control activities and without any recourse to the State. Consequently, the UK regulator has provided for the following:

- It has allowed the full cost of the cash contribution to the pension fund to be allowed in NATS cost base; and

- It has allowed NATS to claw-back the overspend on pension costs in the previous regulatory period through a substantial positive adjustment to the initial RAB for the next period.

This practice is fully in line with the SES II amended Charging Regulation which looks to protect pension contributions as a "pass through" cost and to allow recovery of unforeseen changes in pension provision.

The impact of the change in pension provision has been to increase OPEX in the last period relative to the forecast at the time of the 2007 Determination.

The IAA requests that the Commission note the increase in pension costs during the 2007 determination period due to the collapse of the world-wide capital markets. The IAA did all that it could to control this increase through an agreement with employees to share the burden of the pension fund deficit and, consistent with both regulatory practice elsewhere and the provisions of the SES II Charging Regulation, the Commission should include an allowance for this pension increase in the determination for 2012.

Furthermore, the impact of both payroll and pension costs increases has a long lasting effect on staff costs. This increase in costs is an important factor in explaining why the comparison of 2006 and 2015 staff cost levels proposed by the Commission

is not valid. Much of the enhanced pension contribution relates to reducing the deficit and is not a per capita contribution. The IAA has very little flexibility to reduce this element of cost during the next period. Consequently, IAA recommends that the full costs of both payroll and pension provision be included in the next determination noting that, for pension costs in particular, such inclusion would be fully in line with the practices of other regulators and also of the stated intent of the SES II regulations.

Training costs

This section considers training costs in the 2007 regulatory period, explaining how training activities in the IAA's business are governed by a strict and unrelenting safety regime. All training costs incurred by the IAA in the 2007 determination were necessarily incurred and the resultant overspend should be rolled forward into the next regulatory period.

The IAA's training requirements are not proposed by the IAA itself. By its very nature air traffic control is governed by a strict and unrelenting safety regime. Ab-initio staff are trained to the highest international standards across a range of specialised ratings and ongoing annual refresher and emergency familiarisation training is provided to all ATM staff. The IAA is subject to legislation on these matters.

ATC training is neither cheap nor quick. Even ignoring the time that the IAA has to expend in the recruiting and selection phase, the initial training of ATCOs can take up to two years – sometimes longer. There are no short cuts. This process has been finely tuned as much as possible. Equally, with a global shortage of qualified and experienced air traffic control staff there is little scope to circumvent home-grown staff training although the IAA has sought training liaisons with other air navigation service providers to see if savings could be made in joint training ventures.

Furthermore, IAA has to meet the changing needs of its airline customers in providing a tailored air traffic control service that is effective, cost efficient, environmentally friendly and expeditious. To do that IAA has to investigate and then introduce new practices and procedures; this has a training cost. Several new concepts have been and/or are being implemented in terminal services in recent years. Three example projects that already deliver/will deliver substantial benefits to airlines are:

- **Dual runway operations** for the first departure wave has made a significant impact in reducing delays and congestion during the morning, a positive example of maximising the use of existing infrastructure;
- **Advanced Surface Movements Guidance and Control System (A-SMGCS) Level 2** at Dublin Airport provides routing, guidance and surveillance for the control of aircraft and vehicles in order to maintain the declared surface movement rate under all weather conditions within the aerodrome visibility operational level (AVOL) while maintaining the required level of safety;
- The ongoing **Point Merge** project will completely redesign the Dublin terminal control area by 2012 with significant economic benefits in terms of fuel savings to airlines due to continuous descent approaches, 40% increase in TMA capacity and significantly reduced $CO_2$ emissions.

A significant training was also required for the purposes of:

- COOPANS ATM upgrade;
- TRUCE -Training for unusual circumstances and emergencies;
- Team Resource Management;
- Contingency training; and
- ICAO English proficiency training and testing.

While the operational improvements are highly effective, necessary and praised by the IAA's customers (eg dual runway operations) they also place a burden on the training budget that was not envisioned 5 years ago. Given the continuous development and rapidly changing nature of the ATM industry, it is not possible to accurately predict the training requirements for the whole of a determination period. New concepts and technologies not foreseen back in 2006 when the training budget 2007 to 2011 was set have brought substantial economic benefits to IAA's airline customers. It would be undesirable and inefficient to have delayed initiatives such as these into the next regulatory period so that provision could be made for them in the next training plan. The cost of the over spend should now be rolled forward to the next regulatory period.

### *2) Future OPEX has been adjusted based on a flawed assumption of elasticity of 0.3*

The Commission has proposed a target level of OPEX in 2015 of €13.5m. Paragraph 7.33 states that *this level corresponds to the 2006 level of opex, adjusted for the different number of movements in the two years assuming an elasticity of 0.3*. The Commission have assumed that this target is reached by realising lower levels of staff and training costs than forecast by the IAA. Relative to its projected 2011 costs, the IAA would need to save €3.2m in staff and training costs; the Commission have assumed that it cuts these costs by €0.8m each year.

The main assumption in this proposal is the 0.3 elasticity factor. This assumption is not supported by any data analysis. The proposal assumes that the world has not changed between 2006 and 2015 and therefore ignores the significant increases in uncontrollable payroll and pension costs, as described above, as compared to the 2006 level. It also proposes to cut the training budget and does not recognise the impact of such proposals. IAA suggests that the Commission should focus on the factors behind the increase in OPEX and not seek to only relate traffic movements and the development of OPEX.

**Elasticity factor**

The 0.3 elasticity factor used by the Commission is consistent with assumptions made by the CAA in the UK in its cost projections for NATS. However, it is important to note that the elasticity factor was developed only for NERL (the NATS' En Route services provider) in its 2005 price review. It is not appropriate to use a similar assumption for terminal services for the reasons described below.

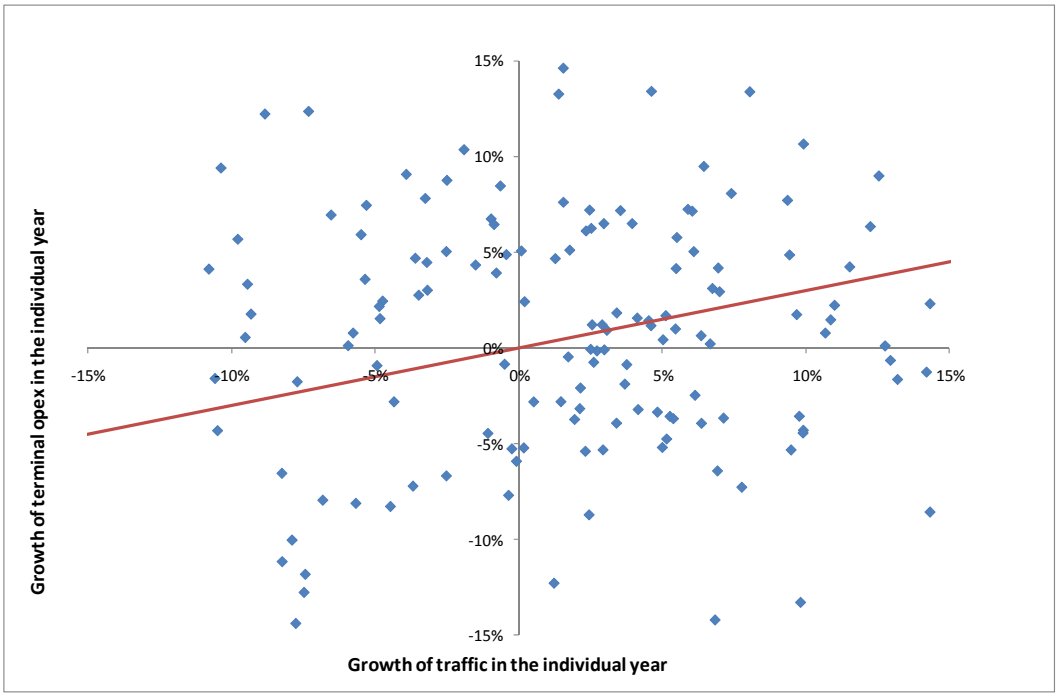
a) Difference between en-route and terminal services

While there is an obvious relationship between traffic growth and the development of costs in the provision of en-route services, such a relationship is not as clear in the terminal environment. In the en-route environment, when the traffic demand for a particular sector increases beyond its capacity, the sector can be split and additional positions opened to serve the additional flights. As the traffic increases in the longer-term, more controllers are required to handle the increased demand. There is however a time lag because it takes time to train the controllers and it is more difficult to respond to reductions in traffic because the situation can change again. So even in the en-route environment the elasticity factor is not the same for situations when traffic increases and when it reduces.

It is not suitable to apply the elasticity factor to terminal services because of significant baseline staffing which must be maintained irrespective of traffic levels. The IAA does not determine the opening hours of airports. The IAA is required to provide air traffic services on a H24 basis at Cork, Dublin and Shannon and a minimum ATCO resource is required irrespective of traffic demand. Traffic will impact on the opening hours of surface movements and clearance delivery services but will have no impact on air movements control, with the current airport infrastructures. There is an essential minimum staffing, whether economically viable or not. The variance between minimum and maximum staffing configurations in a terminal environment is much less than in an en route environment. Any application of an elasticity factor must recognise the base-line staffing which is not influenced by traffic demand. The IAA's air traffic controller numbers allocated to terminal services has been around the same for the whole of the determination period.

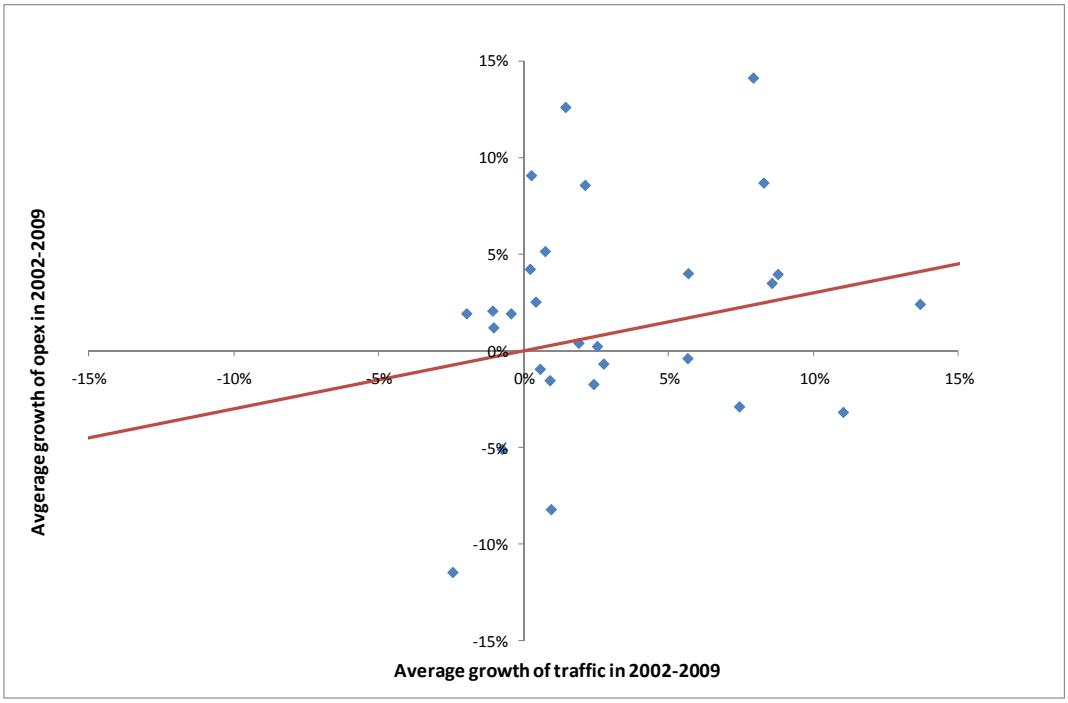
b) Data analysis

The following chart looks to establish a relationship between traffic increases and OPEX increases, in real terms, in the period 2002 to 2009. When individual years are plotted on a chart (where each plot represents one year of one European ANSP, with terminal traffic growth on the x axis and growth of terminal OPEX in that particular year on the y axis), the variation of the data is very high and there is no correlation between the cost increases and changes in traffic. The same situation can be observed if only terminal staff costs are analysed against the developments in traffic.




