### 21st February 2007

Mr. Cathal Guiomard Commissioner Commission for Aviation Regulation 3<sup>rd</sup> Floor, Alexandra House Earlsfort Terrace Dublin 2

Re: Proposed Maximum Levels of Aviation Terminal Services Charges
Draft Determination and Explanatory Memorandum
Commission Paper CP10/2006

Dear Mr. Guiomard

I refer to the above Commission Paper and wish to respond for the Irish Aviation Authority (the Authority) as follows.

### **Safety**

The Authority notes that Section 36 of the Aviation Regulation Act, 2001 obliges the Commission to "aim to facilitate the development and operation of safe, cost-effective terminal services which meet international standards." The Authority hopes that the Commission will endeavour to achieve this objective and will do everything it can to assist the Commission in its role of facilitating the development and operation of safe, cost-effective terminal services which meet international standards

Section 14 of the Irish Aviation Authority Act, 1993 provides that the principal objects of the Authority shall be, inter alia, "to ensure that Irish airspace and other airspace in relation to which air navigation services are provided by the Authority are used in a safe and efficient manner and to facilitate their use." The Authority is also required to give effect to the relevant Annexes to the Chicago Convention.

The primary function of the Authority is to ensure the safety of the total aviation system in Ireland and this has been its main objective since it was established. This safety objective applies to the regulation of the Irish civil aviation industry and also to the air traffic management of the 451,000 square kilometres of Irish-controlled airspace. This objective is paramount in the Authority's consideration of its operational and technical requirements, capital expenditure programme and financial performance.

The Authority's performance in this safety role is monitored and audited by international organisations such as the International Civil Aviation Organisation, Eurocontrol, European Joint Aviation Authorities, European Civil Aviation Conference, European Aviation Safety Agency and the European Commission. The Authority is regularly audited, positively, by most of these organisations.

The Authority's staff is mainly comprised of technical aviation professionals. We employ currently rated transport and general aviation pilots, operations professionals, air traffic systems engineers, air traffic controllers and radio officers, most of whom have many years professional experience in the industry. We have a unique track record of delivery of capital projects on time, to specification and within budget. Notwithstanding this we always maintain safety as our main and over-riding aim.

We do not consider that the Commission has the background or expertise to make a determination based on safety criteria. If the Commission seeks to disallow expenditure required for maintenance of safety or safety enhancement, then it must be aware that it may be over-riding our safety judgement for the provision of service as demanded by our customers.

## Indicative Price Caps for second regulatory period commencing 26<sup>th</sup> March 2007

The Authority notes that the Commission has calculated two indicative price caps covering the second regulatory period. It also notes that this was done to assist interested parties to understand the impact of different assumptions on various elements on the price level based on information to hand at that date (December 2006).

The lower of these price caps would result in a serious shortfall in revenue which would jeopardise the safety and effectiveness of terminal services at the three State airports of Cork, Dublin and Shannon. The Authority would be required to reduce the level of service in order to maintain safety levels.

The Authority has met with the Commission on a number of occasions in January and February and has supplied the Commission with additional information as requested. The information included further details on maintenance of safety, capital expenditure, air traffic controller training, productivity and cost-effectiveness. The Authority is currently preparing additional information for the Commission dealing with certain aspects of capital expenditure and training and labour costs.

The Authority would, however, view with concern that arbitrary deductions from its capital or operating expenditure programmes could be made by the Commission which might have an impact on the potential safety or operational efficiency of the Authority's air traffic management operations.

### **Draft Determination (para. 7 CP10/2006)**

The Authority would **strongly disagree** with the second scenario (ii) and the indicative price level of  $\in 2.07$  for 2007 as outlined in the Commission's draft Determination.

### Design and Scope of the Price Control (para. 5 CP10/2006)

The Authority's proposal in relation to recovery of its costs is that the Commission should amend its price cap mechanism to incorporate full cost recovery in the price cap mechanism. This would ensure that the Authority would be in a position to make the appropriate investment in infrastructure necessary to ensure the safety and effectiveness of terminal services at the three State airports at Cork, Dublin and Shannon.

The Commission's prevailing price control of a hybrid of price cap and cost pass-through appears to provide some adjustment for over/under-recovery of costs. However, as pointed out previously, the amount of costs under-recovered by the Authority at 31<sup>st</sup> December 2005 amounted to €2.9 million. This method of price control is inconsistent with the Authority's founding legislation which obliges the Authority to recover its costs.

