



**Maximum Level of Aviation Terminal Service Charges that may be
imposed by the Irish Aviation Authority
ISSUES PAPER**

**IRISH AVIATION AUTHORITY
RESPONSE**

December 2010

EXECUTIVE SUMMARY

The Irish Aviation Authority (IAA) welcomes the opportunity to respond to the Commission for Aviation Regulation's issues paper for the next determination on the maximum level of aviation terminal service charges to be imposed by the Authority for the period commencing 1 January 2012.

The most important outcomes for this Determination are:

- to ensure the provision of a safe and reliable terminal air traffic control service;
- to ensure that demand is met in a cost-effective manner; and
- to deliver on planned capital investment projects.

The Determination must provide the IAA with sufficient resources to maintain adequate capacity and to keep delays to its airline customers at a minimum. The Authority's capital investment plan, due to be submitted to the Commission in Quarter 1 2011, will deliver efficiencies and promote improved service quality.

The Determination must provide a level of operating costs which reflect the realities of the Authority's operations and infrastructure – a highly skilled labour intensive and technological systems driven cost base where a high percentage of that cost base is fixed in nature. Return on capital should be set at an appropriate level to reflect the risk in service provision.

The Authority looks forward to further engagement with the Commission in the course of arriving at the final Determination.

For ease of reference, the IAA has arranged its response following the same order as the summary of main consultation questions identified by the Commission on page 45 of the issues paper. Each section begins with a summary of the main points of the Authority's response, followed by a more detailed explanation of each question in turn.

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Approach to Regulation

Summary of IAA Response:

1. The next determination should be a revenue cap and should be aligned with the provisions of Single European Sky (SES) II .
2. The Commission should consider the specific regime for traffic risk sharing which has been set out in the SES II amended Charging Regulation.
3. A three year determination would have the advantage of allowing the next determination to dovetail with the performance requirements of Single European Sky which will see performance targets for terminal operations introduced in 2015.

CAR Question 1: What form should this price cap formula take – should the Commission continue with a per MTOW cap, or consider alternatives such as a unit rate or revenue cap?

The determination currently in force provides that the revenue yielded to the IAA for the provision of aviation terminal services to flights departing from Dublin, Shannon and Cork airports shall have a reasonable expectation of not exceeding a level of allowed revenues. These revenues are calculated by reference to the maximum permitted revenue per tonne of departing aircraft from Dublin, Shannon and Cork airports from air terminal services charges times the maximum take-off weight of the departing aircraft in metric tonnes.

The current economic model is not a pure price cap model but is in fact closer to a revenue cap model by virtue of the volume risk sharing formula. On the assumption that the next determination will, once gain, focus on allowed revenues, it is the Authority's view that any determination of its allowed revenues should not be based on aircraft weight as this has no impact on the cost of service provision. The Authority would be happy to explore other measures of traffic volume that would be more appropriate to include in any given revenue formula.

The Authority suggests that the Commission should look to align its determination with the provisions of the Single European Sky II amended Charging Regulation which more closely represents a revenue cap. The key determinant of price control under the amended Charging Regulation is “determined” cost which in turn is effectively the level of allowed revenues.

Allowed revenues should then be distributed among airline customers by reference to the European Commission charging formula introduced on 1 January 2010, EC Regulation 1794/2006, Article 11 and taking into account the Authority's intention to move towards full compliance with the charging formula as follows:

- the quotient to the power of 0.9 for the year 2010 and 2011
- the quotient to the power of 0.8 for the years 2012 and 2013
- the quotient to the power of 0.7 for the years 2014 and thereafter.

As proposed by the Commission, this has the attraction of aligning the Commission's determination with European charging regulations.

CAR Question 2: What approach should the Commission adopt to volume risk – what adjustment should be made to the price cap, if any, if demand does not match forecast?

The current model of economic regulation reflects the limited ability of the IAA to respond to rapidly changing circumstances in the aviation industry. Changes in short term volumes cannot be matched by immediate reductions in capacity. The Authority cannot close sectors without causing a disproportionate effect on its airline customers who would need to re-route aircraft around closed sectors. Economic regulation should incentivise the efficient development of capacity which matches long term demand trends. It should also look to protect capacity from short term volume fluctuations.