**Relationship between terminal traffic growth and terminal opex increase in the individual years (2002-2009)**

When looking at a longer-term correlation between an average OPEX change and average variation in terminal traffic levels, the data still suggests a very low level of correlation. This confirms that the reasons behind the changes in average terminal OPEX are affected by factors other than traffic.




**Relationship between average terminal traffic growth and average terminal opex increase in the whole period from 2002 to 2009**

More importantly, while an ANSP can anticipate traffic increases and prepare in advance, it is much more difficult to respond to unanticipated traffic reductions. Even if the ANSP could reduce the number of its air traffic controllers (either through attrition or redundancy), it takes up to two years to train controllers to become operational. Meanwhile, the traffic situation can quickly change, causing staff shortages in the future. Whatever elasticity factor is supported by the historical data, it is clear that the requirement for resources develops in a completely different way with increases in traffic and in a completely different way when traffic levels are falling.

EUROCONTROL's PRU (Performance Review Unit) acknowledges this in its analysis in the ACE 2008 report: *"ATCOs in OPS are directly related to the provision of ATC services. Their staffing requirements are by and large linked with the traffic growth in the medium and long-term. In case of temporary decrease in demand it is neither sensible nor economical to reduce the number of ATCOs in OPS given the costs and the lead time for recruitment and training (typically 3-4 years). Moreover, ATCOs salaries and wages are typically sticky downwards but quite flexible upwards. For this reason, the degree of downwards flexibility of ATCOs in OPS employment costs in the short and medium-term is very limited. In practice, short term measures which reduce the ATCOs in OPS employment costs are linked to the cutback of overtime hours and the relinquishment of financial bonuses and rewards related to productivity and traffic."*

***3) The IAA is concerned that the proposal by the Commission to reduce staff costs will lead to a significant reduction in service quality and may impact on the IAA's ability to provide a public safety service***

This section considers the arguments presented by the Commission in paragraphs 7.31 and 7.32 and elsewhere in Section 7.

The IAA is concerned that the Commission does not foresee the consequences of a push towards staff cost reductions, with a potentially serious impact on safety and an increase in costs for the airlines.

Staffing levels required for terminal services are predominantly fixed and there is only a very limited relationship between changes in traffic and changes in resources required. Staffing levels proposed by the IAA are set to provide the current service and any reduction will harm its ability to meet future service levels. There is a minimum number of staff required to man a position or sector on an hourly basis, regardless of traffic levels. Furthermore, there is, over and above their primary role as air traffic controllers or engineers, a requirement for ATM staff to be involved in project work, European committees, aviation-related administrative duties and liaison work. These factors govern the IAA's overall manning levels and affect staffing levels allocated to terminal services.

An important point to make here is that there is no distinction between terminal and en-route air traffic controllers (ATCOs) within the IAA. ATCOs have multiple ratings and are engaged in the provision of both terminal and en-route services. This model provides for flexibility and contingency and while it poses more stringent requirements on ATCO training and increases the ATCO employment costs and costs of training, the model allows the IAA to run its business more productively and with fewer staff than would be the case if ATCOs were rated for just one activity.

The IAA's plans assume that increased traffic levels will be handled through technology improvements rather than an increase in staffing. For some time now, IAA has used the 'crewing to workload' model to allocate staffing to positions; this model ensures that the number of staff allocated to a position (which can be a dynamic traffic sector) is appropriate to safely meet those traffic levels in accordance with international best practice. Manning levels are regularly reviewed to ensure they are both adequate and appropriate.

It would be fair to say that reduced rates of pay would be extremely difficult to deliver, especially in the light of skill-sets of controllers, ATCO mobility, shift patterns worked and extensive training demands. These points are developed later in this section.

In recent times, the rate of ATCO resignations has increased significantly, with the lure of higher wages the key reason to transfer to other parts of the world. If pay cuts are imposed, as proposed by the Commission, further departures can reasonably be anticipated, leading to a reduced level of service and significant cost to the airlines, particularly in relation to traffic delays. In addition, if the proposed Quality of Service scheme is introduced at the same time, this would further undermine the IAA's financing with further consequences.

Understaffed units would have a detrimental effect on quality of services and could have a negative impact on safety levels. The IAA's airline customers praise the IAA for their safety initiatives and express the highest level of satisfaction and confidence in the IAA's safety levels, as acknowledged in the 2010 Customer

Care Annual Report. With understaffed units and a proposed reduction in the training budget (discussed above), this situation could very quickly deteriorate.

It is very likely that industrial action could arise in the event of a reduction in staff costs, as proposed in the determination. The IAA adopts best practice in relation to its utilisation of the State industrial relations machinery and will always look to ameliorate the potential harm that could arise from workers' concerns and potential industrial action. Nonetheless, strike action is a recognised form of democratic action and, whilst the Authority will seek proactively to try to avoid such action by staff there may be such action. The IAA is supportive of Government pronouncements regarding the prohibition of any form of industrial action in essential services.

Possible ATCO reductions at Shannon and Cork

The IAA is obliged to provide an ATC service at the three State airports on a 24/7 basis even though traffic figures may not justify such a level of service at Cork and Shannon. A decision to reduce services to, say, 18 hours, could generate a potential to reduce staffing by 2-3 ATCOs per airport, subject to approval by the safety regulator. Such a decision is, however, outside of the remit of the IAA. For as long as the decision remains for the airports to stay open during the night, it is not possible to reduce staffing.

### *4) The IAA is concerned that the proposal to reduce training costs has no basis and could impact significantly on public safety*

The Commission has proposed in its OPEX allowance (paragraph 7.33) to cut the training budget, without any justification of where the training requirements could be cut back. The IAA's concern is that the Commission does not understand the consequences of cuts in the training budget and that such a proposal seems to ignore the safety regulatory requirements imposed on all ANSPs, not just the IAA. This section looks more closely at the requirements for the IAA in the next determination period.

The Commission has proposed an adjustment to the training budget proportional to an adjustment to proposed staff costs as if there was a relationship between the staff costs and training requirements. Consequently, as a percentage of staff costs, the level of training costs would be the same as the IAA sought – just over 12 per cent. This is lower than the average of 17 per cent observed in the period 2000 to 2011. In absolute terms, the average annual training budget assumed of €1.1m is marginally less than the actual amounts spent on training between 2007 and 2011. The Commission also asserts that since the outturns include years when there would have been training needs associated with opening a new tower, a need not expected to arise in the next four years, they are satisfied that the proposed training budget will suffice.

Firstly, since there is extremely limited potential for manpower reductions in terminal services, keeping the training budget proportional to proposed staff costs would imply a relationship between wages and training requirements. No such relationship exists and the proposed pay cuts will not have any impact on the level of training required.

Secondly, as a result of the delay in building the new Dublin control tower there appears to be a misunderstanding by the Commission that the IAA's ATCO training must, therefore, be reduced. This is simply not the case. The IAA's training programme and, as a direct consequence, its training budget, is not

affected by the deferral of the new tower. IAA has mandatory requirements to provide ab-initio training and then significant professional and safety-related continuation training on an on-going and annual basis to all air traffic control staff. The training programme is governed, in part, but not exclusively, by the relationship between the number of ATCOs and the number of air traffic control ratings that they hold – each rating requires specific annual training in order to maintain ATCO competency requirements. This is not specific to Ireland and is Europe-wide. Furthermore, the IAA is regularly required to engage in additional and unexpected ICAO training requirements. The IAA cannot make training cuts as it is obliged to fulfil mandatory international requirements which, in turn, conform with international safety standards. Indeed, it is incumbent upon the IAA to provide a proactive and mature training programme to meet developments in aviation and to ensure that the service that it provides is safe, effective and world-class, meeting the requirements of the global stage on which it operates.

Training, therefore, is not a one-off cost. It is an on-going and repetitive requirement tailored to individual controllers which ensures and sustains the quality of service provided by the IAA. Furthermore, the IAA, as it meets new international requirements or seeks greater efficiencies, has to be innovative. Hence the use of Tower simulators to provide real-time and realistic training, the Point Merge project which will create more expeditious and environmentally friendly routes and the A-SMGCS runway safety tool – all these projects will have claims on the training budget, claims that were not envisioned 5 years ago. In addition, the IAA has back-to back ab-initio controller programmes to run over the course of the next determination whilst, at the same time, upskilling existing air traffic controllers to replace retirees. The recent introduction of a new radar system has also created an additional training burden not experienced in the last regulatory period.

The IAA strongly recommends preserving the training budget as proposed. Given the extent to which training programmes are driven by regulatory requirements as well as changes in technology, a budget cut without justification is not a realistic proposition without a consideration of public safety.

***5) The IAA is an efficient air traffic service provider and compares very favourably with its European peers***

A considerable amount of data has been extracted from the most recent ACE report, published in June 2011, and is presented here. The key findings are as follows:

a) The IAA is the 4th most cost-effective provider of terminal services;
b) The IAA ranks as one of the most efficient ANSPs in respect of staff unit costs;
c) The IAA ATCOs are rated for both en route and terminal activities meaning that individual costs are higher in the IAA than in other ANSPs where controllers in terminal services do not have area ratings and are paid less;
d) The IAA's ATCOs are paid below the European average when the cost of living is taken into account;
e) ATCO productivity is above the European average;
f) ATCO unit costs deteriorated because of a significant drop in traffic; However, Ireland was not exceptional in this regard.

