

ECONOMIC RESEARCH CENTRE

# REGULAR INTERURBAN COACH SERVICES IN EUROPE

ROUND  
TABLE

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114

EUROPEAN CONFERENCE OF MINISTERS OF TRANSPORT

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ECONOMIC RESEARCH CENTRE

REPORT OF THE  
HUNDRED AND FOURTEENTH ROUND TABLE  
ON TRANSPORT ECONOMICS

held in Paris on 11th-12th March 1999  
on the following topic:

# **REGULAR INTERURBAN COACH SERVICES IN EUROPE**

EUROPEAN CONFERENCE OF MINISTERS OF TRANSPORT

## EUROPEAN CONFERENCE OF MINISTERS OF TRANSPORT (ECMT)

The European Conference of Ministers of Transport (ECMT) is an inter-governmental organisation established by a Protocol signed in Brussels on 17 October 1953. It is a forum in which Ministers responsible for transport, and more specifically the inland transport sector, can co-operate on policy. Within this forum, Ministers can openly discuss current problems and agree upon joint approaches aimed at improving the utilisation and at ensuring the rational development of European transport systems of international importance.

At present, the ECMT's role primarily consists of:

- helping to create an integrated transport system throughout the enlarged Europe that is economically and technically efficient, meets the highest possible safety and environmental standards and takes full account of the social dimension;
- helping also to build a bridge between the European Union and the rest of the continent at a political level.

The Council of the Conference comprises the Ministers of Transport of 40 full Member countries: Albania, Austria, Azerbaijan, Belarus, Belgium, Bosnia-Herzegovina, Bulgaria, Croatia, the Czech Republic, Denmark, Estonia, Finland, France, FYR Macedonia, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Moldova, Netherlands, Norway, Poland, Portugal, Romania, the Russian Federation, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine and the United Kingdom. There are six Associate member countries (Australia, Canada, Japan, New Zealand, Republic of Korea and the United States) and two Observer countries (Armenia and Morocco).

A Committee of Deputies, composed of senior civil servants representing Ministers, prepares proposals for consideration by the Council of Ministers. The Committee is assisted by working groups, each of which has a specific mandate.

The issues currently being studied – on which policy decisions by Ministers will be required – include the development and implementation of a pan-European transport policy; the integration of Central and Eastern European Countries into the European transport market; specific issues relating to transport by rail, road and waterway; combined transport; transport and the environment; the social costs of transport; trends in international transport and infrastructure needs; transport for people with mobility handicaps; road safety; traffic management; road traffic information and new communications technologies.

Statistical analyses of trends in traffic and investment are published regularly by the ECMT and provide a clear indication of the situation, on a trimestrial or annual basis, in the transport sector in different European countries.

As part of its research activities, the ECMT holds regular Symposia, Seminars and Round Tables on transport economics issues. Their conclusions are considered by the competent organs of the Conference under the authority of the Committee of Deputies and serve as a basis for formulating proposals for policy decisions to be submitted to Ministers.

The ECMT's Documentation Service has extensive information available concerning the transport sector. This information is accessible on the ECMT Internet site.

For administrative purposes the ECMT's Secretariat is attached to the Organisation for Economic Co-operation and Development (OECD).

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LES SERVICES RÉGULIERS INTERURBAINS D'AUTOCARS EN EUROPE

*Further information about the ECMT is available on Internet at the following address:*

***[www.oecd.org/cem](http://www.oecd.org/cem)***

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BELGIUM

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**EUROLINES OF THE PAN-EUROPEAN COACHNETWORK OF REGULAR LINES  
SERVICES: AN INTRODUCTION**

**SUMMARY**

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Brussels, December 1998



## 1. INTRODUCTION

In this report we wish to introduce the “EUROLINES ORGANISATION” and its commercial daughter company, “EUROLINES SERVICES” to the ECMT. We will explain the objectives of both bodies, mention some of the problems we are facing in our day-to-day business of ensuring international line services by coach, focus on the procedures according to which Eurolines works and describe how the Organisation has evolved over the last couple of years.