Exposing the IAA to significant volume risks would not deliver any benefit to customers for the following reasons:

- short term volatility in revenues introduces uncertainty thereby placing a constraint on long term planning and ability to deliver long term customer requirements and priorities;
- the Authority's cost base is predominantly fixed meaning that costs can only be reduced in a meaningful way by limiting capacity. This would have the effect of constraining the industry in the event of an economic upturn;
- reductions/delays to capital investment could damage future capacity and service quality; while
- increasing the IAA's exposure to volume risk would mean an increase in the Authority's cost of capital and a consequent increase in the terminal unit charge.

The SES II amended Charging Regulation sets out a specific regime for traffic risk sharing as follows:

- where, over a given year, the actual number of service units is not higher or lower by more than 2% than the forecast established at the beginning of the reference period, the additional revenue or loss in revenue of the air navigation service provider in respect of the determined costs shall not be carried over;
- where, over a given year n, the actual number of service units is higher by more than 2% than the forecast established at the beginning of the reference period, a minimum of 70% of the additional revenue obtained by the air navigation service provider(s)

concerned in excess of the 2% of difference between the actual service units and the forecast in respect of determined costs shall be returned to airspace users in year n+2;

- where, over a given year n, the actual number of service units is lower by more than 2% than the forecast established at the beginning of the reference period, a maximum of 70% of the loss in revenue incurred by the air navigation service provider(s) concerned in excess of the 2% of difference between the actual service units and the forecast in respect of determined costs shall be borne by the airspace users in year n+2. However, Member States may decide to spread the carry over of such loss in revenue over several years with a view to preserving the stability of the unit rate;
- for the first reference period, where, over a given year n, the actual service units are lower than 90% of the forecast established at the beginning of the reference period, the full amount of the loss in revenue incurred by the air navigation service provider(s) concerned in excess of the 10% of the difference between the actual service units and the forecast shall be borne by the airspace users in year n+2. As from the second reference period, where, over a given year n, the actual service units are lower than 80% of the forecast established at the beginning of the reference period, the full amount of the loss in revenue incurred by the air navigation service provider(s) concerned in excess of the 20% of the difference between the actual service units and the forecast shall be borne by the airspace users in year n+2. However, Member States may decide to spread the carry over of such loss in revenue over several years with a view to preserving the stability of the unit rate;
- for the first reference period, where, over a given year n, the actual service units are higher than 110% of the forecast established at the beginning of the reference period, the full amount of the additional revenue obtained by the air navigation service provider(s) concerned in excess of the 10% of the difference between the actual service units and the forecast shall be returned to airspace users in year n+2. As from the second reference period, where, over a given year n, the actual service units are higher than 120% of the forecast established at the beginning of the reference period, the full amount of the additional revenue obtained by the air navigation service provider(s) concerned in excess of the 20% of the difference between the actual service units and the forecast shall be returned to airspace users in year n+2.

Consequently, it is the Authority's view that the Commission should look to align its Determination with the traffic risk provisions established under SES II.

CAR Question 3: What should the duration of the next Determination be?

The IAA proposes that the next determination should have a duration of just three years in order to align itself with the Single European Sky (SES) II amended Charging and Performance regulations. Article 18 of the amended Charging Regulation allows for deferred application of the Regulation to terminal activities until 1 January 2015. Similarly it is expected that performance targets for terminal operations will be in place from 1 January 2015. It would therefore be preferable that the Authority would be in a position to apply the EC Regulations without any conflict with domestic arrangements.

On the other hand, the Authority also accepts that a three year determination would require a change to the Commission's legislation. In the absence of such a change, a four year determination would be preferable.

Quality of Service

Summary of IAA Response:

1. The IAA continues to demonstrate its commitment to service quality through the introduction and development of innovative ways of meeting the needs of its airline customers.
2. Measuring delivery of key performance indicators will be a costly venture which will outweigh the benefits.
3. Given the high level of satisfaction among the airline community of the Authority's level of service, financial incentives will not add any material benefit, serving only to increase the cost of capital where service quality penalties are disproportionate to the Authority's revenue base.

CAR Question 4: Is the IAA currently providing a level of service that users consider appropriate?

The IAA has always been proactive in meeting the demands of its airline customers.

