Submission made by the Aer Rianta Section of the IAESA Branch of IMPACT to the

> **Commission** For **Aviation** Regulation

This submission is made by the Aer Rianta Section of the IAESA IMPACT Branch.

IMPACT is the largest public sector trade union in the Republic of Ireland, with over 40,000 members in health, local government, education, the civil service, state-owned companies, telecommunications, aviation, and the voluntary and community sector.

IMPACT was founded on 1st January 1991, through the merger of three unions with a long tradition of serving those who serve the public.

IMPACT is affiliated to the Irish Congress of Trade Unions and the international trade union body Public Services International. We are also affiliated to the European Public Services Union.

Our objectives are:

- ♦ To protect and promote the interests of IMPACT members
- ♦ To maintain and improve their conditions of employment
- ◆ To provide services to IMPACT members
- To promote excellence and effectiveness throughout the public sector
- To promote equality of opportunity in the workplace
- To promote equity and equality in society

There are 3,500 members within the aviation sector of IMPACT. The Aer Rianta Section within the IAESA IMPACT Branch represents middle management and professional staff within Aer Rianta, and accounts for 10% of the aviation members.

The Aer Rianta Section of IMPACT believe that Aer Rianta as an organisation has served Ireland very well over its whole existence. This in the main can be attributed to the dedication, professionalism and hard work of its management and staff. We believe that Ireland has invested large amounts of resources in its Airports and that significant returns have been made to their owners. We believe that just as Aer Rianta's shareholders are entitled to a fair return on their investment as are its customers in terms of best quality service at a fair price, so too are its staff in terms of quality employment at a fair remuneration. In this partnership all the stakeholders can benefit from a strong and vibrant National Airport Authority. The Commission for Aviation Regulation is a positive move in delivering these mutual benefits to all the airport stakeholders.

Summary

IMPACT has problems in accepting the efficiency measures used in the draft determination. There are many doubts being cast on the measures used at both a practical and academic level. Other people have attempted to overcome the problems identified with the measures used, there is no evidence shown in the draft that any other measures were looked at. Work Load Units are shown to distort comparisons between Aer Rianta airports and its peers. Use of other work measures shows Aer Rianta performance as being excellent.

The measures used are all cost based. Aer Rianta is a very strong performer on revenue and price based measures of efficiency. When Aer Rianta is measured on basis it out-performs most of its peers. Aer Rianta has to bear higher costs than many of its peers as it must provide policing at its airports, while its peers have the benefit of a national police service. Aer Rianta chooses to operate a large amount of the airport commercial business. Aer Rianta performs much better than its peers in commercial income per unit of traffic than its peers. Aer Rianta's high commercial returns cross-subsidise the aeronautical business where returns are lower than most of its peers. This submission argues that real economic welfare is served by lower charges to its customers and that this is what Aer Rianta has consistently achieved. A measure of increased productivity can be seen in the ten years between 1991 and 2000 when passenger traffic at Aer Rianta airports increased by 240% while average annual staff numbers increased by 21%.

This submission argues that the Commission has taken too literal a meaning of terms not defined in the Aviation Regulation Act. These meanings defeat the spirit and longer term aspirations of the Act in seeking for the regulation of airports to increase the efficient and effective use of all resources by the airports, and an airports role in the economic development of its region. Aer Rianta can be more efficient and effective and provide better regional economic welfare by having a single charging level. The Act does not preclude this.

The Commission provides a model of transparent and ethical business administration standards. The draft spoils this effect in that it presents most of its findings with little or no justification for how there were obtained or decided. This is a particular failing in areas where a considerable body of opinion is published which supports a contrary position to that adopted by the Commission.

Introduction

In the following text the

- ◆ Act refers to the Aviation Regulation Act 2001.
- Commission refers to the Commission for Aviation Regulation.
- ◆ Draft or draft determination refers to the Draft Determination and Explanatory Memorandum published 26th June 2001

IMPACT believe the draft determination to be seriously flawed in that:

- 1. It uses measures which are inappropriate for what they set out to measure and as such does not meet with the requirements of Section 33h of the Act.
- 2. It tries to address inadequate definitions within the Act and as such seems to not to fulfil the longer-term objectives of the development of efficient and effective airports which meet the needs of users.
- 3. Its enactment as it stands would be contrary to Section 33d of the Act in that the determination shall have due regard for the contribution of the airport to its region.
- 4. Its enactment would be contrary to Section 33b of the Act in that its emphasis on flawed efficiency measures threatens the sustainable and profitable operation of the Aer Rianta airports.
- 5. Its enactment would have the effect of reducing employment in Aer Rianta in that its emphasis on flawed efficiency measures ignores employees as resources which in Aer Rianta's case are used to generate excellent commercial profits, and rather could cause Aer Rianta to concession business that Aer Rianta can make more profit on and in which it is recognised as a world leader in the field.
- 6. The Commission while being very open in their dealings generally and with the information supplied by the various organisations concerned with this process, do not apply the same rules to their own work and do not justify or show how many of their figures used in the draft determination are arrived at