First, we will provide a general insight into the Eurolines Organisation, its origin and history, its present structure, its membership and financing and its major objectives and achievements. We will then explain how we have progressed in our work via our working groups who prepare solid and realistic recommendations to the General Assembly for approval. This procedure and the progress made so far will illustrate our ability to pinpoint the value of our product and of our services for our customers. We will subsequently look into the strategic opportunities that we identify within our transport mode and how we think we must proceed to consolidate our business and continue to make it prosper in the years to come.

Whereas the *Eurolines Organisation AISBL* has a more co-ordinating and administrative task to fulfil with regard to the business of its members, the *Eurolines Services SPRL* is involved with merchandising, sales and commercial issues.

## 2. THE EUROLINES ORGANISATION

### 2.1. Introduction

The Eurolines Organisation was initially founded in 1985 with headquarters in Geneva (CH). At that time, the Central Secretariat was located under the umbrella of the International Road Transport Union (IRU) and had some 7 to 8 member coach companies. In 1995, the Central Secretariat moved from Geneva to Amsterdam and, since March 1997, the new headquarters have been established in Brussels. By Royal Decree of 22 September 1997, the Eurolines Organisation has been recognised as an international, non-profit association with legal status (AISBL). At present, the Eurolines Organisation and its partners cover some 75 million kms on a yearly basis, move between 4 and 5 million passengers per year and generate a turnover of approximately Euro 160 million annually. Eurolines offers connections between more than three hundred major European cities.

## 2.2. Objectives

The objectives pursued by the Association are scientific, pedagogical and administrative and relate to the study of legal, economic or technical questions in connection with journeys by international scheduled coach lines and, more particularly, those that can provide a better service to consumers. To this end, the Eurolines Organisation:

- Provides useful contacts with Community and international authorities and takes the necessary initiatives;
- Acts as a consultative body for Community and European authorities on all business relating to scheduled coach lines;
- Maintains the necessary relations with international organisations representing carriers and other firms providing transport-linked services;
- Carries out market studies;
- Encourages the training of management and staff;
- Promotes, encourages or organises exchanges of information between its members and with closely connected organisations;
- Organises meetings with its members with a view to studying problems of common interest.

## 2.3. Membership

Membership of the Eurolines Organisation is open to undertakings or groups of undertakings which operate international scheduled passenger-carrying lines by road attributed to them and which are duly authorised by the appropriate national authorities. Applications for membership are addressed in writing to the registered office of the Eurolines Organisation in Brussels for the opinion of the Executive Committee (CA) and resolution by the General Assembly (AG) by qualified majority (2/3) of the votes of the members present or represented. The members pay a unique entrance fee of Euros 10 000 and a subscription fee fixed annually for the category to which they belong. Each member has a number of votes in proportion to the total number of kilometres and the total sales credited each year to his undertaking on the scheduled international routes that it operates. This is determined as follows:

### Kilometres:

- |                                   |   |         |
|-----------------------------------|---|---------|
| – up to 1 million kms             | : | 1 vote  |
| – from 1 million to 3 million kms | : | 2 votes |
| – over 3 million kms              | : | 3 votes |

### Sales:

- |                                     |   |         |
|-------------------------------------|---|---------|
| – up to 5 million Euro              | : | 1 vote  |
| – from 5 million to 10 million Euro | : | 2 votes |
| – over 10 million Euro              | : | 3 votes |

Upon becoming a member, each member must advise the Central Secretariat of the following information:

- Each international coach line operated by each member, together with the annual statistics of the number of kilometres that each member of the pool has driven each year, the amount of sales per member of the pool and the number of passengers carried each year;
- This information must be provided each year, by each member and for each international route that it operates;
- Each new route must be notified to the Central Secretariat.