- Airspace capacity has been significantly improved at Dublin airport while the lower level airways system feeding Dublin, Cork and Shannon airports have been restructured to improve delays to arrivals at those airports;
- Dual runway operations at Dublin airport commenced in July this year for the 0630 – 0800 rotation;
- Runway Incursion Monitoring has been implemented as part of the Advanced Surface Movement Guidance and Control System (ASMGCS);
- New innovative initiatives are underway such as Point Merge which will enhance the flow of arrivals at Dublin airport, increase capacity and reduce arrival delays;
- Work is continuing on a CAT III ILS for Runway 10 with an expected completion date of quarter 1 2011;
- Clearance delivery data-link trials have commenced;
- The possibility of an early morning route (YI25) through the North Wales Military Training Area for traffic to the London TMA is under consideration;

These improvements have been brought about without any formal quality of service scheme, clearly demonstrating that regulation in this regard will not necessarily add benefits to the industry.

The Authority's annual Customer Care report, due to be published in quarter 1 2011, will show a strong result for the Authority (based on responses of sixteen significant airline

customers) in terms of our airline customers' assessment of our service quality and operational efficiency.

CAR Question 5: What aspects of service quality are important for customers purchasing aviation terminal services from the IAA – what information on Key Performance Indicators (KPIs) should be provided, and how frequently?

The Authority believes that quality of service in the areas of ATFM (air traffic flow management), regulation delays and slot adherence delays, environmental and cost issues such as reduction in taxi times, holding times at the ground holding point and holding in the air, are key issues for our customers. Innovative developments by the Authority as outlined above have allowed it to be proactive in meeting the needs of customers and, as noted above, airline customers' assessment of service quality continues to be very high.

It is the Authority's view that the cost of providing information on key performance indicators would outweigh the benefits as the key concern here is the accurate assessment of responsibility. Providing a gate-to-gate quality air traffic control service is dependent on a number of stakeholders. The extent to which these stakeholders contribute to a reduction in quality of service may be difficult to quantify and would be very time consuming to establish.

CAR Question 6: What financial incentives, if any, should be in place to achieve a given target level of service quality?

Safety is the Authority's foremost consideration in its provision of air traffic services. However, the Authority also recognises the importance of service quality to its customers. Given the Authority's clearly identifiable commitment to service quality, past, present and future, and given the satisfaction of airline customers on an overall basis with the level of service quality provided, the Authority does not believe that it is appropriate to introduce financial measures in this regard.

On page 13, paragraph 3.10, of the Issues Paper, the Commission appears to extrapolate an "at risk" quality term of 8% of IAA terminal revenues. The Authority believes this to be an unreasonable proposition by the Commission and would anticipate a significant level of discussion with the Commission in advance of any further considerations of financial incentives. The Authority would also expect such a discussion to include a system of bonuses.

Traffic Forecasts

Summary of IAA Response:

1. EUROCONTROL STATFOR continue to be the most credible source of traffic forecasting data available.
2. Traffic forecasting by the Commission could be construed as a costly exercise where a recognised forecasting unit already exists.
3. Aircraft weight is not a suitable metric for consideration of the Authority's cost base. Any consideration of a cost allowance must look at other volume metrics such as aircraft movements.

CAR Question 7: How should the Commission arrive at a forecast for Air Traffic Movements (ATMs) – does it suffice to take a third party forecast, e.g. EUROCONTROL'S forecast, or should the Commission conduct its own forecasting exercise?

The current aviation market is extremely volatile making traffic forecasting a very challenging exercise. The Authority's past use of EUROCONTROL STATFOR medium term forecasts have been found to be methodologically sound and realistic and, in our opinion, should continue to be the most credible source of traffic forecasting data available. In the normal course of business, the IAA, along with most of our European ANSP colleagues, uses the EUROCONTROL STATFOR forecasts for planning purposes, supplemented as required with local forecasts from the Dublin Airport Authority.

The Authority believes that EUROCONTROL STATFOR provides acceptable traffic forecast data and that an attempt by the Commission to replicate this function could be perceived as an exercise in increased costs for limited benefit.

CAR Question 8: If the Commission were to carry out its own forecasting exercise for ATMs, what factors should it take into account?

It is the opinion of the IAA that the Commission should not undertake such an exercise as traffic forecasting is already carried out to an acceptable standard, across Europe, by EUROCONTROL STATFOR.

CAR Question 9: Are there reasons to expect a significant change in distribution of aircraft types using the three state airports – in particular is there reason to expect a change from the recent trends observed?

Weight of aircraft is not a suitable metric for measuring demand for the Authority's air traffic control services. Any consideration of a cost allowance must look at other metrics such as aircraft movements.

Page 17, paragraph 4.9, of the Issues Paper asks the question whether, from a cost perspective, heavier aircraft would impose a higher cost burden on the IAA. The answer is that aircraft weights do not have a significant bearing on the costs of providing an air traffic control service at the airports.