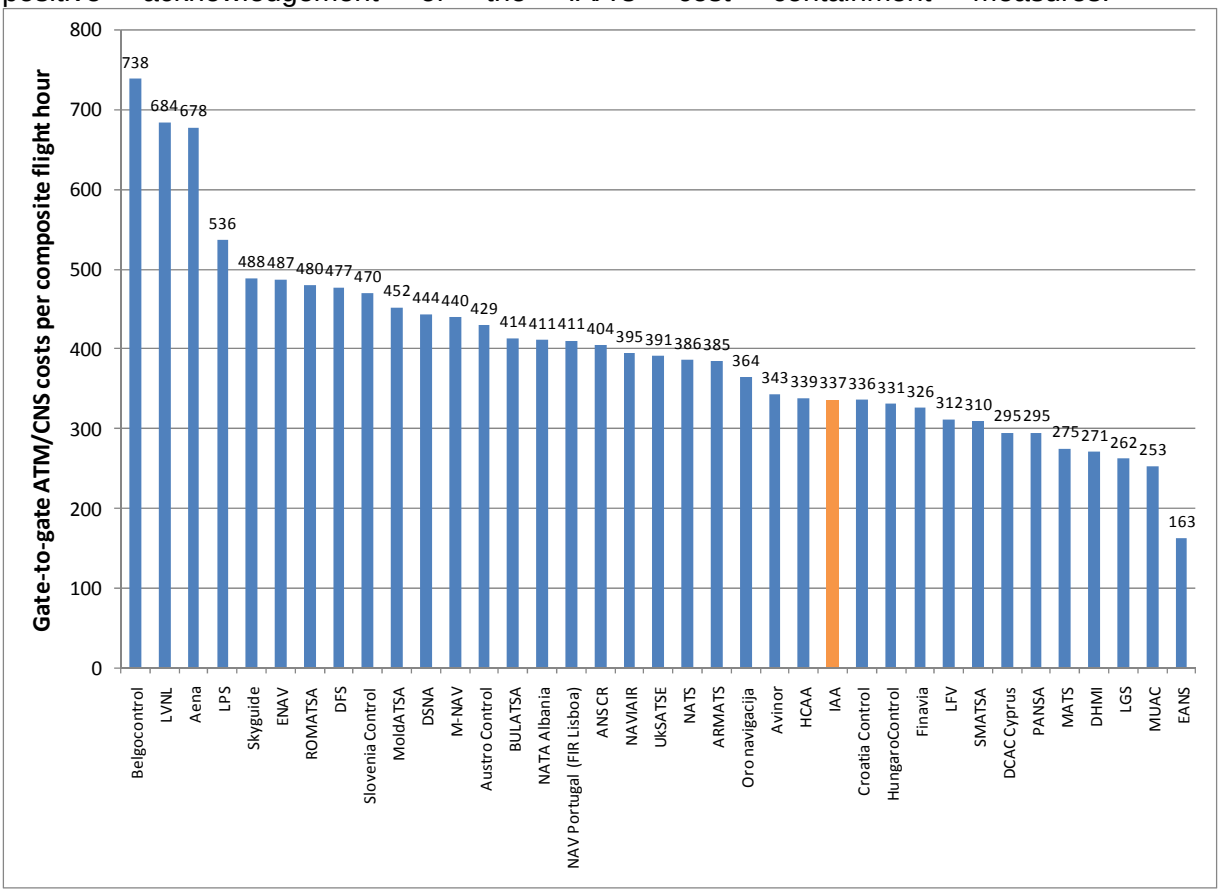
This Section provides additional comments on the Commission's benchmarking of relative levels of efficiency in paragraphs 7.19 to 7.32. In particular, it states that a *"comparison between the IAA and other ANSPs does lend some support to the IAA's*

*contention that [it] is relatively efficient compared to its peers"*. It is the IAA's view that the draft determination appears to pay little attention to this contention and proceeds to make unfavourable comparisons between levels of pay in the IAA and in the Irish manufacturing industry. The IAA believes that such benchmarking is highly inappropriate because of the specifics of the ATM industry and elaborates on this discussion later in its response. The IAA believes that a valid and, therefore, more appropriate comparison of pay levels and performance would be to utilise the widely accepted and credible ACE benchmarking report given that both the European Commission and their statutory nominated agents (EUROCONTROL Performance Review Body (PRB)) have stated that this is the tool that they will be using to benchmark, manage and monitor European-wide performance under the SES II performance regulation 691/2010.

IAA's cost efficiency

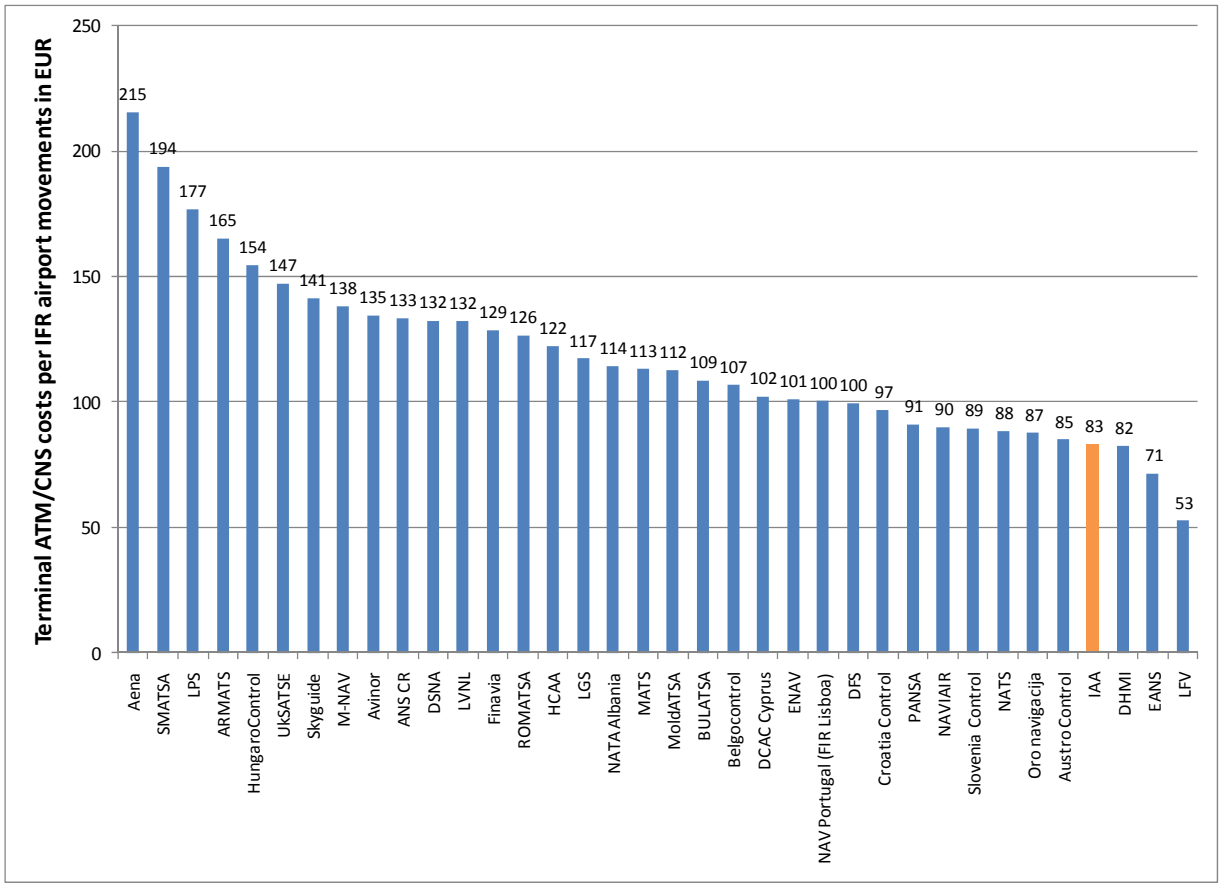
According to the June 2011 ACE report, the IAA is very efficient and ranks among the top most cost-effective air navigation service providers (ANSPs) in Europe. The IAA's gate-to-gate ATM/CNS costs per composite flight hour amounted to €337, which is significantly below the European average of €435, and ranked as the 13th most cost-effective ANSP. Only ATM/CNS costs that are referred to as 'controllable' costs by the PRU are included while costs outside the control of an ANSP, such as MET costs or EUROCONTROL costs, are excluded. However, a similar picture would emerge if all ANS (air navigation services) costs were included, as shown in the latest PRR2010 report, published in May 2011.

This trend was acknowledged by the IAA's customers in its Customer Care Annual Report 2010. An average score for 'financial cost-effectiveness' (76.2%) was a significant improvement on the previous two years and can be attributed to the positive acknowledgement of the IAA's cost containment measures.



**Gate-to-gate ATM/CNS costs per unit (Source: ACE Benchmarking Report June 2011)**

A closer look at terminal costs presents an even more favourable picture for the IAA. Similarly as in the gate-to-gate comparison, including only 'controllable' ATM/CNS costs per terminal unit, the IAA is the fourth most cost-efficient ANSP in Europe at €83 per IFR airport movement, significantly below the European average of €120, despite a significant decrease in traffic.



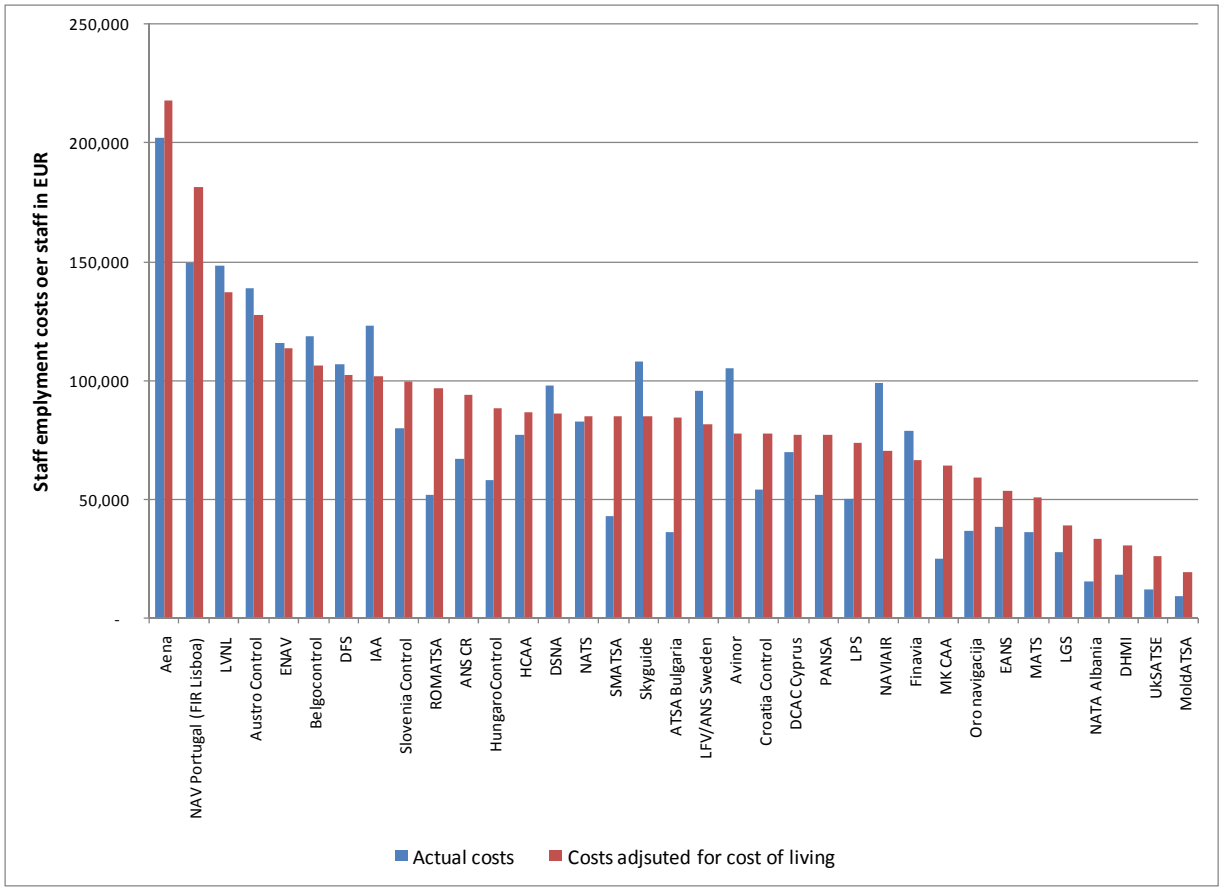

**Terminal ATM/CNS costs per unit (Source: ACE Benchmarking Report June 2011)**

Cost of living

Employment costs constitute a major part of the costs of providing air navigation services. However a major exogenous factor that underlies differences in unit employment cost is the difference in prevailing market wage rates in the national economies in general. This is also associated with differences in the cost of living. Employees are recruited in local labour markets, and therefore the prevailing wage rates, for many different grades and types of employees, will have a major influence on the overall employment costs. The costs should, therefore, be adjusted to take into account the differences in cost of living before they can be compared with each other. And if this is done properly, the IAA compares very favourably with other ANSPs, as can be seen below.