The principle of cost recovery is well established and is practiced throughout Europe by the thirty-two members of Eurocontrol with the sole exception of the UK. The Commission appears to rely heavily on the UK experience of price control using the CPI-X approach. It is worth remembering that:

- The Authority has been shown to be more efficient than NATS, the UK air navigation services provider, by all international benchmarking exercises including Eurocontrol performance measurements.
- The price cap formula in the UK was modified in 2002 to prevent the bankruptcy of NATS as the volume risk had to be shared with the airlines. The licence was changed to facilitate this.
- NATS have not had significant investment in new systems since 2001, so an underlying capital expenditure programme, with a follow-through on charges, will need to commence in the future. The Authority, by contrast, currently has Europe's most advanced technology all delivered on time, to specification and within budget.
- The performance of the Authority's air traffic management system (ATM) is much superior to NATS system.

The Commission states that there are no incentives to minimise operating costs and that there is a risk of over-investment in the cost recovery method of price control. The reality, aside from economic theory, is that the Authority operates in a fiercely competitive market and is now competing with the other thirty-two air navigation service providers throughout Europe in an environment under the Single European Sky regulations that is developing towards a rationalisation of airspace with a proposed reduction in the number of Air Traffic Control Centres and fewer air navigation service providers. The Authority intends to remain at the forefront of safety, efficiency and technology in order to stay competitive. Thus, the very survival of the Authority provides a powerful incentive for it to remain cost-effective and efficient.

### **Traffic Forecasts – Volume Risk**

The Commission states that there are superior incentive properties with the CPI-X approach. The Authority agrees that this is true in the case of companies that are able to react to the incentives. The Authority is unable to react to the volume risk – as was obvious from the first

price control period. The effect of the fall in traffic in the aftermath of 11<sup>th</sup> September 2001; the outbreak of Foot and Mouth disease in the UK; recession in the US; the ensuing collapse in the tourist visitors from North America during 2002; and subsequently the outbreak of SARs were borne by the Authority and the Authority was unable to stimulate traffic growth by changing its price base.

This volume risk was a significant factor in the Authority's inability to recover costs amounting to €2.9 million during the period to 31<sup>st</sup> December 2005. The Authority has no control or influence over traffic and it is unfair to use this form of price control without permitting a pass through or recovery of the volume risk. The Authority would agree to forgo the difference in the return by accepting the lower cost of capital of 6.7% before tax in return for the elimination of this uncontrollable risk.

The Authority believes that the determination of the maximum terminal charge must take account of the projected level of demand and it is unjust that the Authority be penalised by being forced to bear the volume risk. The Authority is a service provider to the airport operator and must meet its requirements, including provision of service during periods when traffic levels are too low to meet the cost of doing so. This is a public service/political requirement that the Authority carries without identifying the offsets between peak and trough traffic periods.

The Authority pointed out to the Commission at the time of the first determination that the Commission did not appear to take due account of the above factors and their impact on the level of traffic demand. The forecast of traffic used by the Commission was over-optimistic and contributed in large measure to the under-recovery of  $\in 2.9$  million of costs in the period to  $31^{st}$  December 2005.

In addition, the Authority has limited control over the level of pay awards as decided under the National Pay Agreements. The Authority adopts Government policy and adheres to the provisions of the National Pay Agreements. The Authority has pointed out to the Commission that during the previous regulatory period the actual level of pay awards under the national pay agreements was significantly higher than the forecast level of pay as the eventual outcome of the Partnership 2000 pay award was determined ultimately by the Labour Court.

The Commission states that it is not persuaded by the Authority's proposal in respect of cost recovery, yet the Commission itself is already familiar with this concept as it has adopted cost recovery in relation to its own charges levied on the Authority. During the period of the first Determination, the Commission has over and under recovered its own costs, which in turn were passed on to the Authority, in each of the years as follows:

2001	Invoiced	€127,215	(Under)-recovery	(€9)
2002	Invoiced	€126,880	(Under)-recovery	(€51,518)
2003	Invoiced	€95,000	Over-recovery	€59,249
2004	Invoiced	€66,000	Adjustment	€162
2005	Invoiced	€23,722	(Under)-recovery	(€4,505)
2006	Invoiced	€324,060	Not available yet	
2007	Estimate	€321,000	Not available yet	

# The Statutory Objective and the Proposed Degree of Reliance on Statutory Factors (para. 5 et seq. CP8/2006; para. 5 et seq. CP10/2006)

## "a. the relevant charging principles of the International Civil Aviation Organisation (ICAO) and Eurocontrol"

The Eurocontrol Charging Principles are based on the ICAO charging policies; have been tried and tested over many years; and are universally accepted and understood within the aviation industry.