Operating Expenditure

Summary of IAA Response:

1. Pensions costs should be recovered in full through the unit rate.
2. Benchmarking as a means of measuring efficiency is a useful exercise so long as consideration is given to comparability, best practice and achievability.

CAR Question 10: What are the key operating cost issues that the Commission should focus on?

It is the Authority's intention to prepare a forecast of operating costs, staff and non-staff, for the determination period from 1 January 2012. This forecast will be prepared in quarter 1, 2011.

However, the Authority believes it is important to highlight the significant issue of pension costs at this time. The IAA's pension fund is currently in a significant deficit situation. The major issue is the extent of the liabilities of the fund. The IAA has been addressing this issue with its employees in a proactive manner over the last three years and has arrived at a number of solutions which should return the fund to surplus. These solutions 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;
- 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 Authority's annual contribution rate continues to be 30.5% of pensionable salary for the foreseeable future; and
- additional cash contributions to the fund by the employer.

While these solutions represent significant costs, the planned outcome is a return to surplus of the pension fund.

The IAA takes the view that the full value of the pension costs paid out in the determination period should be included in the cost base. This view is consistent with practices in other regulatory environments and indeed, the SES II amended Charging Regulation looks to protect pension contributions as a pass thru' cost through references as follows:

Article 6 paragraph 2

‘Staff costs shall include gross remuneration, payments for overtime, employers’ contributions to social security schemes as well as pension costs and other benefits. Pension costs may be calculated using prudent assumptions according to the governance of the scheme and national law as appropriate and detailed in the national performance plan.’

Article 11a paragraph 2(c)

‘Paragraphs (a) and (b) may not apply to the difference between actual and determined costs due to:

- (i) Unforeseen changes due to national pension regulations and pension accounting regulations

CAR Question 11: Is the IAA currently operating efficiently – what evidence should the Commission rely on to establish whether the IAA is operating efficiently?

The Authority contributes to an annual report - ATM Cost Effectiveness Benchmarking report - produced by the Performance Review Unit of EUROCONTROL with the ACE working group. The most recent report issued in June last demonstrates that the IAA is performing efficiently and effectively, comparing very favourably with its ANSP peers.

The Authority agrees with CAR that benchmarking its performance against other air navigation service providers can be a useful exercise so long as the following points are considered:

- Comparability – comparisons should be on a like for like basis with adjustments made for factors that influence costs such as size, traffic complexity, cost of living/taxation, safety regulatory restrictions based on working hours of operational staff;
- Best practice – using respected and credible data sources; in this regard the data held by the PRU provides a good data source;
- Proportionality – identifying the key areas for review and how they should be reviewed, so that effort is concentrated on the major cost areas;
- Achievability – recommendations resulting from the analysis should be practical and achievable in the context of running an ANSP.

CAR Question 12: What proportion of operating costs should respond to changes in demand? Which of the categories of operating cost are most responsive to demand changes?

The Commission’s 2007 determination acknowledges that as traffic volumes grow then so too do operating costs. It is difficult to define a long term relationship between operating costs and volumes but the view that approximately two-thirds of an air navigation service provider’s cost base is fixed ties in with the Commission’s approach in

2007 that a 10% growth in traffic would require a 3% increase in staff costs. This approach is consistent with the model of NATS in the UK except that the operating costs increase covers all costs and not just staff costs.

The ability to respond to unplanned traffic growth is less than the ability to respond to unplanned reductions in traffic due to the time and costs involved in training air traffic controllers. It is the Authority's view that reducing costs in response to a short term decline in traffic should be very carefully considered due to the Authority's over-riding remit of safety. In addition, such a situation might restrict the Authority's ability to meet the service level demands of its customers required in an upturn.

Capital Costs

Summary of IAA Response:

1. The Authority does not expect to be remunerated for capital investment costs which it has not incurred.
2. The Authority expects its airline customers to benefit from cost efficiencies delivered on completed projects.
3. The Authority suggests that the new determination should be sufficiently flexible to allow it to respond to any decisions made in relation to a second runway at Dublin airport.
4. A rate of return should be established in conformity with the provisions of SES II amended Charging Regulation.

CAR Question 13: What should the 2012 opening RAB be, given that the IAA is projected to underspend relative to its 2007 allowance?

The Authority does not expect to be remunerated for capital investment not yet spent and therefore suggests that the opening RAB for the new determination should be adjusted to reflect the capital costs of investments not made.