At the outset it must be said the setting up of the Commission is something which IMPACT welcomes. We believe that such a body brings a degree of professionalism and business efficacy sadly lacking in the past. That is not to say we are entirely happy with the legislation, we believe it was not drafted to the same high standard usually expected from our parliamentary draftsmen and women. This we feel may lead to disputes. However we must work with what there is for the moment and this is what we will do. On the following pagers we will try to justify what we have outlined above. This document is by its nature a critique. This is somewhat negative but we feel it is for others with more resources and expertise to talk of the deliverables.

Efficiency Measures

Clearly the Act imposes a duty on the Commission in making the determination to have due regard for the "efficient and effective use of all resources by the airport authority" (section 33c). In making a judgement as to how well the authority is making effective and efficient of its resources the Commission reports (section 3 of the draft) that it relied on a variety of information and on a consultants report of Aer Rianta's operating efficiency. However, details of how these measures were assessed as being suitable is not contained within the text. The measurement seems to have relied on five performance indicators, as these are the only concrete figures included in the draft.

Performance indicators in an airport context are generally regarded as been developed by Prof. Rigas Doganis and Dr Ann Graham of the Transport Studies Group, Polytechnic of Central London in the early 1970's (now University of Westminster). The workload unit was an airline measurement used to reflect the fact that cargo (or more correctly freight and mail) and passenger traffic are both revenue generating traffic. Internally in most of the combined airlines (passenger airlines that carry freight in addition to passengers) there was a need for cost and management accounting procedures to have a measure which could be used to compare all the traffic on one When Doganis and Graham's original work was carried out on route or trip with another. European Airports in the early 70's most of these airports were very heavily involved in cargo and passenger handling. This is unlike the situation today when most airport authorities have got out of or are getting out of handling services. Doganis in his book "The Airport Business" 1992 states that comparability problems are abundantly apparent in the airport industry. difficulties arise in six main areas, activities performed, level of government involvement, financial accounting procedures, nature of government subsidies, sources of finance and the design/service standard at each airport. Doganis propose 28 performance indicators as being "useful" to airports in attempting to measure their economic efficiency.

Clearly performance indicators have major difficulty in the absolute measurement of an airport's performance. To be absolute all the six factors listed by Doganis, (and this paper would contend some others not considered here, see below) would need to be exactly alike for each airport under consideration. This paper contends that performance indicators are relative measures, which can only be used to measure specific areas of performance against previous performance of the same specific areas for the same airport, or airports which operate in exactly the same way across all their activities.

The determination uses only five measures (when others recommend 28 or more). The five measures are all cost rather than revenue based. Doganis states that "revenue performance indicators are easier to calculate than cost efficiency indicators and greater reliance can be placed on the actual figures produced". Why do the Commissioners only use five? Furthermore the five used are cost based and are recognised by a world expert as being less reliant than revenue based indicators. Based on only these and in absolute terms the Commission claims that Dublin is 15% less efficient than the best of its peers and Shannon is 25% less efficient than its peers.

Figures for the year 2000 published on the ACI web site for traffic at Brussels show passenger traffic at 21,604,478 and cargo traffic at 634,342 tonnes. This equates at 100 kgs per WLU to 27,947,898 WLUs. In other words cargo traffic at Brussels increased WLUs by 22.7%.

ACI figures again for the year 2000 for traffic at Copenhagen show passenger traffic at 18,294,387 and cargo traffic at 419,342 tonnes. Again at 100 kgs per cargo WLU the total WLUs are increased to 22,487,807. In other words cargo traffic at Copenhagen increased WLUs by 18.6%.

The Figures for Dublin for the same period are 13,843,528 passengers and 150,023 tonnes of cargo which equates to 15,343,758 WLUs. Cargo traffic increased WLUs by 6.5%.