Staff unit costs

Looking at staff costs, at first glance, could indicate that IAA staff are paid very well compared to their peers, as can be seen below. However, according to the ACE data, the IAA has only 52% of support staff which compares with 71% on average in Europe. This ranks the IAA as the third best in Europe. A general comparison of unit staff costs is therefore biased since IAA employment figures include a considerably higher proportion of air traffic controllers (ATCOs) than staff figures of other ANSPs. In addition to that, a large proportion of the IAA's support staff includes former ATCOs that are required to participate in challenging projects that introduce new concepts and technologies. The productivity of support staff is acknowledged by ACE as one of the highest in Europe and justify relatively higher unit costs than for non-ATCO staff.

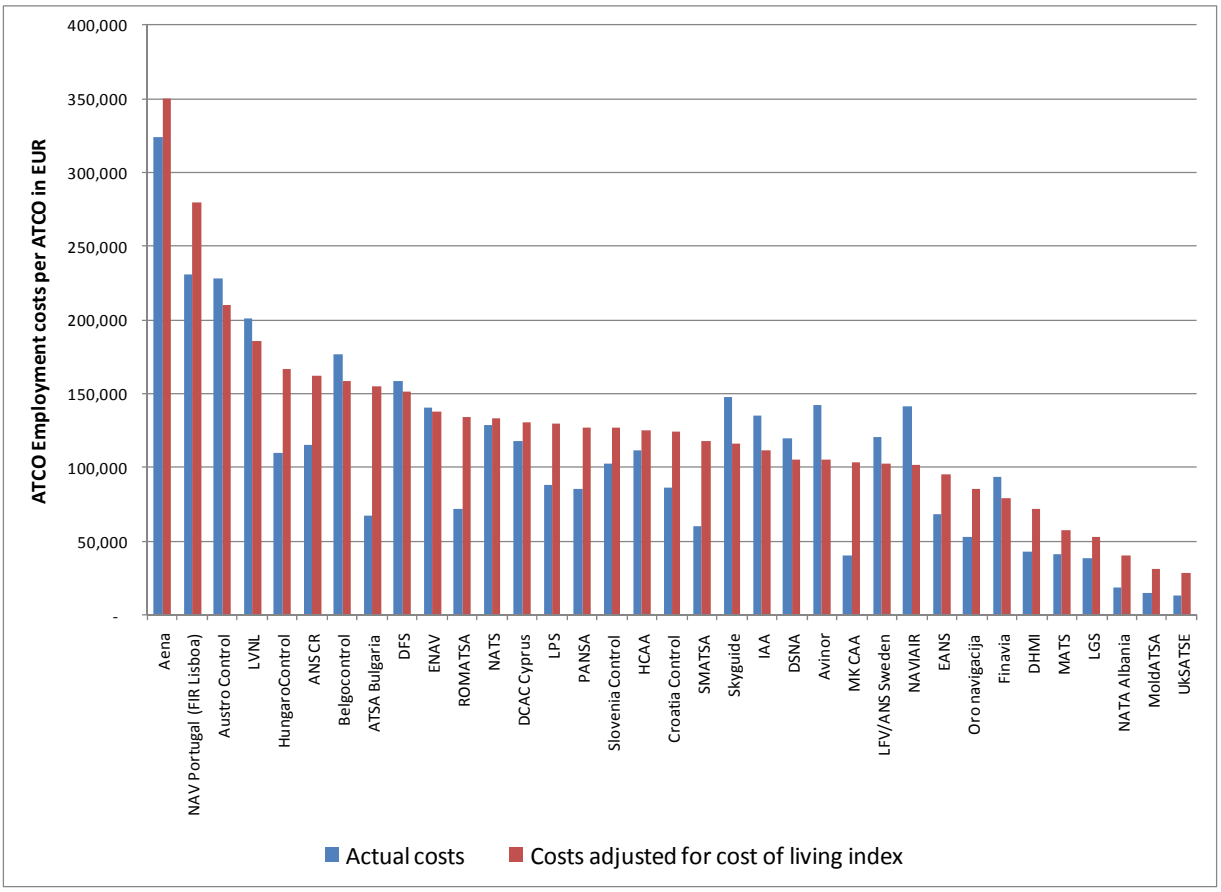



**Staff employment unit costs (Source: ACE Benchmarking Report June 2011)**

ATCO unit costs

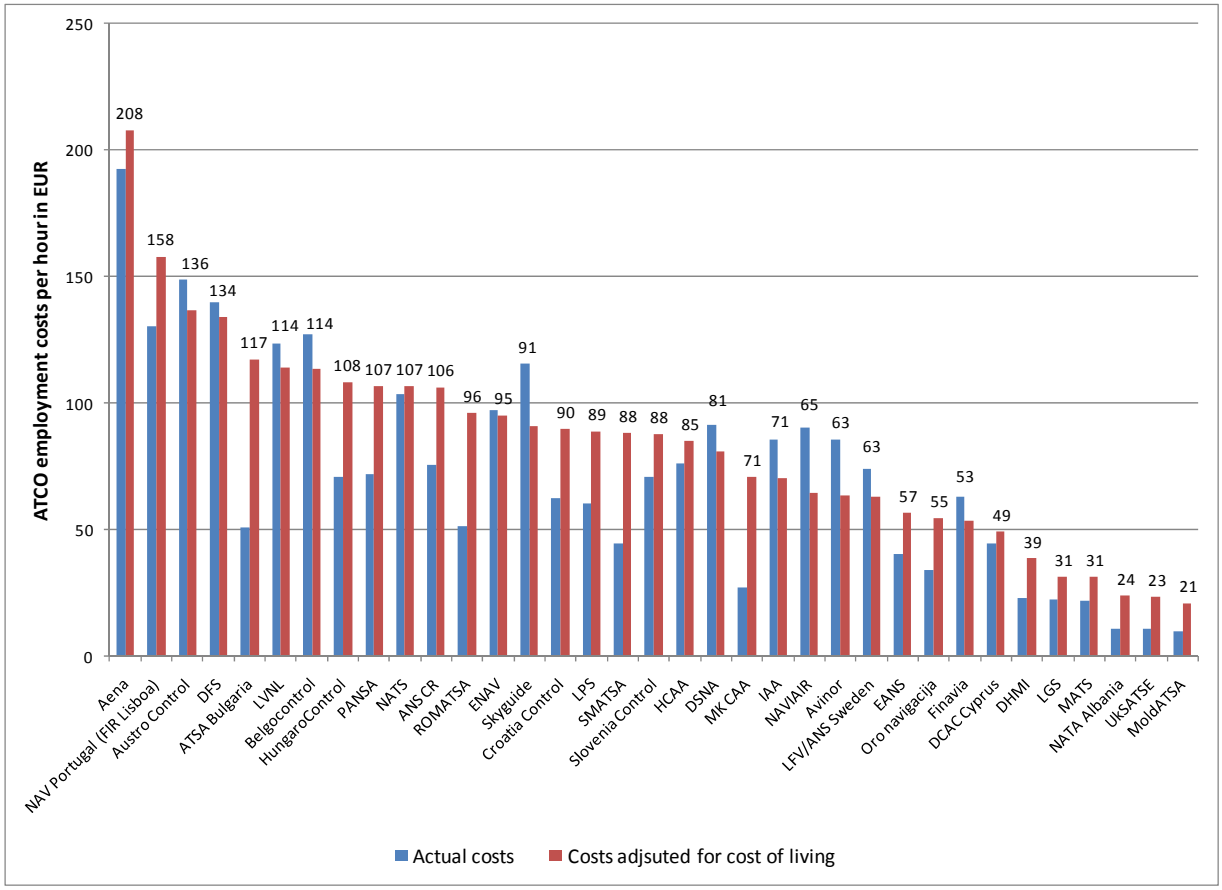
A completely different picture therefore emerges when ATCO unit costs are compared with other ANSPs. Taking into account the purchasing parity power (PPP) cost of living factor, the IAA compares even more favourably to its peers and is significantly below the European-wide system average for ATCO employment costs. On this basis, the IAA would rebut the assertion made by the Commission that IAA pay has evolved unfavourably. In fact it has been controlled to the extent that it competes very favourably among its peer group, even taking account of pension costs that have increased outside the IAA's control.

There is one additional factor that needs to be taken into account when looking at ATCO unit costs. The IAA's ATCOs are engaged in both en-route and terminal services. This increases the unit costs since ATCO remuneration is closely linked to the number of ratings they have. However, it allows for more flexibility and greater overall efficiency and effectiveness in the organisation, including more flexible rostering practices and significantly reduces the overall number of staff required for both services. Since other ANSPs often use a separate pool of ATCOs for terminal services with limited ratings (required for approach and aerodrome control services), this creates a bias to higher unit costs for ANPSs such as IAA that use one pool of controllers for all services. If this factor is taken into account, IAA ATCO unit costs would compare even more favourably with its peer group.




