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European Air Transport Public Service Obligations: A Periodic Review

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I. INTRODUCTION

The 'Third Package' of European Union air transport liberalisation measures came into effect on 1 January 1993 and has substantially reduced the restrictions on interstate flight operations. The package of measures also includes provision for the member states to impose 'public service obligations' on low-density routes which were deemed necessary for the purposes of regional development. In this paper, it is this legislation which is the main focus of attention. In the second section, the background to and contents of the 'Third Package' are reviewed. The competitive implications of these measures are briefly outlined. In Section III, the legislation relating to public service obligation routes is critically examined. The Irish government was first to invoke this legislation and several difficulties have come to light as a result. In the final section, recommendations on improvements to the legislation are proposed, based largely on the equivalent US 'Essential Air Services' (EAS) programme.

II. EUROPEAN AIR TRANSPORT LIBERALISATION

1. The EU 'Third Package' of Air Transport Liberalisation Measures

The European Union took substantial steps towards liberalising the internal European air transport market in July 1992 with the adoption of Council Regulations no. L240 relating to several key aspects of the industry's operation including access for Community air carriers to intra-Community air routes,

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licensing and fares. This package of measures, commonly referred to as the 'Third Package' of measures, represented a substantial step forward in the process of achieving a single market in the air transport sector. Previous packages (the First Package of 1987 and Second Package of 1989) represented more modest moves to liberalisation, although, as Button and Swann (1992) show, the application of articles 85 and 86 of the Treaty of Rome (relating to antitrust-type restrictions) to air transport in 1987 represented major progress on what had been a long slow process (Crowley, 1992; McGowan and Seabright, 1989; McGowan, 1994). Button and Swann give a very comprehensive review of this process and carefully analyse factors that led to the adoption of the 'Third Package'. Several of the negative outcomes associated with deregulation in the US are subject to safeguard provisions in the European liberalisation programme (i.e. computer reservation system ownership and bias, predatory pricing practices, slot allocation issues relating to hub airport dominance) (Van De Voorde, 1992; Button and Swann, 1992).

Council Regulations no. 2407/92 through 2411/92 cover a wide range of issues in the scheduled and non-scheduled passenger and cargo markets. Council Regulation no. 2407/92 deals with common licensing arrangements and the rights of Community-registered carriers to operate any aircraft owned within the Community. The licensing regulation requires that the principal place of business and registered office be located in the state in which the carrier is registered, that the carrier carries insurance and that air transport is the main concern of the licensee. Licensed carriers are not required to own their own aircraft, but they must have at least one at their disposal. These aircraft must be registered in the state's aircraft register, although it is left to the discretion of the member state to issue a licence to the carrier if the aircraft at their disposal are registered elsewhere in the EU.

Council Regulation no. 2408/92 covers access to intra-Community air routes. This includes the abolition of capacity restrictions between member states and the removal of restrictions concerning fifth-freedom and multiple designation rights² along with a gradual phasing-in of cabotage³ rights. Full cabotage is not required before April 1997. Consecutive cabotage is permitted where a carrier uses less than 50 per cent of its seasonal capacity on a service on which the cabotage segment is an extension or preliminary to an interstate route. This regulation also makes provision for the imposition of public service obligations and permits entry to be restricted on new routes between regional airports (these aspects are discussed in detail in the next subsection). Provision is made for

² Fifth-freedom rights are the rights of an airline to carry traffic between two foreign countries via its home country. Multiple designation is the right to designate more than one airline to operate on a given international route.

³ Cabotage is the right of a carrier of one state to carry traffic exclusively between two points within another state. Consecutive cabotage occurs when a carrier flies between two points within another state as a preliminary or continuation of a service to the home state.

member states to establish non-discriminatory rules for distributing air traffic between airports within an airport system (e.g. the London or Paris airport systems).

Council Regulation no. 2409/92 grants freedom for Community carriers to set air fares and rates for services, except in specific limited circumstances. In Council Regulation no. 2410/92, the Community competition rules are formally extended to the air transport sector, while amendments to certain categories of agreements and concerted practices in the air transport sector are made in Council Regulation no. 2411/92.