The cargo business at most European airports exists with minimum resources applied by the airport authority. The cargo is moved through terminals operated entirely by the handlers and on to aircraft again using equipment provided and operated by the handlers. There are no information desks, security checks, flight information systems, lifts, escalators etc. etc. provided by the airports for cargo. At Dublin Airport for example there are only two cargo dedicated employees. A small amount of property administration and operations staffing is required but none of it dedicated. The amount of staff dedicated to cargo at all European airports is of a very small size relative to the overall size of the cargo business at these airports. Surely therefore an airport which has a very large amount of cargo traffic relative to its passenger traffic will seem to be much more efficient on a cost or employee per WLU basis.

Incorporating cargo operations into the measurement of airport efficiency is generally considered to be a desirable goal. In using the WLU in its airport efficiency measurements the Commission appears to be breaking new ground as it seems that no body in the World is using them in the same way. However, the use of 100 kgs of cargo per 1 WLU has been questioned for some time as an accurate equivalent measurement of passenger traffic (see below).

The nature of cargo traffic is further complicated in that there are two very different elements of a cargo movement. One is the movement of the "paperwork" which may be the same for a one kg consignment as for a one tonne consignment. The other is the physical movement of a unit of weight, but even that is complex because the size to weight ratio is different for every consignment as is every consignment being of a different shape.

The task of incorporating cargo traffic into the measurement of an airport's performance efficiency is very difficult and given that its importance as an airport's measure of output efficiency is so difficult the question must be asked as to whether it is a valid measure. The Transport Studies Group at the University of Westminster continue to work on finding a creditable alternative to the WLU. At the same time many experts feel the number of Aircraft Movements at an airport should also be taken as an indication of the inputs which make up an airport's production. The Transport Research Laboratory in the UK is also involved in trying to measure airport efficiencies. They publish an annual review of 39 airports and airport groups using 34 performance indicators. They have worked with the Universities of Westminster and Durham and the Ecole National des Travaux de L'Etat to establish measures which could accurately and absolutely measure airport efficiencies. So far they have developed a unit of traffic which uses WLUs and Air Transport Movements (ATM) in a measure they call Airport Throughput Unit (ATU). They feel this is a better measure of airport production than the WLU. They continue to work with Durham with a view to a single measure, which could be weighted and adjusted for the many differences in airport operating environments, and thus give an overall total overall performance indicator.

Clearly then, using a very small number of performance indicators to measure what is very clearly not like with like is of questionable validity. The Commission has not indicated in any way within the draft why they use such a small amount of indicators, why they use the particular indicators, why they use WLUs when there are such reservations about their use.

Other Factors/Issues affecting Airport Productivity

The determination shows that in 1999 Dublin Airport's total operating expenses per WLU were 10.4 Euros which compared well to some of its peers but was 30% higher than the average of the best of its peers. The best peers were Brussels, Copenhagen, Glasgow, Oslo, and Stansted. Details not taken into consideration in making the comparison include (details from exhibit 2 of determination)

- ♦ 94% of passengers at Dublin are International v 57% average at the best of peers
- ♦ 95% O & D passengers at Dublin v 65% average at the best of peers
- ♦ 1,345 equivalent full time employees v 825 average for the best of the rest

The most respected writers of text books on airport operation and design including Horanjeff and Mc Kelvey, De Neufville, Ashford et al, Doganis etc. all point to the fact that the resources consumed by international and O and D passengers is very much higher than transit and domestic operations. Some authors suggest that the figure for longer international services may be as high as three times the amount for domestic operations. On this basis there is a strong correlation on the Commissions definition of efficiency and the proportion of long, short and domestic passengers handled at the three Aer Rianta airports.

The airports in the peer group do not employ as many employees as Aer Rianta. However, if this is broken down into the classes of employees the figures used in the draft determination do not hold up. Aer Rianta directly employs airport police, the peer airports are policed mainly by national police. For example at Brussels there are over 800 police and security staff not employed by the airport authority. Aer Rianta employ their own commercial staff to operate most of the airside retail outlets. The peer airports do not employ their own staff to operate their retail outlets

Is it fair to say that Aer Rianta airports are inefficient on an operating cost basis, when non operating staff are included in the operating performance measurements, or when very large amounts of police work is required to be provided by the airport, and seen as an operating cost the other airports do not incur, and therefore making them appear to be more efficient or as argued previously when the traffic mix is so different in the airports under review.

Problems Relating Poorly Defined Terms

The determination tries to apply a literal meaning to terms which have not been defined, and which focus only on costs. In the preparation of this submission we have sought a standard definition used by one of the accountancy bodies of the terms "cost effective" and "cost competitiveness" but have been unsuccessful.