**ATCO unit employment costs**

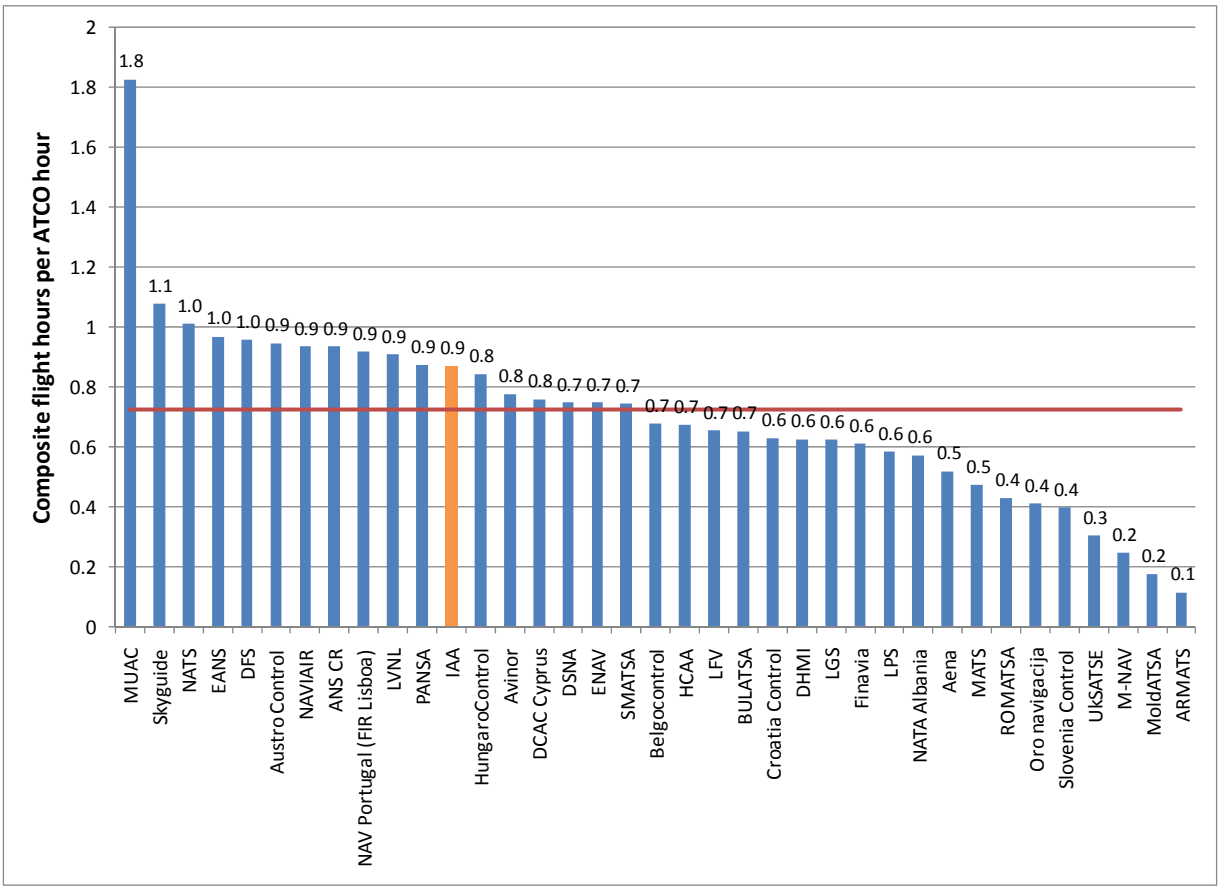
Average unit ATCO employment costs in the European system amount to €98 per ATCO-hour with the IAA at €85, significantly below the European system average even without taking account of purchasing power parity (PPP). The diagram below shows the ATCO employment costs for ATCOs in OPS per ATCO-hour on duty both before and after adjustment for PPP.




**ATCO unit employment costs per ATCO hour**

ATCO productivity

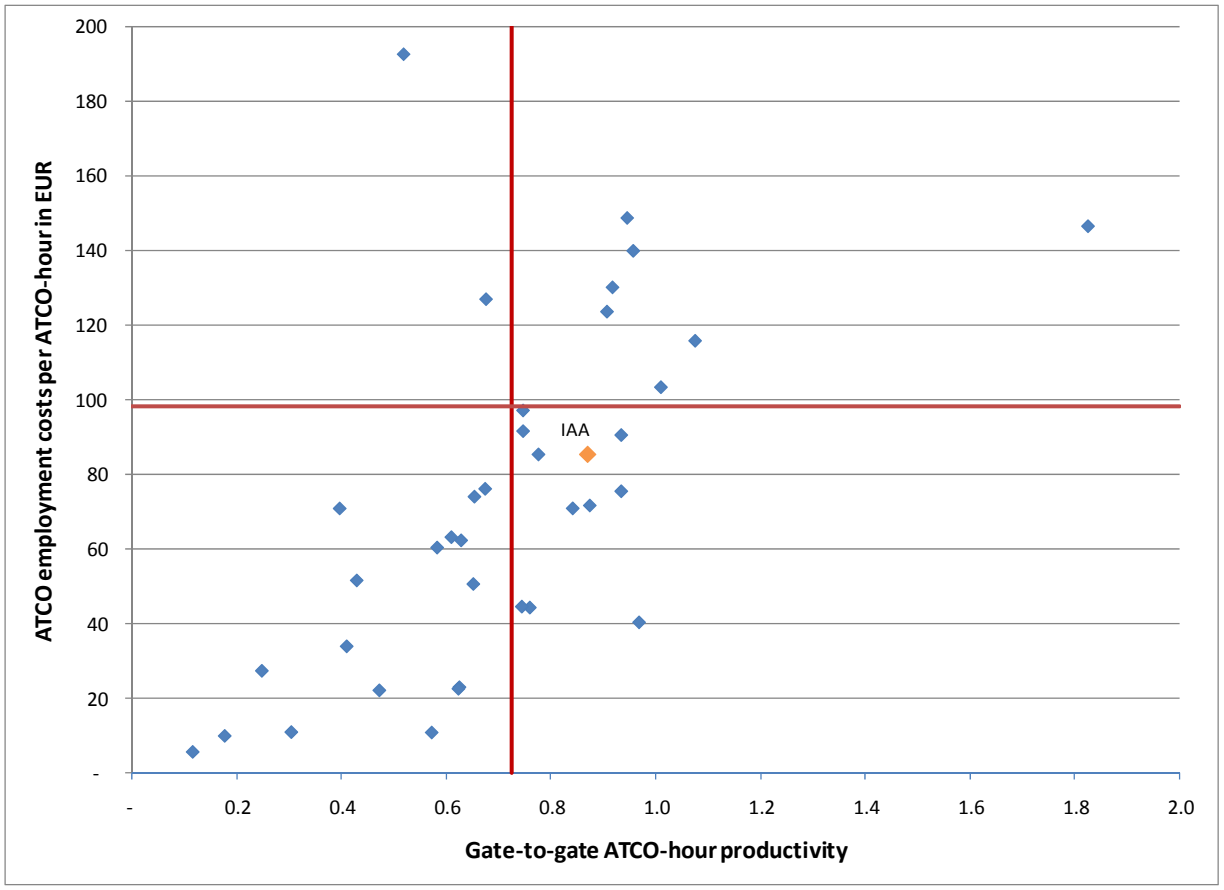
The Commission asserts in paragraph 7.22 that *"the IAA's ATCO productivity is relatively poor"*. This is not borne out by analysis of the June 2011 ACE data. The chart below, demonstrates emphatically that the IAA ATCO productivity is one of the highest in Europe and well above the European system average.




**ATCO productivity (Source: ACE Benchmarking Report June 2011)**

In addition, while the IAA's ATCO gate-to-gate productivity was above average the ATCO unit costs were below the European average (even if unadjusted for PPP cost of living). This can be seen from the chart below.

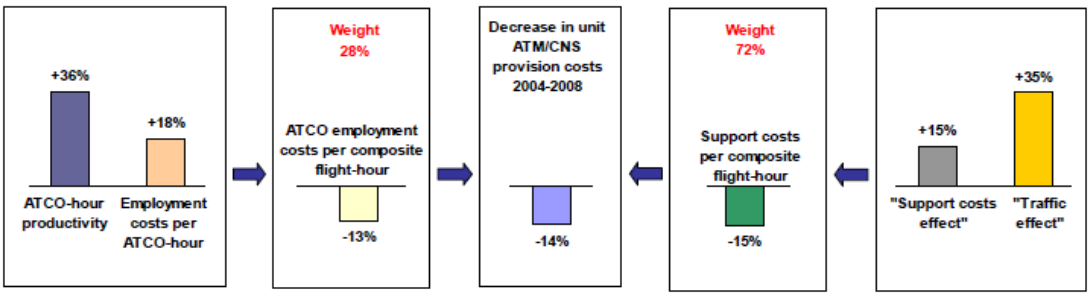
It is true that the gate-to-gate productivity in Ireland reduced as a consequence of traffic reduction but as explained in PRR 2010, published in May 2011 (see Figure 10-26 of PRR2010), the IAA is not alone in this and the same was true for many other ANSPs that faced the same challenges of falling traffic. After several years of continuous increases, ATCO-hour productivity fell significantly at European system level (-6.7%). Only six ANSPs (LVNL, HungaroControl, LPS, MoldATSA, BULATSA and NATA Albania) achieved an increase in ATCO-hour productivity. However, it should be noted that for MoldATSA and NATA Albania, this performance improvement was achieved in the context of traffic increases, as pointed out in PRR2010. Yet, the IAA's gate-to-gate employment costs per ATCO hour stayed at the exactly same level as in 2008 for Ireland, unlike for many other ANSPs where the unit costs increased.




**Gate-to-gate ATCO hour productivity (Source: ACE Benchmarking Report June 2011)**

Relationship between ATCO productivity and ATCO unit costs

The Commission draft determination asserts in paragraph 7.21 that *"from 2004 to 2008, the average gate to gate ATCO costs increased by 20%; the IAA's payroll and related costs for terminal services grew by 40% in the same period"*. The IAA wishes to demonstrate in the following diagram extracted from the 2008 ACE report, used by the Commission, that payroll and related increases were driven by a significant increase in traffic and new airspace responsibilities.

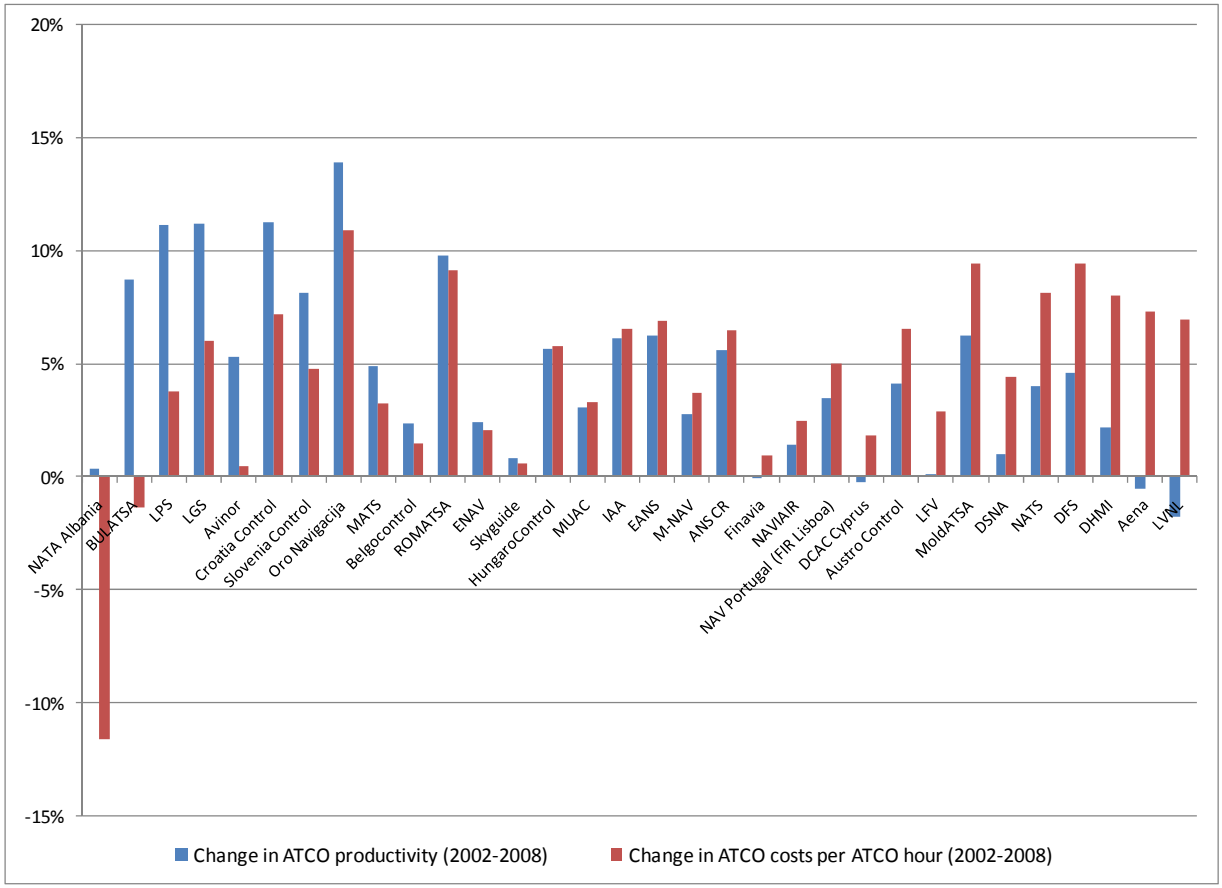



**Changes in financial cost-effectiveness for the IAA (Source: ACE Benchmarking Report June 2011)**

The requirement of the national wage agreements was that any increases on top of that agreed at national level should reflect improvements in productivity. In 2004-2008, the average increase in productivity was 7.9% while the ATCO employment costs per ATCO hour rose by 4.2%. The IAA's traffic grew rapidly over the period 2004 to 2008 at around +8% p.a. or 35% overall – this was unusually high as compared with the European average for the same period of just 16.9%.