The Authority adopts robust procedures to ensure that all capital investment projects are delivered in a timely fashion, to original specification and within budget. To the extent that the Authority has delivered a capital project at a lower price than anticipated, once again, it is the Authority's view that these efficiencies should also benefit its airline customers.

The Authority wishes to raise the specific issue of costs incurred to date, amounting to €1.7 million, in relation to the construction of a new visual control tower at Dublin airport. The current determination allowed for the cost of the proposed new tower to be recovered once specific milestones had been achieved. The decision by the Dublin Airport Authority to defer the construction of a second runway was made after the Authority had carried out some preliminary work, the objective of which was to secure planning permission for the tower. Planning permission for ten years has now been secured. The Authority would like to discuss with the Commission how it can be remunerated for these costs.

CAR Question 14: Do parties have preliminary views on either the specific capex projects which will be required post-2012, or the level of overall capex the IAA is likely to need in the forthcoming regulatory period?

It is the Authority's intention to produce a detailed capital investment programme covering the new determination period. This programme will be made available to the Commission in quarter 1 2011.

The Authority proposes that the allowance for depreciation should be calculated on a straight line basis over the useful economic life of the asset, as defined in its financial statements.

The Authority wishes to raise, in advance, the construction and fit out (including costs of training) of a new visual control tower at Dublin airport, due if and when the Dublin Airport Authority construct a second runway. This project, and its associated costs, was addressed in detail in the current determination. The Authority suggests that, while the date of construction remains unclear at this stage, the new determination should be flexible enough to facilitate the Authority commencing construction and fit-out of a new visual control tower, once an agreement for a new runway is in place. As explained before in many communications with our airline customers, the existing control tower at Dublin airport is not of sufficient height to allow it to see the full length of a newly constructed second runway. Having considered all alternatives, the only viable outcome will be for the Authority to construct a new control tower which meets in full the needs of the airport. This tower will need to be fully operational in advance of the new runway being commissioned for use.

Complementary to the second runway project are the potential operating cost implications arising from any required airspace change proposals which would follow from the development of a new runway at Dublin airport. These costs could be significant and should be borne in full by the other stakeholders.

CAR Question 15: How should the Commission determine a rate of return for the IAA?

Article 6, paragraph 2 sub-paragraph 5, of the SES II amended Charging Regulation states the following in relation to cost of capital:

‘Cost of capital shall be equal to the product of:

- (a) the sum of the average net book value of fixed assets and possible adjustments to total assets, used by the air navigation service provider in operation or under construction, and of the average value of the net current assets, excluding interest bearing accounts, that are required for the provision of air navigation services;
- and

- (b) the weighted average of the interest rate on debts and of a return on equity employed or necessary to be employed to reflect, inter alia, the risk sharing set out in Article 11a.'

Paragraph 3 goes on to say:

'... the weight factors shall be based on the proportion of the financing through either debt or equity. The interest rate on debts shall be equal to the average interest rate on debts of the air navigation service provider. The return on equity shall be based on the actual financial risk of the air navigation service provider.'

Other Issues

Summary of IAA Response:

1. Over- and under- recoveries are a key component of a risk sharing model.
2. Exempted IFR terminal service units account for just 0.04% of total service units. Costs associated with these exempted flights are not material for separate consideration.
3. Ireland should continue to operate a single charging zone with a single terminal service unit rate for Cork, Dublin and Shannon airports.
4. Economic regulation model should not allow for negative CPI adjustments.
5. An “alert mechanism” should be included in the determination to protect the Authority’s revenue base from the prolonged impact of a volcanic eruption.

CAR Question 16: What should the Commission do about over- and under-recovery against the price cap between years – for example, should the IAA have the discretion to defer collection to later years in the case of under-recovery?

Over- and under-recoveries are a key component of a risk sharing model of economic regulation. To the extent that under-recoveries arise in a year/over the course of a determination, the Authority should be able to recover these costs in full through future price increases. Similarly, where the Authority over recovers its costs, its airline customers should be reimbursed in a similar manner. The suggestion by the Commission on page 41, paragraph 7.6, of the Issues Paper that no roll forward of any under-recovery would be allowed would only serve to increase the financial risk profile of the Authority resulting in a higher cost of capital.

The Authority supports the view that it should have the discretion to defer collection of any under-recoveries to later years. This would allow the Authority to smooth any increases in the terminal unit charge in times when actual traffic volumes are significantly lower than forecast traffic volumes.