We feel the term used in section 33 h i.e. "cost competitiveness" cannot be interpreted in a literal manner in that enterprises do not compete on their costs, they compete on their price e.g. would the prospective customer of an enterprise ask the question before purchasing goods or services as to what was the cost of the production of your goods or service? No, it is more likely he or she would be more likely ask what is the price you will charge me.

In section three of the determination, it states that users are not defined. The Commission takes "the common sense meaning" of this term. Likewise nowhere is the term cost effective defined in the Act. If the Commission is directed in the Act to "facilitate the development and operation of cost-effective airports which meet the requirements of users ---" and there is no definition of what this means how does the Commission arrive at its definition. We feel the Commission should take a common sense meaning of the whole sentence and apply more weight to what the users clearly want i.e. the best value to users bearing in mind that section 33c directs the Commission to have regard for the efficient and effective use of all resources by the airport authority. This submission clearly shows (see below) that Aer Rianta's aeronautical charges are low and appear to be cross subsidised by better than their peer's commercial returns. Applying the spirit if not the letter in these definitions we believe is proven to be in the better economic welfare of the users

Other Measures Which Show Aer Rianta to be an Excellent Performer.

In 1999 the Minister of Public Enterprise commissioned a report on the strategic options for Aer Rianta, undertaken by Warburg Dillon Read, AIB Capital Markets and SH&E. This report shows that in percentage terms Aer Rianta's aeronautical revenue was the lowest of 15 European airports or airport groups including the "best of the peers" as quoted by the Commission. In the UK's Transport Research Laboratory (TRL) Annual Airport Performance Indicators Report for 2000 (see above) of 39 world wide airports and airport groups, Aer Rianta at 31st position was the lowest of the European airports except Gatwick in terms of the ratio of aeronautical revenue to total revenue. Aer Rianta figure was 34.7% aeronautical revenue and Gatwick was 31.5%. The BAA group was 44.4% and Copenhagen was 47.8%.

In Aeronautical revenue per passenger Aer Rianta was considerably below any of the European Airports in the TRL report at 2.68 SDRs per passenger. The BAA group was 5.64 SDRs and Copenhagen was 4.33 SDRs. Surely these figures show that Aer Rianta is meeting the needs of its users in a very price competitive way i.e. offering a very low price for its services. And in terms of economic welfare low prices to consumers must be the best way this is measured.

It should be noted that service levels offered are to IATA Service Standard B for terminal buildings, which is the second highest IATA service standard. Runway, taxiway and apron construction and systems are designed to ICAO standards which are incorporated in Irish law and in the Airport Operating Licence conditions, as laid down be the operational regulation body i.e. the IAA. And therefore low price is not at the expense of low quality of service.

The logical conclusion of only measuring efficiency on an Operating Cost Efficiency basis is that Aer Rianta should reduce costs so that its efficiency measurements would look better. This paper is not against Aer Rianta reducing costs. It makes sound business sense to reduce costs. Using fuel-efficient heating and air conditioning systems will reduce costs. Employing seasonal staff, in front line jobs to cope with peak demand saves costs etc. However only relying on Operating Cost efficiency measures in an Aer Rianta context, with its relatively high staff cost per traffic unit, would have Aer Rianta sack all its commercial staff and bring in concessionaires to operate its commercial activities.

While there is always some scope for cost reduction across all of Aer Rianta's activities, because of its very high growth in a short time, Aer Rianta has not had the opportunity for cost

build up which tends to occur, as firms get older. So enforcing cost reduction in Aer Rianta would mainly affect the commercial area.

When factors such as security requirements, which require Aer Rianta to employ more staff in these areas than its peers are factored into employee productivity Aer Rianta performs as well as or better than most of its peer airports. Appendix A shows the annual averaged full time equivalent employees of Aer Rianta over the period 1990 to 2000 plotted against passenger and cargo traffic. This is we argue is a very positive proof of sustained improvement in employee productivity.

However, as with most of the measures of efficiency there must be some caution in the use of these figures. Some of the volume of an employee's workload is relative to the size and design of the assets they work with rather than the assets volume of production. For example an electrician who could be effectively employed in maintaining the lighting in an airport terminal with 10,000 light fittings could do so with little regard to the actual numbers using the terminal. If the terminal doubled in size and now had 20,000 fittings all things being equal two electricians would be required even if the numbers using it remained static. Without doubt some of the employee productivity in the past 11 years can be ascribed to "sweating the assets", and the very large expansion in terminal capacity due to the 6-Bay extension will in the early years of its operation see some loss of this apparent efficiency gain.