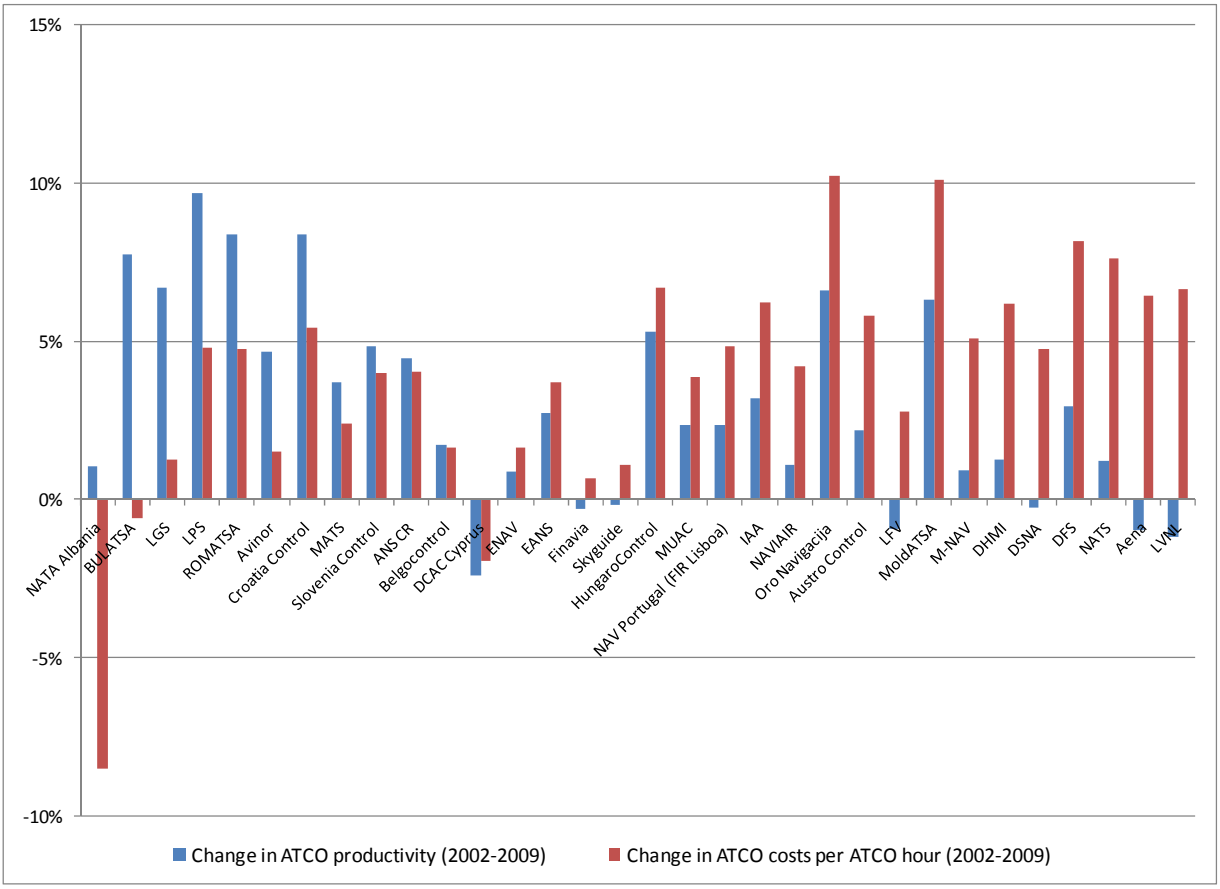
The rise in 2005 was largely the result of the IAA taking responsibility for an area of the North Atlantic that had previously been oceanic. Supported by a solid traffic growth, ATCO productivity rose by +36% over the period, consolidating IAA's position in the top quartile of European ATCO productivity. Conversely, in the meantime, employment costs per ATCO hour rose by +18%. Overall, ATCO employment costs per unit of output fell by -13% over the period. Support costs have increased by +15%, which is substantially less than traffic increases (+35%). It results in a fall in unit support costs of -15%. While 2004 support costs were affected by the capital-related costs from major investments, the subsequent fall in 2005 was supported by reductions in both staff costs and non-staff costs. In 2008, however, non-staff operating costs increased due to larger technical and administration expenses and additional maintenance support required on the ATM system.

IAA followed the policy of unit costs following productivity very strictly. The effect of this is illustrated below, which shows that the average ATCO employment costs per ATCO hour matched very closely the productivity trends in 2002-2008 (ANSPs sorted according to the difference between the change in productivity and change in the ATCO unit costs).




**Change in productivity vs change in ATCO unit costs (2002-2008)**

The situation looks a bit different if 2009 is taken into account. Traffic dropped to unpredictable levels but this was no different than for other ANSPs which experienced similar challenges to the IAA. IAA should not be penalised for this unexpected drop in traffic. While the planned traffic growth rate for 2009 in November 2008 was +3%, the actual traffic growth rate was -8%. Yet in 2009, the IAA still belonged to the quadrant with above average ATCO productivity and below average ATCO unit costs.




**Change in productivity vs change in ATCO unit costs (2002-2009)**

As discussed earlier, it is very difficult to respond to traffic reduction, especially in terminal services, where the resources required for handling terminal traffic are predominantly fixed and the ANSP is expected to be able to respond to future growth, with a seamless increase in traffic handling.

### *6) It is inappropriate to compare employee costs in the IAA with Irish manufacturing industry earnings*

This Section provides the IAA's response to the Commission's comments in paragraphs 7.19 to 7.32, where the Commission, in its justification of its proposals for significant reductions in OPEX allowances, benchmarked the IAA employees, working on a global stage, against Irish manufacturing industry working in an internal market place. This type of benchmarking is not appropriate.

Specifics of the ATM industry

Aviation industry staff are a very specific category of public sector worker. They are highly skilled and have responsibilities that are critical to public safety. Their salaries reflect this responsibility. A substantial portion of their salary remunerates them for working unsocial hours. The job of an air traffic controller or an engineer is 24/7. Premiums for working shift patterns have been negotiated historically and there is no opportunity to make changes in the short term.

Constantly changing technology and work practices

The whole ATM industry is currently undergoing a major change with the Single European Sky and SESAR paving the way. SESAR is the most ambitious programme ever envisaged for the ATM industry in Europe. New technologies have been implemented, eg COOPANS, and more are planned in the near future. These technologies will bring substantial benefits to the IAA's airline customers through improved flight efficiency and lower delays or through more productive use of resources that will require lower costs of providing additional capacity, when required. While many of the new concepts and technologies will provide the benefits in the future, they involve changes to ATC procedures and an ongoing upgrade of the controllers' and engineers' skill-sets. There are also additional training requirements posed by international organisations and regulations, such as recent English language proficiency training mandated by ICAO (International Civil Aviation Organisation). Increased complexity of the controller's and engineer's jobs and additional requirements for training has resulted in a significant increase in failure rates, particularly for controllers, during the training of new recruits. In the past, the success rate would be circa 90%. Recently, this figure has fallen to around 80%, impacting training costs and creating additional pressure for new air traffic control recruits. This has been a particular issue in the recruitment of air traffic controllers European-wide. Ireland is no different.

ATCO mobility

There is a shortage of highly-skilled air traffic controllers in Europe and world-wide. Recent changes in the industry have brought about a harmonisation of training requirements and licensing arrangements. This has created a European-wide market for air traffic controllers and has increased their mobility substantially. IAA is concerned to ensure that current competitive rates of pay are sustained as the alternative of recruitment and training of new controllers is a time consuming and a more expensive process, taking up to two years before a student controller becomes fully operational. In the current economic climate, a significant number of ATCOs have resigned to pursue more financially attractive contacts elsewhere. To put this in context, the resignation rate among ATCOs this year is equivalent to what would historically occur over a decade. Any reduction in ATCO remuneration would exacerbate this trend and lead to staff shortages and reductions in services resulting in reduced service quality and costly delays to the IAA's customers.

# 7. Capital Costs (CAR Chapter 8)

IAA key responses

1. The IAA supports the principle that capital expenditure amounts not incurred should be reflected in a reduced opening RAB;
2. The IAA welcomes the Commission's proposal to allow all of its planned CAPEX in the next determination;
3. The IAA proposes that costs incurred to date on a new visual control tower at Dublin Airport should be included in the RAB;
4. The IAA proposes that cost savings realised on some capital projects should not be clawed-back in the opening RAB of the next determination;
5. The Commission's cost of capital calculation is too conservative.

***1) The IAA supports the principle that capital expenditure amounts not incurred should be reflected in a reduced opening RAB***

The IAA notes the Commission's proposal to adjust the initial RAB in order to "claw-back" capital expenditure not spent by the IAA during the last regulatory period.

As one of the many cost containment measures introduced by the IAA during the last regulatory period, some capital projects were cancelled and/or deferred. In addition, the IAA continued to manage closely projects that did go ahead in order to produce budget savings, whether delivered through procurement procedures or completing as much work as possible in-house. The end result was an under-spend on CAPEX relative to the 2007 forecast. Since the original CAPEX forecast was recovered through the price cap, the IAA accepts that some of this over-recovery should now be returned. The IAA also notes that a precedent of RAB claw-back is in operation by the UK Regulator.

***2) The IAA welcomes the Commission's proposal to allow all of its planned CAPEX in the next determination***

The IAA notes the Commission's intention to allow all of the capital expenditure proposed by the IAA in its submission 2012 to 2015. The IAA's CAPEX plan for the next regulatory period represents a very significant reduction on previous years' CAPEX plans, achieved through a balance of benefits from previous investments and a desire to avoid unnecessary expenditure in the current challenging environment. The IAA undertakes regular consultation with its airline customers and is confident that the plan put forward is adequate to meet their needs in the next four years.

However, there are a number of harmonisation and cooperation programmes for operation at European level and all of these harmonisation initiatives are moving towards the requirements which are set out very clearly in the SESAR programmes. The planned CAPEX proposals represents the IAA's best estimate of its requirement to comply with SES mandates within the next regulatory period. However, where new initiatives are mandated by Europe, but not yet mature

enough for inclusion in the CAPEX planned spend, the IAA's airline customers will be advised before any expenditure outside of the determination, but beyond its control, is committed.