2. Public Service Obligations in EU Air Transport

Under Council Regulation no. 2408/92, the Council of Ministers adopted a regulation permitting the imposition of a public service obligation (PSO) in respect of scheduled air services. These PSOs are defined as

any obligation imposed upon an air carrier to take, in respect of any route which it is licensed to operate by a Member State, all necessary measures to ensure the provision of a service satisfying fixed standards of continuity, regularity, capacity and pricing, which standards the air carrier would not assume if it were solely considering its commercial interests.

(Official Journal of the European Communities, no. L240/10, 23 July 1992.)

The PSOs may be imposed by member states in relation to scheduled air services

to an airport serving a peripheral or development region in its territory, or on a thin route to any regional airport in its territory, any such route being considered vital for the economic development of the region in which the airport is located, to the extent necessary to ensure on that route the adequate provision of scheduled air services satisfying fixed standards of continuity, regularity, capacity and pricing, which standards air carriers would not assume if they were solely considering their commercial interest.

(Official Journal of the European Communities, no. L240/10, 23 July 1992.)

It is only in this paragraph that the PSO is mentioned in relation to an airport. In all other references, the PSOs are expressed in terms of routes. The regulation requires that the right to operate such PSOs be offered by public tender either singly or for a group of routes to any licensed Community carrier. The selected carrier is permitted to offer only passenger services under a PSO order, and fares and conditions may be quoted to the selected carrier. In the event of no carrier being willing to offer the required level of services, the regulation allows

member states to pay compensation⁴ and to limit access to the route to just one carrier for up to three years. In setting out an invitation to tender for the PSO,⁵ the member state is required to state the necessary standards of the order, rules for amending or terminating the contract and penalties for failure to comply with the contract. The member state must demonstrate to the Commission that other forms of transport cannot adequately ensure service when capacity offered exceeds 30,000 seats per year (this amounts to just over 80 seats per day and is a very low threshold). Other member states may propose satisfactory alternatives fulfilling the same PSO.

The Council did not put any financial instrument in place, nor were specific guidelines set out for the operation of such a programme. Compensation paid to carriers under these PSOs is to come from the individual state concerned. This regulation related to new Community PSOs coming into effect after 1 January 1993. In trying to assess the extent of pre-existing subsidy payments by member states to carriers for air service obligations, the Commission prepared a report for the Council and European Parliament, *On the Evaluation of Aid Schemes Established in Favour of Community Air Carriers*, in March 1992. In this report, it was shown that Greece, France, Italy and the UK were operating some system of direct operational aids to carriers for service on domestic routes. The detail and extent of these subsidies were not fully documented as this information was not forthcoming in many instances from the state governments. Some specific examples are quoted in the report, however.

III. CRITICAL ASSESSMENT OF THE PSO LEGISLATION

1. Irish Invocation of Article 4 of Council Regulation no. 2408/92

The Irish government is the first European state to invoke Article 4 of Council Regulation no. 2408/92, relating to the PSOs. Seven PSOs were imposed on domestic routes to the six regional airports in 1994 (i.e. six air routes between each of the regional airports and Dublin and, in addition, one route connecting three of the regional airports). The six airports, which opened for scheduled international air services between 1986 and 1989, experienced rapid increases in passenger volumes up to 1990 (477 per cent increase overall between 1987 and 1990) and very dramatic declines between 1990 and 1993 (51 per cent decline from 1990 to 1993). This pattern emerged for a variety of reasons which are discussed at length in Reynolds-Feighan (1993; 1995). With the decline in traffic

⁴ 'A Member State may reimburse an air carrier ... for satisfying standards required by a public service obligation imposed under this paragraph; such reimbursement shall take into account the costs and revenue generated by the service.' (*Official Journal of the European Communities*, no. L240/11, 23 July 1992).

⁵ The imposition of a PSO and these invitations to tender for filling the PSO order must be published in the *Official Journal of the European Communities*.

in each successive year since 1990, many of the airports, which are privately owned, face serious financial difficulties and even bankruptcy. Service to four of the airports has been reduced to one early-afternoon round trip per day. This makes connections difficult for many passengers and imposes additional travel time costs on business flyers who must stay overnight in the region or in the destination location because of the minimal frequency offered.