The Authority notes that the Commission proposes to continue with the existing weight based method for charging purposes (using the maximum certified take-off weight, MTOW).

The Authority believes that the airline community strongly favours the principle that aircraft weight be taken into account in the charging structure, rather than a movement-based formula. It has been given effect through the inclusion of maximum take-off weight (MTOW), modified in the case of en route services, in the charging formula. Historically, ability to pay has been the major factor in determining charges for air navigation services and the MTOW is seen as an appropriate proxy for ability to pay.

The Authority favours the continuation of a direct weight factor for terminal charges as the present weight-based charging mechanism provides the most equitable compromise between cost incurred, value of service provided and ability to pay.

# "b. the level of investment in aviation terminal services by the Authority, in line with safety requirements and commercial operations, in order to meet current and prospective needs of the airline industry"

The Authority's Capital Expenditure programme for the second regulatory period is derived from the Authority's Technology Strategy (ATM) 2006-2015 which was published in 2005. The aim of the Strategy is to deliver a strategic roadmap for the Authority's Air Traffic Management (ATM) Technology for the period 2006-2015. This Strategy is currently under review but elements of it have been updated for the purposes of this submission. It is proposed to update the Strategy regularly. The most significant update to the Strategy at this point is that provision has been made for the construction of two new control towers, one at Cork airport during the period 2007/08 estimated at €10.5 million and one at Dublin airport during the period 2009/10 estimated at €44 million.

The methodology used in compiling the Strategy was to:

- Identify the Communications, Navigation and Surveillance (CNS) requirements.
- Specify the strategy for the replacement or upgrading of these systems over the period to 2015.
- Identify which emerging technologies must be tracked in order to position the Authority for the challenges of 2010 onwards.

• Outline, where appropriate, the implications for the Strategy with regard to the Authority's Service Delivery Strategy and the development of a Functional Airspace Block between Ireland and the UK (or any other State).

Operational requirements are the driver for technology change, and can be expressed as customer requirements to increase the system capacity, maintain and improve safety, improve performance or remain compatible with changing Single European Sky requirements.

All identified technology projects are subject to approval by the Authority's Air Traffic Management Planning Group to ensure that the proposed technology changes meet operational requirements. Projects are subject to further business case analysis and capital expenditure approval before Executive approval and then Board approval. Large projects are also subject to approval by the Department of Transport. The Authority also applies all the Department of Finance Guidelines and EU Procurement Directives.

Full details of the methodology adopted in relation to the Authority's Capital Expenditure programme are set out in the Authority's Technology Strategy 2006-2015, a copy of which was submitted to the Commission on 1<sup>st</sup> September 2006.

The Authority has a track record of delivering large projects on time, to specification and within budget and this was evidenced during the recent upgrade of the Authority's national air traffic management system which was completed during 2004 at a cost of approximately €115 million. This project included the building of a new air traffic control centre at Ballycasey, Co Clare, extending the Dublin air traffic control centre and equipping them with modern air traffic management systems.

Fundamental to the Authority's philosophy with regard to its CAPEX programme is that it does not become engaged in systems development. The Authority instead, seeks as far as possible, to provide a "commercial-off-the-shelf" (COTS) solution, which has a proven operational track record, to its systems requirements.

Current investment in new systems and expansion in capacity should be seen in the context of:

- the failure in the past by air navigation service providers to ensure adequate long term ATM capacity to meet more rapidly generated market demand;
- the Authority's identified strategic need, in the context of the EU Single European Sky, to capitalise on market opportunities.

Significant expenditure is envisaged in the construction of two new Air Traffic Control Towers, one at Cork and one at Dublin. The requirement for these towers arises from operational (including safety) requirements by the Dublin Airport Authority.

The Cork tower is required as the Cork Airport Authority (CAA) is taking back the existing tower because the building has reached the end of its useful life and the proposal is that the Authority (IAA) will construct its own tower on a green-field site on the opposite side of the runway. The Authority has lodged a planning application with Cork

County Council. Following receipt of planning permission, tenders will be invited for the construction. An initial budget estimate has been made of €10.5 million for the construction and equipping of the tower.