The IAA notes the particular comments of the Commission in paragraph 8.13 in relation to COOPANS. Many future projects will be required to support SESAR / Single European Sky requirements, and functional requirements will be clearly defined. NATS will be required to comply with the same functional requirements and interoperability as the IAA. Today, it is not anticipated that a further level of harmonisation will be required as part of the Ireland-UK functional airspace block (FAB). The current situation between the IAA and NATS is that both air traffic management systems interface very well, with full electronic transfer of data and communications. The IAA, however, continues to work very closely with NATS to ensure that the functionality of both ATM systems meets the SESAR requirements. The COOPANS partnership is currently the most advanced and cost-effective mechanism for the implementation of future flight plan functionality.

***3) The IAA proposes that costs incurred to date on a new visual control tower at Dublin Airport should be included in the RAB***

In Annex 4, the Commission has presented the principles for rolling forward the RAB under various scenarios. Under scenario 5, the IAA considers that the Commission could compensate it for costs incurred to date in bringing the visual control tower at Dublin Airport to planning permission stage, through its inclusion in the opening RAB.

The IAA has incurred costs of € 1.6 million in designing a new control tower and securing planning permission. This expenditure was contractually incurred prior to the second runway project being deferred by the Dublin Airport Authority (DAA). Since then, no additional expenditure has been incurred and the project is on hold pending reinstatement of the second runway project by the DAA.

Given that the IAA incurred this expenditure when the prospect of a second runway was a real prospect, the opening RAB should be increased by € 1.6 million to allow the IAA to recover its costs to date.

On a related point, the Commission comments in paragraph 8.15 that, based on IAA and DAA estimates, respectively, of 4 years in which to make a new control tower operational and 2.5 years for the construction of a new runway, that it is possible that for over a year after completion of the second runway there will not be a fully operational tower. The IAA's opinion is that such an outcome could not be acceptable to its airline customers. IAA recommends that the Commission includes in its final determination a provision to re-open discussions on this point in the event that the issue of a second runway is re-opened within the next four years.

***4) The IAA proposes that cost savings realised on significant projects undertaken in the 2007 regulatory period should not be clawed back in the opening RAB of the next determination, as proposed in scenario 1 of the RAB roll-forward principles***

The IAA proposes that cost savings achieved in the 2007 regulatory period in relation to two projects - Display Screen Replacement and Navaids – should be reflected in the opening RAB. These projects generated savings in the order of €2.1 million through strategic purchasing and re-using older equipment, where possible.

### *5) The IAA proposes a cost of capital of 6.9%*

The IAA proposes a real pre-tax cost of capital is 6.9%.

The following table compares the component elements of the IAA proposed cost of capital with those of the Commission and the cost of capital calculated for the 2007 regulatory period.

| **Cost of Equity** | 2007 Values | CAR 2011 Draft Determination | IAA Proposal |
|---|---|---|---|
| Risk free rate | 1.84% | 1.64% | 2.71% |
| Asset beta | 0.65 | 0.65 | 0.65 |
| Debt-to-equity ratio | 75.4% | 7.0% | 56.56% |
| Corporate tax rate | 12.5% | 12.5% | 12.5% |
| Equity beta | 1.1 | 0.70 | 1.0 |
| Equity risk premium | 5.0% | 5.0% | 5.0% |
| Return on equity | 7.34% | 5.14% | 7.71% |

| **Cost of Debt** | 2007 Values | CAR 2011 Draft Determination | IAA Proposal |
|---|---|---|---|
| EURIBOR | | 2.15% | 2.9% |
| Premium | | 1.10% | 1.95% |
| Planned Inflation | | 1.00% | 1.23% |
| Cost of Debt | 2.22% | 2.25% | 3.62% |

| **Gearing** | 2007 Values | CAR 2011 Draft Determination | IAA Proposal |
|---|---|---|---|
| Gearing | 35.5% | 6.5% | 36.13% |
| Debt:Equity Ratio | 75.4% | 7.0% | 56.56% |

| **WACC** | 2007 Values | CAR 2011 Draft Determination | IAA Proposal |
|---|---|---|---|
| Real Pre tax | 6.2% | 5.6% | 6.9% |
| Real Post tax | 5.4% | 4.9% | 6.0% |

Nominal bond rates and nominal interest rates on debt should be deflated using a rate of 1.23%

The conversion from German 10-year bond rates (nominal) to an Irish risk free rate has been made by using the 2010 Eurozone inflation rate (1.6%). This raises a number of issues:

- As documented in Europe Economics report[1], when this approach is used (i.e. deflating nominal bond rates) it should not rely on past inflation but on forecast inflation; and
- As the IAA RAB will be adjusted as a function of the Irish CPI, the Irish inflation rate should be used instead of the Eurozone inflation rate.

According to the IMF[2], the forecast inflation in Ireland over the 2012-2015 period is 1.23%, which is lower than the 1.6% used by the Commission.

We also note that the Commission does not use the same inflation rate to deflate the cost of equity and the cost of debt. For the cost of debt, the Commission uses the 2011 forecast inflation report in IAA's National Performance Plan, i.e. 1%.

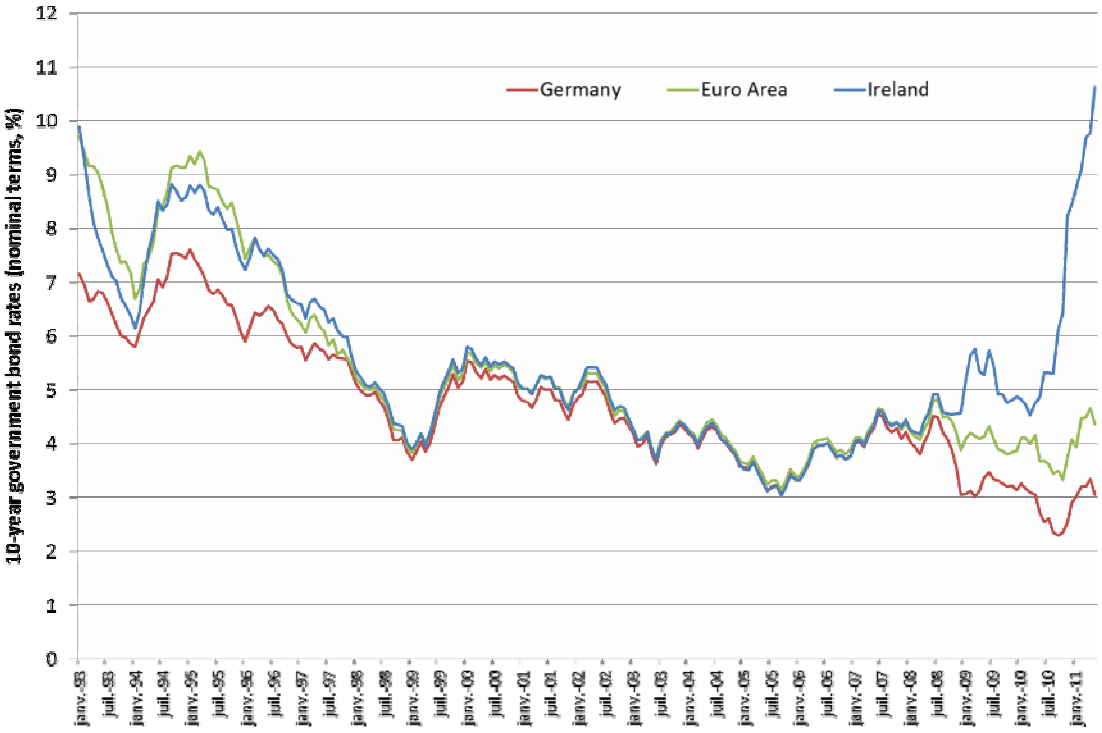
The real risk free rate should be 2.71%

Regulation (EC) No. 1794/2006 states that *"The return on equity shall take into account the financial risk of the air navigation service provider taking the national bond rate as a guide"*.

Although IAA understands that the economic situation in Ireland is exceptional and deserves considering an alternative approach, the reference to the German bond rate (i.e. the lowest in Europe) made by the Commission is an extreme solution. As the IAA, similar to most air navigation service providers in Europe, is closely linked to the State, the National economic situation should be taken into account given that the costs of raising funds and the return expected by the State may be closely related to National bond rates.

[1] Cost of Capital for NATS (En Route) plc for CP3, Europe Economics, 20 May 2010.

[2] IMF World Economic Outlook, April 2011.




**10-year government bond rates (ECB)**

This chart shows that the German, Irish and the Euro area bond rates were extremely close all over the period July 1998 to July 2007. However:

- looking at a wider time period (1993-2010) Irish government bond rates have generally been higher than the German bond rate;
- the Irish government bond rates show a better correlation with the Euro area average rate than with the German rate; and
- the German bond rates have recently reached their lowest levels since 1993 (e.g. 2.3% in September 2010), which are not representative of historical long term values.

The IAA recommends that the Euro area average bond rates provide a reference that better reflects the Irish economic context (while removing the excessive effect of the Irish sovereign and bank debt crisis). Over the last three years, it has also shown less volatility than the German bond rates.

The IAA suggests using the Euro area 10-year government bond rates, and use an average of the last 12 months period (June 2010-May 2011) to avoid the potential criticism that the May 2011 rates were relativly high compared with previous months.

This approach is in line with the Hutson & Kearney 2007 report[3], which cited the Euro area 10-year government bond as their preferred reference but finally took the Irish 10-year government bond for consistency with SES regulations.

[3] The Irish Aviation Authority's Cost of Capital, Report to the Commission for Aviation Regulation, by Hutson & Kearney, March 2007.

The IAA suggests a nominal risk free rate of 3.94%, deflated by 1.23%, resulting in a real risk free rate of 2.71%. The IAA notes that this value is in the range of regulator precedents cited in Europe Economics report (i.e. 2.0-3.0%).

The UK CAA retained a range estimate of 1.5% to 2.25% for the real risk free rate and used 1.75% as their base assumption. The UK CAA recognised that index-linked gilt (ILG) rates were historically low.

The Commission refers to the same range estimate (i.e. 1.5% to 2.25%) in its draft determination and backed up this range with other references showing a similar range. However, despite considering the same range estimate the Commission proposes to adopt a lower rate than the UK CAA (i.e. 1.6% compared to 1.75%).

The IAA recognises that the proposal to use a real risk free rate of 2.71% is somewhat higher than the value adopted by UK CAA (1.75%). However, the UK CAA used a different approach in that they referred to the index-linked gilt (which has the advantage of being in real terms already) instead of the deflated nominal bond rates as previously used by the Commission. Europe Economics compared these two approaches and found that the use of ILG resulted in lower rates.

An Equity Risk Premium (ERP) of 5% is appropriate as long as the risk free rate (RFR) above is revised upwards to 2.71%. Failing this, an equity risk premium of 5.25% to 6.10% would be appropriate

The risk free rate and the equity risk premium cannot be seen in isolation.

The UK CAA decision on ERP is 5.25%, which, combined with a 1.75 RFR implies a 7.0% market return. In its latest determination, the UK CAA has partly compensated for the use of a lower RFR by a slightly higher ERP (+0.25%), reflecting the idea that in crisis periods, ERP are typically higher than in non-crisis periods. The Europe Economics report for the UK CAA refers to a potential 20% increase of the ERP in crisis periods, implying that a 5% ERP in non-crisis period may rise up to 6%.