CAR Question 17: Are there any issues arising from SES II developments that parties think should influence the Commission’s price cap?

The IAA fully supports the new SES II requirements being implemented through the Performance Scheme Regulation and the amended Charging Regulation (expected to be signed into law in December 2010). The Authority has included comments throughout

this response paper where SES II developments could influence the Commission's determination.

CAR Question 18: Are there any potential cross-subsidies the Commission should be aware of, for example, the costs of exempt flights or approach services at other airports?

On page 5, paragraph 2.7, of the Issues Paper, the Commission asks the questions

- 1) Do parties agree with the Commission's interpretation of the exemptions provision in article 9 of the Regulation (EC Regulation 1794/2006) and;
- 2) Are there any categories of exempted flights which should be included in the above list.

Exempted IFR terminal service units represent an immaterial proportion of total service units, being just 0.04%. While the Authority supports the application of Regulation 1794/2006 in providing that costs for exempted flights shall not be taken into account for the calculation of the unit rates, the reality is that the costs involved in collecting this data is not justified by the values concerned. The IAA suggests that costs of exempted flights should continue to be included in total costs.

The Authority confirms the following exemptions from terminal charges:

- Flights performed by aircraft of which the maximum take-off weight authorized is less than two metric tones;
- Search and rescue flights authorized by the appropriate competent body;
- Training flights performed exclusively for the purpose of obtaining a licence;
- Circular flights;
- Flights performed exclusively for the purpose of checking or testing equipment used or intended to be used as ground aids to air navigation, excluding positioning flights by the aircraft concerned

and proposes that no other categories of exempted IFR flights should be added to the above list.

CAR Question 19: Are there any other issues not already mentioned in this consultation paper which the Commission should be aware of in making a Determination on ATSCs?

Sub cap at certain airports

The Commission poses the question of a sub-cap at certain airports on page 6, paragraph 2.8, of the Issues Paper. The Authority does not support the view that a sub-cap at Dublin, Cork and Shannon airports would be helpful.

Ireland's current position of a single charging zone with a single unit rate for terminal operations is in line with all of our European colleagues bar two, Sweden and the United Kingdom. It is also worth noting that the amended Charging Regulation provides that

'In order to provide access for passengers to the air transport network and in particular to small and medium sized airports as well as to larger airports at an acceptable cost, Member States should be able to apply the same unit rate for terminal services charges at all airports served by the same air traffic service provider, or in several groups of such airports, in order to cover the costs of terminal services.

It is the Authority's view that the status quo of one charging zone and one terminal unit rate for all of the State airports should be retained.

Deflation

The Commission's economic model currently allows for the consideration of consumer price inflation (CPI) in the calculation of the unit rate. The question is raised as to the likely treatment of CPI in a deflationary environment.

Ireland is currently experiencing a period of negative inflation with the IMF database (October 2009) projecting inflation figures as:

2009	-1.8%
2010	-2.0%
2011	-0.6%

Likely levels of inflation in the new Determination period are uncertain but could be negative. The IAA proposes that CAR should not allow a negative inflation factor to be included in its formula of economic regulation as a negative adjustment would put pressure on the Authority's revenue base.

Most of the Authority's cost base is fixed and therefore cannot adapt to traffic downturns as quickly as its customers can. The Authority has limited opportunities to make corresponding cuts in costs as this would invariably involve a reduction in airspace capacity. In addition, the Authority's cost base is made up of approximately 50% staff costs. Given the worldwide shortage of air traffic controllers and the benchmarking evidence of the Performance Review Unit which shows Irish air traffic controllers remunerated below the European average, it is possibly unrealistic to imagine deflation of wages other than for a very short period of time.

Impact of the Volcano

Historical evidence suggests that an eruption of the volcano Katla may well follow the eruption of the smaller Eyjafjallajokull. Additionally, this may be accompanied by heightened activity from other volcanic centres in Iceland.

The impact of such events on the IAA's revenue will depend on the timing, scale and length of eruption, the height and density of resulting plumes and direction of prevailing winds. Additionally, the impact will also depend on the response of the safety regulator and airlines.

The Authority suggests that the Commission should explicitly allow for the activation of an "alert mechanism" for such events. This would provide an additional potential safeguard for the Authority should traffic risk sharing prove insufficient to maintain the company's financial stability and, therefore, its ability to provide a safe and efficient air traffic control service to its terminal customers.