The potential benefit of air transport links to several peripheral regions of Ireland is reduced or lost when air services are withdrawn or reduced to a skeleton service. The Irish government invested almost IR£25 million (\$37.5 million) in these airports using exchequer funds and the European Union Structural Funds. These investments were made because it was felt that the airports were a vital component of the transport infrastructure in the regions and would contribute to regional economic development (Irish Department of Transport, Energy and Communications, 1994). However, the airports can only contribute to regional economic development if they have regular and convenient air services offered by air carriers. Ireland's two airlines, Ryanair and Aer Lingus, substantially reduced their schedules to the six regional airports in 1991 and 1992. The skeleton service remaining is forcing many potential passengers to drive long distances to the main Irish airport at Dublin to avail of service. The potential advantages of the airports *to the communities* are not being realised.

That the provision of a basic level of transport services is a prerequisite for *long-term* sustainable economic development was the argument that formed the basis for the Irish government's decision to invoke Article 4 of Council Regulation no. 2408/92 and impose public service obligations. The PSO orders set out guideline timetables for connecting flights at Dublin, minimum frequencies required, categories of aircraft to be utilised and a maximum return fare.⁶ Since no applications were received by carriers willing to enter the markets and provide the required services, the Irish government published an invitation to tender for the routes and an undertaking to limit access to one carrier on these routes in mid-1994.⁷ The Irish invocation of this regulation has highlighted several key difficulties associated with the EU PSO programme. These will be outlined and discussed below. Before doing this, however, a brief outline of the equivalent US legislation is given, since comparisons will be drawn between the EU and US programmes.

2. US Essential Air Services Programme

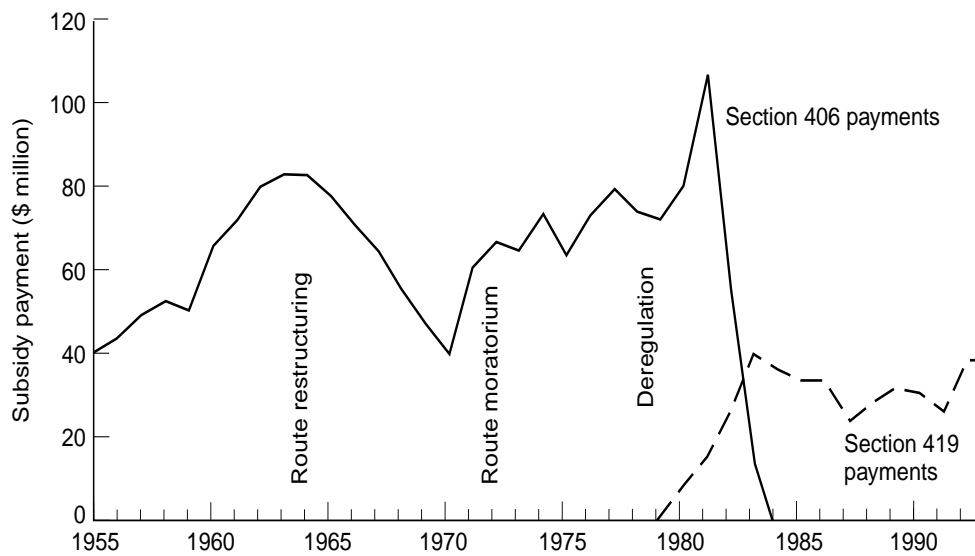
The US trunk carriers that were in existence when the industry was first regulated in 1938 received subsidy payments for the carriage of mail on a variety of short/medium-haul routes. As larger aircraft were being used and the trunks entered longer-haul routes, subsidy payments were reduced. In the 1950s,

⁶ *Official Journal of the European Communities*, 94/C, 3/03, 5 January 1994.

⁷ *Official Journal of the European Communities*, 94/C, 173/10–173/16, 25 June 1994.

subsidies were no longer required by the trunks. The US government was eager to develop the air transport system and particularly air services to smaller communities. Accordingly, it issued certificates to a new class of air carrier, the local service carriers, in the 1940s (Eads, 1972; Molloy, 1985). These carriers were not permitted to compete with the trunks and were restricted to serve short-haul/low-density routes. Subsidies were paid by the federal government and the Post Office to develop these routes. Throughout the 1950s, the subsidy payments were rising steadily as the local service carriers moved towards using larger aircraft. In an effort to reduce the payments, the Civil Aeronautics Board permitted route restructuring in the mid- 1960s and a large number of small community services were abandoned by the local service carriers. Subsidy payments fell, however. This policy was reversed in the early 1970s when a route moratorium was imposed. Once again, the subsidy payments began to rise as many operators were using small jet aircraft on routes with market characteristics more suitable for smaller turbo-prop equipment. The subsidy payments during this period were based on the overall financial position of the carrier rather than being prorated with output (US Office of Technology Assessment, 1982).