The Dublin tower will be required if the second runway planned by the Dublin Airport Authority (DAA) goes ahead. It has been established that the existing tower at Dublin is not high enough to serve the proposed second runway and it cannot be raised sufficiently to meet the Dublin Airport operational requirements in light of the proposed new runway. DAA has suggested that a review and analysis of other site options should be undertaken to ensure that the optimum site is identified. The Authority will participate in this review. The Authority has planned for the construction of the tower and for completion of construction by end 2010 in order to prepare for full operational use by January 2012 on the assumption that the second runway will be operational by then. An initial budget estimate has been made of €44 million for the construction and equipping of the tower.

The construction and equipping costs of both the Cork and Dublin towers are initial estimates at this stage and firm estimates will only be available after the tender process for both construction and equipping. It is the Authority's intention to build and construct both towers. It has the necessary technical and operational expertise as to the operational requirements and it has a track record of delivering large projects on time, to specification and within budget.

If, for any reason, a decision is taken by the Dublin Airport Authority not to proceed with the construction of the second runway at Dublin, or to defer the construction so that it falls outside the second regulatory period, then the Authority will review the decision on the necessity for, or the timing of, a new tower at Dublin. If the Authority does not need to incur the expenditure on the tower, then it will not charge the customers. This is one of the fundamental principles of the cost-recovery system.

The Commission refers to its calculation of the "steady state" level of capital expenditure and its impact on charge levels and the value of the Regulatory Asset Base. The concept of "steady state" level of capital expenditure is meaningless. As has been pointed out above the Authority engages in capital and other expenditure because of the requirement to support airport and airline operational requirements. These are the drivers for technology expenditure, and can be expressed as requirements to increase the system capacity, maintain and improve safety, improve performance or remain compatible with changing Single European Sky requirements. Much of the forecast capital expenditure in the period 2007-2011 is to replace infrastructure that is coming to the end of its operational use and must be replaced.

## "d. the level of the Authority's income from aviation terminal services and other revenue earned by the Authority generally"

The Authority notes, and agrees with, the Commission's conclusion that it intends to continue with a regulatory till that only includes revenue earned by the Authority from aviation terminal services.

- "c. the efficient and effective use of all resources by the Authority"
- "e. operating and other costs incurred by the Authority in providing aviation terminal services"

# "g. the cost competitiveness of aviation terminal services with respect to international practice"

The Authority's operating expenditure supports the Authority's capital expenditure investment which derives from operational requirements to increase the system capacity, maintain and improve safety, improve performance or remain compatible with changing Single European Sky requirements.

The Commission has noted the attempts by the Authority to provide a cost-effective service to its customers during the first regulatory period. The Commission has also recognised that the Authority performs very well when measured against other air navigation service providers throughout Europe.

The Authority has consistently been one of the best value-for-money service providers within the Eurocontrol Route Charges System. The Authority's en route unit rate for 2007, at €24.79, is the lowest among the 32 Eurocontrol Member States.

This is also the situation in relation to aviation terminal charges. Details are given below of comparable aviation terminal charges at airports in the UK and elsewhere in Europe. The information is taken from the Airport and Air Navigation Charges Manual which is published by IATA. This information shows that at those airports where Terminal Navigation Charges are charged on the basis of MTOW, the charges can vary as follows:

	GBP per tonne	€ per tonne
London Heathrow	1.46	2.18
London Gatwick	1.46	2.18
London Stansted	1.46	2.18
Glasgow	2.03	3.03
Newcastle	6.10	9.10

Two typical aircraft using Cork, Dublin and Shannon would be a Boeing 737 with a MTOW of 67 tonnes and an Airbus A 320 with a MTOW of 73.5 tonnes. Terminal charges for these aircraft at the above airports and also some European airports are as follows:

	В 737	A 320
	€	€
Cork, Dublin, Shannon	129.98	142.59
London Heathrow	146.00	160.16
London Gatwick	146.00	160.16
London Stansted	146.00	160.16
Glasgow	203.00	222.69
Newcastle	610.00	669.18
Amsterdam	351.19	388.70
Copenhagen	172.00	189.19
Helsinki	162.06	169.74
Munich	166.52	174.41
Berlin	166.52	174.41
Paris	250.21	271.95

The final report commissioned by the Performance Review Commission, "ATM Cost-Effectiveness (ACE) 2004 Benchmarking Report" and the draft 2005 Benchmarking Report indicate that the Authority's performance is better than the European average in each of the following areas:

- Economic cost-effectiveness
- Financial cost-effectiveness
- Efficiency delays
- Air Traffic Controller (ATCO) hour productivity
- Employment cost per ATCO hour

Details of these benchmarks are given in the attached schedules accompanying this letter.