The Commission used an equity risk premium of 5.00%, which, combined with a 1.6% risk free rate, implies a 6.6% market return (-0.4% lower than UK CAA). The Commission's arguments in favour of using an ERP of 5% are that:

- 5% was the value used for the 2007 determination; and
- the Dimson, Marsh and Staunton's 2011 paper[4] indicates a range of 4.5% to 5.0%.

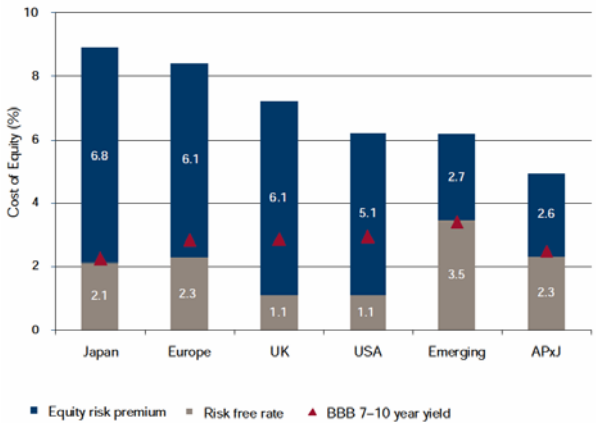
On the first point, it should be noted that not revising the 2007 ERP implies that the Commission has ignored the fact that ERP increases in crisis periods, a factor that was recognised by the UK CAA.

On the second point, the Dimson, Marsh and Staunton's 2011 paper does not give a clear indication that 4.5% to 5.0% is an appropriate range. On the other hand, it is noted that this paper shows ERP and RFR for various regions, as shown in the table below.

[4] Elroy Dimson, Paul Marsh, and Mike Staunton (2011) Credit Suisse Global Investment Returns Sourcebook 2011, Credit Suisse Research Institute, Zurich.

**Market-implied ERP estimates for various regions**

**Source:** Credit Suisse HOLT 17 January 2011




For the UK, the combination of a RFR of 1.1% and an ERP of 6.1% results in an over market return of 7.2%, which is close to the implied market return of the UK CAA study (although RFR and ERP shares are slightly different).

For Europe, the RFR is higher than in the UK (2.3% compared to 1.1%) but that the ERP is the same (6.1%), implying a market return of 8.4%.

The implied market return of the Commission (6.6%) is considerably lower than the average return for Europe published by Dimson, Marsh and Staunton in 2011.

Gearing is proposed at 36.1% and a debt/equity ratio of 56.6%, based on clear definitions

The IAA understands from the different reports commissioned by both the Commission and the UK CAA in their recent price determination exercises that there are two main approaches to the determination of the gearing:

- the use of notional ratio, putting an a priori assumption on what the gearing would be if companies were optimising their financing structure;
- the determination of a ratio based on company balance sheet structure.

As mentioned in the Hutson & Kearney 2007 report, *"There is some debate about whether actual or 'optimal' gearing should be used in the cost of capital calculation"*.

The Commission has adopted the second approach, which better reflects the IAA actual situation, that is a financing structure which is mainly equity oriented. The main drawback of this approach is that the definition of the gearing itself requires a number of assumptions on the precise balance sheet items to be included in debt and equity. These assumptions can have a very large impact on the final WACC value.

The definitions of gearing used by the Commission are as follows:

- Gearing = (Long term bank loans + Income equalisation) / Total assets
- Debt/Equity ratio = (Long term bank loans + Income equalisation) / (Total assets - (Long term bank loans + Income equalisation))

The IAA believes that the Commission approach has several shortcomings:

- In its calculations, the Commission has not used the financial accounts published by IAA for 2010, which differs slightly from the numbers used in paragraph 8.35;

- The income equalisation fund reflects the cost recovery mechanism and should be excluded from long term debt (the IAA understands that this balance was excluded in the 2007 price determination);

- Since the role of the gearing in the WACC equation is to weight the cost of debt and the cost of equity, the IAA suggests that the most appropriation definition for gearing is:

Gearing = Long term bank loans / (Long term bank loans + Shareholder equity)

- Similarly, the way that the Commission has calculated the Debt/Equity ratio implies that short term assets and, more importantly pension liabilities (that have been at their historical highest in 2008 and 2009), are considered as equity. This has a considerable impact on the ratio and results in a very low value (7%). The IAA suggests that the appropriate calculation of the Debt/Equity ratio is:

Debt/Equity ratio = Long term bank loans / Shareholder equity

Cost of debt is proposed at 3.62%, being a forecast nominal interest rate of 2.90%, increased by 195 basis points, and deflated using an inflation rate of 1.23%

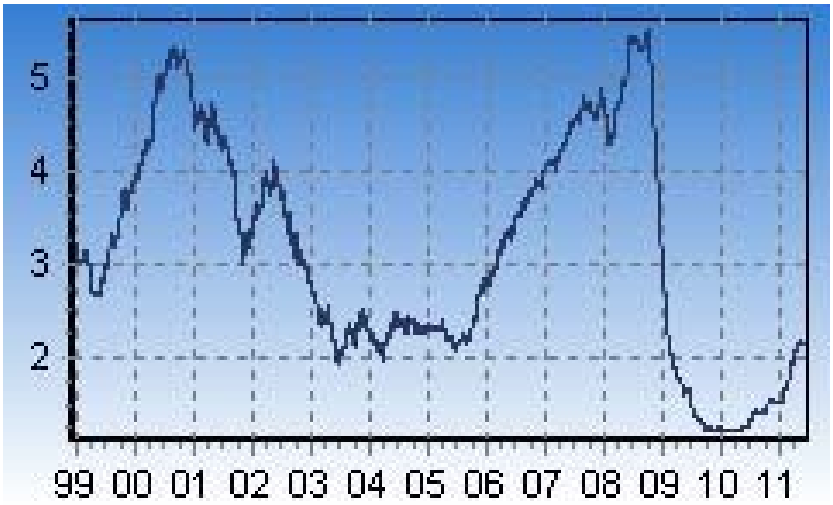
The cost of debt is determined by:

- the future level of EURIBOR rates; and

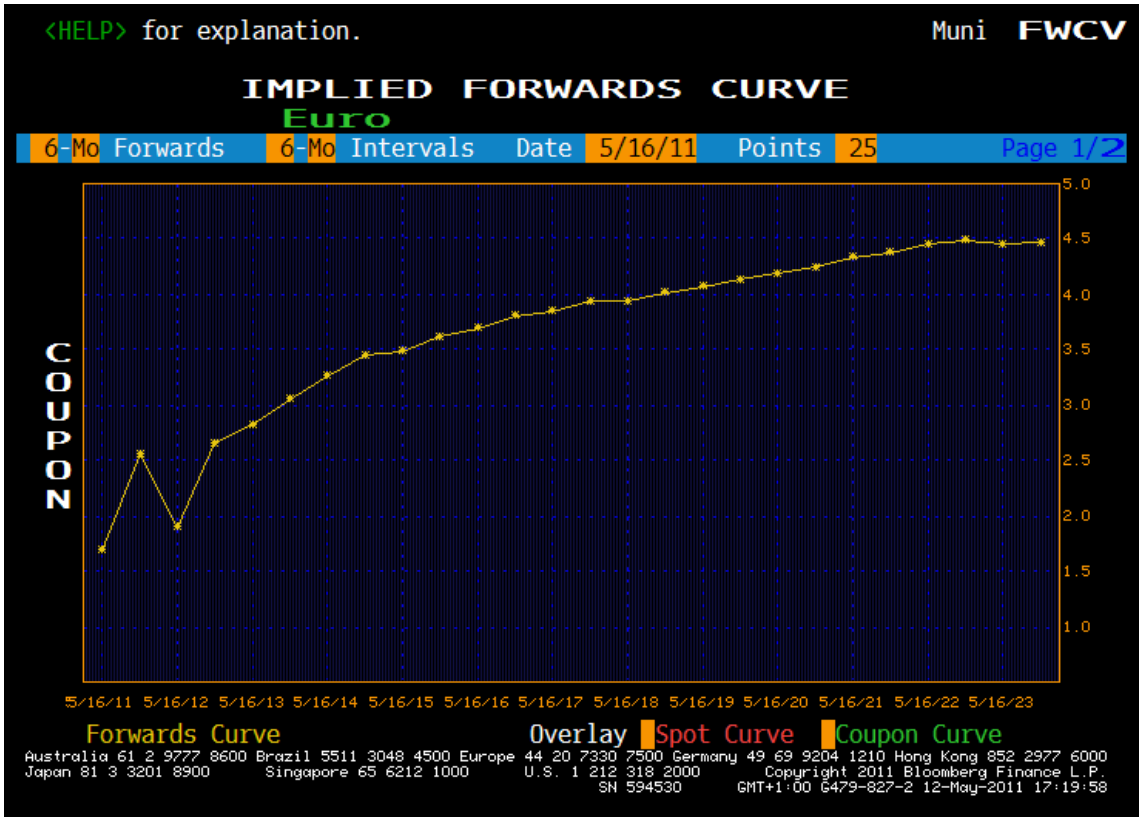
- the risk premium requested by the banks.

In its draft determination the Commission referred to the May 2011 12-month EURIBOR rate (2.15%) and implicitly assumes that this rate will remain valid over the 2012-2015 period.

The IAA suggests that the Commission's approach is not appropriate based on the facts that the May 2011 rate is close to historical low levels (see table below) and that EURIBOR rates are forecast to increase in the coming years (see table below).




**Euribor 12-month rates (www.euribor-rates.eu)**




**EURIBOR 6-month forecast (2011-2023)**

The interest rate should not be assumed constant over the regulatory period. As shown above, EBRD forecast that the EURIBOR rate would gain at least 1.5 percentage points between May 2011 and May 2015.

The IAA suggests considering, as a base assumption, an average rate of 2.90% (i.e. 2.15% + 0.75% to reflect an increase in EURIBOR rates).

In its draft determination, the Commission mentions that the IAA borrowing costs include a risk premium of 110 basis points on top of EURIBOR 12-month rates. This is out-of-date data with the IAA currently paying a premium above EURIBOR of 195 basis points.

# 8. Other issues (CAR Chapter 9)

***Reimbursement of price cap excess***

The IAA proposes that where the price cap is exceeded, airlines should be reimbursed at the earliest available opportunity. The Commission suggests a period within 45 days (paragraph 9.3). However, the IAA wishes to remind the Commission that all of its invoicing is carried out by the Central Route Charges Office (CRCO) of EUROCONTROL and that invoicing procedures are established and not subject to variation. The IAA proposes a period of 90 days for reimbursement to ensure adequate notice is provided to the CRCO of once-off price cap changes.

***Price cap under-collection***

To the extent that the IAA looks to assist its airline customers through the deferral of any price cap increases, as happened in 2010 when the IAA sought to defer for 6 months the increase in the price cap in order to provide some breathing space to its airline customers, IAA should not be penalised for this action. Clearly any previous decision to defer price increases was made with the understanding that under-recoveries could be collected in full at a later date. IAA believes that any attempt to restrict any under-recoveries, genuinely due to the IAA, is unfair and biased against it.

The IAA acknowledges the intent of the Commission to roll forward, in full, any under-recoveries arising in the 2007 regulatory period into the next determination.