FIGURE 1
US Federal Air Subsidy Payments, 1955-93



Sources: Regional Airline Association, 1988-93; US Office of Technology Assessment, 1982.

The industry was deregulated in 1978, with the 'section 406' payments (i.e. the pre-1978 subsidies authorised under section 406 of the 1958 Federal Aviation Act) being phased out by 1983. The 'Essential Air Services' (EAS) programme was established under section 419 of the 1978 Airline Deregulation Act and permitted commuter carriers to avail of subsidies for service to small communities. The commuter carriers were non-certificated and had been permitted to start up in the 1950s on an experimental basis. They gradually began replacing trunk carriers and local service carriers on the short-haul routes that were being abandoned in the 1950s and 1960s. Prior to 1978, commuter carriers were not eligible to receive federal subsidies for services to small communities. In the 1978 act, this restriction was removed and the act required the Civil Aeronautics Board (CAB), the regulatory agency at the time, to draw up common safety, technical and operating standards for commuter carriers. The aim was to assure the travelling public that safety standards that prevailed for the certificated carriers (i.e. trunk and local service carriers holding a (federal) Certificate of Public Convenience and Necessity) would now be applicable to the commuter carriers. Since 1978, the number of commuter carriers operating has expanded rapidly and the EAS programme is now largely serviced by these commuter carriers. As Figure 1 shows, the subsidy payments have been maintained in the 1980s at significantly lower levels than those prevailing in the 1960s and 1970s.

The EAS programme is now administered by the US Department of Transportation (DOT) and continues to be funded by the federal government. The programme operates in the following way.⁸ Eligible communities/points were identified as those communities receiving scheduled air services in October 1978 (when the Airline Deregulation Act was passed). Several restrictions have been introduced in the last two years to reduce the number of new communities qualifying for the programme. These restrictions relate to the relative location of the community *vis-à-vis* larger regional and national 'hub' airports. The Secretary of Transportation determines the level of essential air service for each community (usually two round trips per day, six days per week) (US Department of Transportation, 1992). If this service is not being provided by a carrier, the DOT invites applications from carriers to tender for the service provision and specify if necessary the level of compensation required to fulfil the required air service level. One carrier is selected by the DOT based on several factors including fare structure, reliability of the carrier and interlining and/or marketing arrangements with larger carriers at the hub airport that the applicant carrier proposes to use. The DOT issues an order naming the carrier, the level of compensation payable and the period covered by the agreement. The carrier may, with the DOT's permission, enhance the service offered, provided that it is co-

⁸ See Reynolds-Feighan (1995) for lengthy discussion of the US programme.

sponsored by the community or state and that the increased service will result in self-sufficiency for the community within three years.

If another carrier at any time proposes to offer subsidy-free service to an EAS community where compensation is being paid to a carrier, the DOT may give notice to the incumbent carrier of its intention to discontinue the subsidy payments and the service obligation with that carrier. The new carrier may offer service covering the minimum service level. The incumbent carrier may choose to continue service without compensation on the route or to withdraw its service. If one carrier remains serving the community, it cannot withdraw service without notice to the DOT and until a replacement carrier is found. A single carrier operating to an EAS community is obliged to meet the designated minimum service level.

In summary, the US programme involves designating eligible points (communities) rather than routes. Because it is federally operated, consistent qualifying criteria, service level designations and tendering procedures and selections result. In addition, the procedure for dealing with increased air service levels is clearly set out. Through the competitive bidding process and the threat of replacement for a subsidised carrier by a low-cost carrier, total subsidy payments are kept in check. In the last two years, additional restrictions have been set out for new communities entering the programme in an effort to keep the total federal subsidy payments within the limits agreed by Congress. These restrictions relate to the distance to the next nearest commercial airport and the maximum subsidy allowable per passenger.