Studies with the Federal Aviation Administration (FAA) in the US in 2004 and the DFS in Germany in 2006 show that the Authority is more efficient than comparable terminal operations there.

## "f. the level of quality of aviation terminal services, and the reasonable interests of the users of these services"

The Authority recognises and welcomes the fact that the influence of its airline customers on its core air navigation business is increasing each year. Customers are more focused on costs and service levels than previously, as airline operating margins remaining very tight in a highly competitive market.

On an annual basis, the Authority conducts an extensive consultation process with its customers through the "Customer Care Programme". These meetings are held at the customers' corporate head offices in order to ensure the most senior level of airline participation The objective of the Programme is to deliver strategic messages to the Authority's top airline customers (in revenue terms) and to generate much needed feedback on key issues.

The Programme, which has been expanded and improved over the years in response to customer needs, is managed by the Commercial and Strategy Directorate, supported by the Operations Directorate. The feedback obtained from these face-to-face customer meetings is valuable and helps the Authority to identify how it can meet the needs of its customers. These meetings help to build strong relationships between the Authority and its key customers, which is critical to the Authority's long-term survival. A number of carriers have stated, in feedback received in the Customer Care Survey, that this process sets the Irish Aviation Authority apart from other Air Navigation Service Providers.

#### Main focus areas 2006 and 2007

The Customer Care Programme of 2006 focused on the following:

• **ATC Operations** – The Authority's Service Delivery Strategy implementation, full rollout of the Northern Oceanic Transition Area (NOTA), major airspace changes on the UK/Ireland boundary and a number of other tactical operational achievements.

- **Single European Sky** The Functional Airspace Block study between the Authority and NATS, the FAB Business Case and the possible charging options.
- **Financial** User Charges and estimated savings delivered to each customer in 2006.
- **Technology** A major navigational aid replacement project and the Authority's strategy and long-term investment plan.
- **High Frequency Voice Communications Ireland and Iceland Joint Network** Overview of joint network proposal with the Icelandic Service Provider, operational trials and potential savings.
- Customer Relationship Management System (CRM) Outline of our new online CRM System.

Some focus areas are repeated annually, most notably discussions on User charges, however in 2007, the main additional focus areas will be:

- **Full utilisation of NOTA airspace** Focus on how each customer can more efficiently flight plan through Irish Airspace.
- **Full implementation of the online CRM system** This will help deliver a more efficient stakeholder consultation process and enhance our existing Customer Care programme.

### **Customer Care Survey and Customer Scorecards**

The Authority also conducts a **Customer Care Survey**, online via <u>www.zoomerang.com</u>. In 2006, 17 Customers were requested to complete the survey covering the following areas:

- Customer Communications
- Safety
- Service Delivery
- Operational Efficiency
- Responsiveness
- Innovation and Continuous Improvement
- Summary comments

Customers rate the Authority's performance in each of the above and the survey helps the Authority to identify what needs improvement at an operational and corporate level.

The new CRM system incorporates an interactive **Performance Scorecard** between the Authority and each airline customer. The Authority will be scored in relation to operational efficiency, economic efficiency, customer relations and innovation. This will be run alongside the annual survey.

## Service Quality Explanatory Memorandum (para. 8 CP10/2006) and Service Quality (para. 11 et seq. CP8/2006)

The subject of delays can be addressed under many headings but perhaps a useful distinction is between delays encountered in entering the ATM system and delays experienced while in it.

The major delays in entering the ATM system occur when traffic demand exceeds capacities declared by control centres along the flight route or at the airport of destination. The Central Flow Management Unit (CFMU) of Eurocontrol provides this "metering" function and restrictions imposed are in the form of a slot or "window" within which aircraft must become airborne. The centralised nature of this function means that considerable data is available on this form of delay and as a result it is the most used form of performance indicator for the ATM system.