The Commission must have due regard for "the efficient and effective use of all resources by the airport". Knowledge and experience are a resource, a human resource. Aer Rianta in its best use of human resources turns a better commercial profit than any of the peer airports except Gatwick. It does so by using knowledge and experience directly in its commercial activities. Aer Rianta at present operates a single till system where commercial and aeronautical revenues are grouped. In using its human resources to best effect in this single till approach the commercial operation effectively cross-subsidises the aeronautical operation of Aer Rianta's business.

Suboptimalisation of Airport Resources by Different Price Levels

Among the "Regulatory Objectives" of Section 33 of the Act is -- "to facilitate the development and operation of cost-effective airports --- with due regard to the contribution of the airport to the region in which it is located"

This submission proposes that the Draft Determination Conditions i.e. maximum permitted revenue per WLU at Dublin to be £4.96 at Shannon £6.05 and Cork £7.15 is

- 1. Not a necessary direction under the Act
- 2. And such price differentials will in time increase operational costs and reduce the positive economic effects of the two smaller airports.

If the final determination keeps the proposed maximum revenue limits, and at the same time reduces or caps Aer Rianta's ability to achieve rates of return on their investments, which Aer Rianta feel will enable them to carry out all the work they consider necessary under their Capex programme; then aeronautical charges will rise. Perhaps not to the maximum levels permitted, but to a level significantly higher than Dublin Airport. Almost all economic theory will support this contention. The net effect of such price differential will be to reduce the propensity of the more cost conscious carriers to use Dublin Airport.

Freight carriers who at present serve the regions will tend to terminate their services in Dublin and try and operate their regional services via surface transport. This will affect inward investment in the regions, as companies in these peripheral locations can only operate if very fast and seamless supply chain systems are in place. The large express freight carriers offer this type of service.

Higher aeronautical charges will also tend to dampen passenger carrier demand. This will reduce passenger traffic in the very important leisure sectors, as well as reducing business travel options.

Reduced services will have negative economic effects in their regions in terms of reduced tourists numbers than would be the case with lower charges. There would be consequences for business travel by impairing the ability to serve/meet client's customers etc. Another consequence would be to build in delays into the supply chain for companies, thereby increasing their costs and reducing their efficiencies.

Reduced levels of business at Shannon and Cork airports will increase costs and reduce economies of scale. The lost traffic will not all go to Dublin Airport, a high proportion being lost. Aer Rianta's ability to operate "cost effective" airports will suffer.

If the directive is to have due regard for the contribution of the airport to the region in which it is located then we believe this directive is not served by this proposal on differential airport charges. Section 32.3 of the Act only states the Commission may provide for different levels of maximum charges at different airports, not shall. Section 32.4 allows for charges at all the airports to be taken into account when setting the charges at any one. Why, given these two sections in the Act could not a relatively simple standard maximum be set somewhere above the Dublin rate? As traffic at the three airports is so highly skewed in Dublin's favour a very small increase on the Dublin maximum would achieve what the draft is allowing without hindering the airport's role in regional development.

Transparency of Draft Determination

The Commission has attempted to maintain a transparent and open approach to its work. It has tried to make the working of the aviation industry accessible to all; it maintains one of the most informative web sites on this worldwide business. This is regarded by this organisation as the correct and ethical way for a regulatory body to work. We do feel however that the Draft Determination and its Explanatory Memorandum failed to live up to the Commission's own high standards in this regard. This document is very short on explanation as to how particular figures were arrived at or the justification for the use of these figures. While the Act does not direct the Commission to give explanations the Commission has set a standard and by not meeting this standard reduces the high esteem it has established in such a short while. The draft produced is a learned document based on the prevailing economic, business and legal theory and practice by a body charged with carrying out its work to the highest ethical standards. It would do an enormous disservice to the Commission if the final document does not meet the Commission's own high standards.

APPENDIX A

Aer Rianta Full Time Equivalent Employees				
Year	Employees	Passengers	Freight & Mail In Tonnes	Ratio of Passengers to employees
2000	2413	17931940	214315	7431
1999	2421	16492159	202412	6812
1998	2240	14796332	191505	6606
1997	2098	13351527	170211	6366
1996	2036	11956266	146681	5872
1995	1980	10567598	124144	5337
1994	1985	9315603	104263	4693
1993	1950	8371349	94109	4293
1992	1908	8164336	86661	4279
1991	1988	7466329	70055	3756
1990	2032	7846326	78567	3861

Wally Carpenter

Chairperson Aer Rianta Section IAESA Branch IMPACT 26^{th} July 2001.