3. Difficulties with the EU PSO Regulation

The difficulties with the EU PSO regulation cover three main areas — namely, state-level operation of PSOs rather than EU operation, entry protection and cabotage restrictions, and implications of curtailment of the commuter carrier sector. These will be discussed in turn below.

National versus EU Operation of PSOs

The European PSO regulation leaves the administration and funding of these orders to the individual states. The EU has not set out criteria for designating PSO routes, nor has it set out procedures for selecting among applicant carriers; this is left to the individual states. Consistent designations of PSO routes and service levels as well as EU funding for the programme would lead to a more efficient and more transparent programme, with better matching of funds to regional needs (see Reynolds-Feighan (1995) for a lengthy discussion). In the report by the Commission to the Council and the European Parliament mentioned earlier (CEC, 1992), it was pointed out that several routes receiving state subsidies within the Community should have been commercially viable based on the route characteristics. Consistent assessment of PSO routes at the

Commission level would prevent this situation arising in the future. In the House of Commons Transport Committee report of 1991, fear was expressed that the PSOs could be used by member states to support the state-owned airlines.

The EU regulation is unclear about the payment of compensation for enhanced or increased air service levels (above the level required by the PSO). The Irish regional airports were adversely affected by the cyclical downturn in the air transport sector and by the recession in the Irish and UK economies particularly. If the demand for air services increases periodically as expected, is it the case that the state governments may increase the levels of subsidy payments, or do subsidies just apply to the minimum service level?

Entry Protection and Cabotage Restrictions

The EU regulation explicitly permits the member states imposing the PSO to restrict entry to the route to one carrier for a period of up to three years. This contrasts with the US EAS programme which permits another carrier to bid to offer replacement services for a lower level of compensation or for no compensation. This possibility of entry, or in fact replacement of an incumbent carrier, keeps costs as low as possible and minimises subsidy payments by the federal government. The federal government has learned from 50 years of regulating the domestic airline industry that restricting entry to routes results in federal subsidy payments rising and inefficiency developing. This case was outlined earlier.

Under the European programme, selected carriers receive protection from entry by other carriers for a period of up to three years from the commencement of the PSO (Article 4.1(d) of Council Regulation no. 2408/92). This procedure does not allow flexibility. For the smaller regional airports in both Ireland and the UK, an examination of recent traffic trends demonstrates that they were more sensitive to unfavourable economic conditions than were the larger airports. These smaller airports (with between 40,000 and 200,000 passenger throughputs per annum) experienced very dramatic changes in traffic volumes in a two-year period (Reynolds-Feighan, 1994). The rigidity of the European PSO procedure hampers expansion of services by the designated carrier and prevents entry by another carrier for periods when economic conditions may increase demand for the air services. Under the US programme, the (subsidised) carrier does not receive protection from entry by other carriers, since the main function of the US programme is to provide a safety net for small communities by ensuring that air service levels do not fall below a specified minimum level. In the event of improved demand for services, other carriers are free to enter the market at any time or to offer to provide the minimum service level for a lower level of compensation. Exit by a carrier from a route is permitted when at least one other carrier services the route. Exit is not permitted, however, if no other carrier

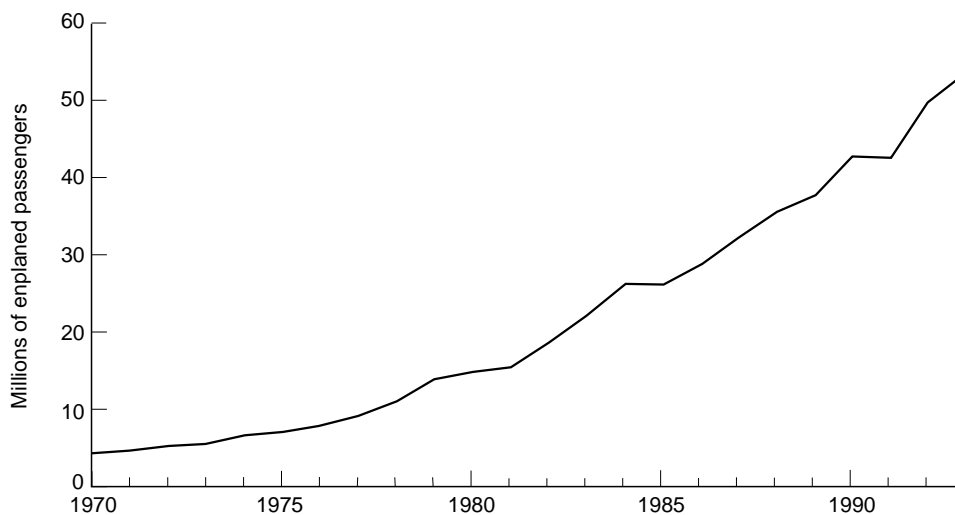
services the route. Under these circumstances, the carrier is paid a higher subsidy by the DOT and a replacement carrier is sought.