The en route part of the Irish ATM system does not routinely produce any CFMU delays. The minimal amount of delays generated in our terminal operation is administered by the CFMU. These delays predominantly occur at Dublin Airport and arise for many reasons including inter alia weather, traffic bunching, airport infrastructure, incidents at the airport, military activity etc. The random nature of the demand side (i.e. Traffic bunching) for the provision of ATM services (particularly at Dublin which does not yet have fully co-ordinated status) makes the efficient provision of capacity to all traffic peaks extremely difficult. Notwithstanding this constraint the terminal ATM service is operating in a very efficient manner generating only minimal delays.

The Commission pays tribute to the Authority's track record of relatively low delay at the Dublin Area Control Centre (ACC) in CP8/2006. It also refers in CP8/2006, page 52, to "Dublin Airport's share of total delay was 27 per cent" according to PRR 8, Annex II. It is worth noting that the category of "Airport Delay" can be broken down into about two hundred discrete and different ATFM regulation delays.

It is not apparent from the PRR 8, Annex II data that during 2005, 30% of Airport Delays were attributable to weather conditions, while in 2006, 41% of airport delays were related to weather conditions. A summary analysis of the ATFM Regulation Delays for Ireland is as follows:

	2005	2006
	%	%
Weather	30	41
ATC Capacity	50	28
ATC Routing	12	_
Implementation/sectorisation (West End)	_	11
Aerodrome Capacity	8	6
Miscellaneous including security		14
	100	100

It should also be noted that Eurocontrol and the CMFU attribute delays to an airport that an aircraft departs from, regardless of where the delays are incurred during the flight. A true measure of delay for an aircraft is to use an aircraft's departing "Slot adherence" which again, is affected by an airport's "co-ordinated status". Currently the Authority's slot adherence statistics for departing aircraft show that around 90% of aircraft leave within their slot. This is expected to improve significantly when Dublin Airport attains fully co-ordinated status.

The Commission also discusses ATCO productivity differences between Shannon ACC and Dublin ACC and suggests that there is some latent capacity at Dublin, as the performance indicator for Dublin appears much lower than that of Shannon, and may thus be able to deal with delays should they become significant.

It should be noted that Eurocontrol discusses ATCO hour productivity on the basis of the number of composite gate-to-gate Instrument Flight Rules (IFR) flight hours handled per air traffic controller (ATCO) hour on duty. The type of work handled by Shannon differs considerably from Dublin and this in turn affects the raw statistics. The Shannon ACC, and the ATCOs based there, primarily deal with long sectors in which IFR aircraft fly for long periods of time as they transit over Ireland between North America and Europe.

The Dublin ACC and ATCOs there, on the other hand, deal primarily with IFR terminal traffic, that take-off, turn east and exit Irish airspace within seven minutes into London ACC. Neither does this ATCO productivity measure take account of IFR traffic managed by Dublin ATCOs in UK airspace that has been delegated, for operational reasons, to Ireland. Dublin is the smallest ACC in Europe and therefore some of the performance measures are skewed by this fact.

Eurocontrol is aware of the Authority's dissatisfaction with this ATCO productivity measure as it does not take account of the different business models managed by Dublin ACC and Shannon ACC., i.e. en route versus terminal. Neither does it recognise Visual Flight Rules (VFR) traffic which is considerable at Dublin ACC and adds to the complexity of the operation.

No universal method of measuring the performance of terminal Air Navigation Services (ANS) has been developed. The close interaction of ANS provider, Airport Operator, Airlines, Military airspace and environmental constraints, make the task extremely difficult. Performance measurement in the en route phase of flight, which should be less difficult because of the reduced number of entities, has not yet been developed. The three major key performance areas under which ANS performance can be assessed are:

- 1. Safety
- 2. Delay
- 3. Cost-effectiveness

Delays and less than optimal routings, within the ATM system, are more difficult to measure. Reliable and consistent data will only become available for this purpose when they are captured automatically. The production of other relevant performance indicators such as predictability, flight efficiency and flexibility will also only become possible when such data are captured.

The Authority is committed to providing, on a sound commercial basis, safe, efficient and cost-effective air navigation and regulatory services which meet the needs of its customers. The Authority will continue to seek improved efficiencies and productivity because it believes that the present cost recovery system meets the interests of the Authority and those of its customers once operated in a cost-effective manner – which we believe to be the case.

Yours sincerely

Eamonn Brennan Chief Executive