Because of the phased introduction of cabotage in the EU, carriers registered in the state imposing the PSO have an advantage over non-national carriers. This arises because of the capacity restriction placed on the latter carriers by the 'consecutive-cabotage' rule, i.e.

a Member State shall not be required to authorize cabotage traffic rights within its territory by Community air carriers licensed by another Member State, unless ... the air carrier does not use, for the cabotage service, more than 50% of its seasonal capacity on the same service of which the cabotage service constitutes the extension or the preliminary
(Article 3 of Council Regulation no. 2408/92.)

This restriction and the fact that *routes* are specified by the individual states mean that cross-border PSO routes are less likely. The expansion of existing regional or commuter carriers across borders is also curtailed until 1997 at least by the consecutive-cabotage rule. The House of Commons Transport Committee report of 1991 called for clear guidelines to be set out for the terms of tenders, because under the current legislation, the committee was concerned that member states could use 'their discretion with respect to the selection criteria to favour particular airlines' (House of Commons Transport Committee, 1991). The consecutive- cabotage rule compounds this.

FIGURE 2
US Commuter Airline Traffic, 1970-93



Source: Regional Airline Association, 1988-94.

The US EAS programme is administered by the DOT and places no restrictions on licensed carriers tendering for EAS routes. This allows for a minimum-cost operator to be selected and this in turn minimises the subsidy payments required.⁹ Free entry to and exit from routes is seen to be a key component in the development of competitive and efficient air transport markets (Baumol, 1982; Barrett, 1991; Comités des Sages, 1994).

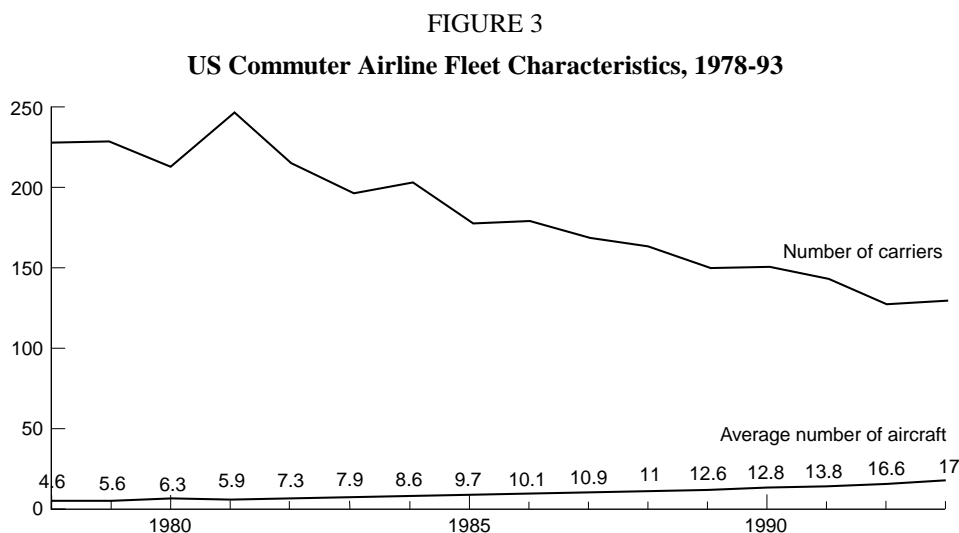
Curtailement of Growth of the Commuter Carrier Sector

The restriction of entry to PSO routes, the consecutive-cabotage rule and the state-level administration and funding of PSOs are likely to curtail the development of commuter airlines in Europe. Article 5 of Council Regulation no. 2408/92 aims to encourage the development of new routes between regional airports by allowing state governments to limit the number of carriers on these new routes to one. Because these routes are likely to have relatively low volumes of traffic and operate over relatively short distances, the initial development of the routes should be driven by commuter carriers operating turbo-prop aircraft. The consecutive-cabotage rule will hinder the development of new cross-border routes and delay until at least 1997 the efficient organisation and growth of 'third-level' carriers and their networks. The EU needs to reconsider the role of inter-regional air routes, however, and take the lead on encouraging route developments at the federal level.

In the US, the commuter carriers have maintained strong and consistent growth in passenger volumes since 1978, as Figure 2 demonstrates. These carriers provide vital links between small centres and the main regional and national nodes of the air transport system. The EAS programme is now largely serviced by the commuter carriers (in 1994, 419 of the 503 eligible communities were served exclusively by regional/commuter carriers (Regional Airline Association, 1994)). These carriers have expanded the size of their operations and the links with the larger major and national carriers. As was shown earlier, the EAS programme has rationalised federal subsidy payments to small communities and ensured federal safety regulations for the commuter carriers. The commuter carriers have increased the number of enplaned passengers by 378 per cent between 1978 and 1993. The number of operators has declined from 228 carriers in 1978 to 196 in 1983 and 130 in 1993, through mergers, acquisitions and a small number of failures. The result has been a steady rise in the average fleet size of the carriers. These trends are illustrated in Figure 3. The total number of commuter aircraft in operation in 1978 was 1,047; this rose to 1,545 in 1983 and to 2,208 in 1993 (Regional Airline Association, 1988–94). The

⁹ There is some discretion in the procedure for carriers offering different schedules and having differing interlining/marketing agreements with larger carriers. This is because the carriers select the route rather than the US DOT.

average number of aircraft operated by a commuter carrier is now 17 (1993), a substantial increase since 1978 when the average fleet was 4.6 aircraft.



Source: Regional Airline Association, 1988-94.

In Table 1, information on the number of commuter, charter and air taxi operators in each state of the EU in 1993 is presented. The data are derived from the 1994 edition of *JP Airline Fleet International*. It should be noted that these data are estimates based on the compilations in the publication, but the source does not clearly distinguish commuter airlines and air taxi operators from other users of turbo-prop aircraft in all cases.¹⁰ Table 1 shows that the EU commuter carriers and air taxi operators are large in number and small in terms of their average fleet size. The overall average number of aircraft per carrier is 3.4 for the EU. A very large number of operators utilise a single aircraft each. These carriers typically service short-haul low-density routes on a scheduled, non-scheduled or air taxi service basis. In the single internal EU market, these carriers have the potential to offer flexible access and mobility to small communities by linking small centres or rural/peripheral regions to the main transport networks.

¹⁰ Courier services and air photography and surveillance services were excluded from the totals when they were distinguished in the publication.

TABLE 1
Regional/Commuter Airlines and Air Taxi/Charter Carriers in the EU, 1993

	<i>Number of carriers^a</i>	<i>Number of aircraft^b</i>	<i>Average number of aircraft per carrier</i>
Belgium	26	69	2.7
Denmark	26	133	5.1
France	93	397	4.3
Germany	124	356	2.9
Greece	7	30	4.3
Ireland	5	18	3.6
Italy	42	134	3.2
Luxembourg	3	7	2.3
Netherlands	18	59	3.3
Portugal	15	38	2.5
Spain	27	82	3.0
UK	86	276	3.2
Total	472	1,599	3.4

^a Total number of commuter airlines and air taxi/charter carriers in EU states in 1993 (does not include training or airphoto carriers, nor helicopter operators).

^b Total number of aircraft registered for carriers.

Source: *JP Airline Fleet International*, 1994.

The EU commuter carrier sector is clearly at an earlier stage of development. This sector has the potential to offer vital links to the main EU transport networks, particularly for small and peripheral communities. But the carriers need to build up their networks in order to avail of economies of scope and to complement the services of the larger carriers. At this stage, the networks are nationally focused and competition with national or other EU flag carriers is difficult. The US experience has shown that the commuter carrier sector plays an increasingly more important role in linking small communities and offering consumers attractive scheduling and pricing arrangements.

IV. SUMMARY AND CONCLUSIONS

In the European Union, air transport can play a somewhat different role from the one it played in the past. The European airline networks of the 1940s, 1950s and 1960s were focused on developing and expanding links with each state and the main international centres in Europe, the US and, to a lesser extent, Asia and Australasia. Accordingly, the flag carrier networks were focused on one or two main national hub airports (usually the capital city). In this situation, feeder

services from the regional centres within the state fed traffic to the main hub airport(s) or connected regional centres within the state in the larger domestic markets of Germany, France and the UK. With the advent of the Single European Market, much attention is now being focused on developing inter-regional links (particularly in border areas) and intra-regional links that connect to the Trans-European Networks (TENs). These networks are the strategically important corridors serving the EU, and have been drawn up at the 'federal' level. Because of the awkward geography of the EU, much of the Union's land area is peripheral to the main population and economic core. In this context, air transport should be reconsidered in terms of the potential role that it can play in linking peripheral regions to the TENs and the EU's core. In addition, inter-regional interactions between bordering states can be developed relatively quickly with air transport.

A vibrant commuter carrier sector with access to all classes of Community air routes offers flexibility in developing new links between and within EU regions. It has been shown how the commuter carriers in the US became increasingly important in this role after deregulation. Deregulation led to a rationalisation of markets and of carriers so that, for example, a higher service frequency to many small and medium-sized communities was achieved. US commuter carrier code-sharing agreements with larger carriers is an important factor which has greatly enhanced the number of origin-destination pairs a given airline can offer to passengers within its own system.

Air transport requires relatively small infrastructural investments in order to link small centres to larger centres and networks. Air carriers can offer flexible, convenient and cost-effective service when the market is competitive and operates with minimal restrictions. The EU liberalisation package does not address the role and potential of smaller air carriers in the single market and accordingly does not attempt to redefine the role of air transport in linking smaller centres in the much larger European Union. The US view was succinctly stated in the 1993 report to the President and Congress, *Change, Challenge and Competition* (National Commission to Ensure a Strong Competitive Airline Industry, 1993), when it recommended the development of policies encouraging services to small communities, including the maintenance of the federal EAS programme. The report concluded that

If the nation's economy is to be competitive in the new century, our communities must be able to reach markets for their goods and products, wherever those markets may exist.... Convenient access to airline service is essential for the economic growth and development of small communities. Connecting these small communities to the national air transportation system provides economic benefit to the nation as a whole.

(National Commission to Ensure a Strong Competitive Airline Industry, 1993, p. 27.)

In Sections II and III, it was shown that EU liberalisation legislation includes some provision for low-density routes or small-community routes where state subsidies may be paid to carriers in order to guarantee a minimum level of air services. There are difficulties with the legislation, however, which may adversely affect the regional airports and may produce a suboptimal outcome for the EU because subsidy payments may not be minimised. This may result because non-national carriers tendering for PSO routes must have an established interstate capacity in operation or they must be prepared to produce interstate capacity as well as domestic capacity in order to be eligible for the service obligation. The EU legislation is not clear on how periodic downturns in small-community traffic levels, which may occur in parallel with unfavourable national economic conditions, can be quickly dealt with, so that a 'safety net' for small-community air services is kept in place. Increases in the service levels offered by carriers fulfilling PSOs are not catered for in the legislation either.

EU liberalisation is expected to bring net benefits to the member states. The approach is to deal with the air transport sector at the EU level. The Commission is now strongly advocating a common external aviation policy, where *the Commission* negotiates or renews bilateral agreements with non-EU states. In the area of air traffic control, again the aim is to centralise and harmonise and administer a Union-wide system. However, in terms of dealing with essential air services to peripheral or small communities, the Commission approach has been to leave administration and funding up to individual states. The subsidiarity principle should be re-examined in this case. For consistency, this aspect of the EU's air transport policy should also be administered and funded at the EU level if efficiency, transparency and balanced regional development are core concerns.

A more flexible approach will help small-community airports to establish stronger passenger bases and ensure air services even in cyclical downturns. Under these circumstances, the benefits of fast access to peripheral regions will accrue to the regions and to the EU as a whole.

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