This information must be provided each year by each member, whereby the votes corresponding to the kilometres and the sales can be attributed. Each member then receives the membership fee invoice from the Central Secretariat.

For the admission of new members, the applicant undertaking must lodge a complete file of its activities in the area of international coach lines with the Secretary General, indicating any situations in which it competes with the routes and organisation of undertakings from the same country that are already members. This file must be sent to the undertakings that are already members (i.e. the General Assembly), who, within a period of 60 days, must submit their remarks and their favourable or unfavourable opinion in writing. In the event of an unfavourable opinion, the reasons for which must be stated in detail, CA must examine the points of disagreement and make a proposal to the undertakings for solutions. If no agreement is reached, the decision is remitted to AG, which decides with a qualified majority (2/3) of its votes. AG gives a ruling without having to give the reasons for its decision to the undertaking. New members that operate routes or lines already served under the Eurolines mark by undertakings that are already members of Eurolines, may not use this mark for those lines. Undertakings that wish to become a new member are not admitted if they only operate routes or lines already covered by the Eurolines network.

The Eurolines Organisation has at present (November 1998) 31 members, representing 25 European countries. Some of these member companies are state owned, most are private. The members are listed on page 17 of this report.

## **2.4. Obligations of members**

The members are obliged to put into practice all decisions taken by the majority of the members present and voting at the General Assembly and in particular to agree to the following objectives:

- To maintain amongst them relationships of co-operation and business correctness;
- To adopt the Eurolines logo in the colours laid down by the General Assembly and to use it on letterhead paper, tickets, agency windows, coach stations, etc. Full use of the Eurolines colours is obligatory for all the vehicles regularly used on the scheduled lines. The graphical chart of these colours and the conditions for using the Eurolines mark on all supports concerned are defined in the *Eurolines Identity Manual*. This manual clearly defines the conditions for using the Eurolines mark on all supports concerned (vehicles, tickets, coach stations, letterhead paper, etc.). The manual is based on an optimal use of the Eurolines logo, aimed at giving the general public a clear and unified image of the Eurolines products. It is mandatory for all members to apply the requirements in this manual. Only the Organisation will be charged with filing and protecting the Eurolines mark and defining its utilisation on the European market;

- To use the Eurolines logo on all publicity concerning scheduled international routes;
- To agree to the free circulation of travellers by adopting a uniform ticket, in compliance with the standard approved by AG, following agreement by the pool concerned;
- To use vehicles in conformity with the characteristics approved by AG on the scheduled international Eurolines routes;
- To undertake, prior to any new commercial venture in another country than its own, to sign an agreement with the member or the entire members of Eurolines in the country in which it wishes to set up business. Members already engaged in a commercial venture in a country other than their own, formally undertake, within six months, to rationalise the marketing of the product in the eyes of the general public and, in particular, to lay down commercial, financial and technical agreements on a case-by-case basis with the member or members of Eurolines in the country concerned;
- If a member starts to operate a new line in competition with an already existing Eurolines line, the marketing of this new route is not permitted under the Eurolines mark. Failure to comply with this provision shall be a reason for exclusion from the Organisation. Members that leave or are excluded from the Organisation shall lose all rights to use the mark, name and logo of Eurolines in any European country.

## **2.5. Exclusion of members**

The exclusion of members of the association can be proposed by CA after having heard a plea in defence of the party concerned and can be ruled on by AG with a majority of 2/3 of the votes of the members present or represented. The members can also resign by serving a letter of resignation in writing to the Central Secretariat three months at least prior to the end of the year. Reasons for exclusion from the Eurolines Organisation can be:

- Ceasing operating scheduled international routes;
- Serious professional breaches;
- Failure to make payment of the annual subscription;
- False declarations concerning sales and kilometres;
- Absence from three consecutive AG meetings, without having empowered a representative;
- Failure to comply with the Articles of Association and the Internal Regulations.

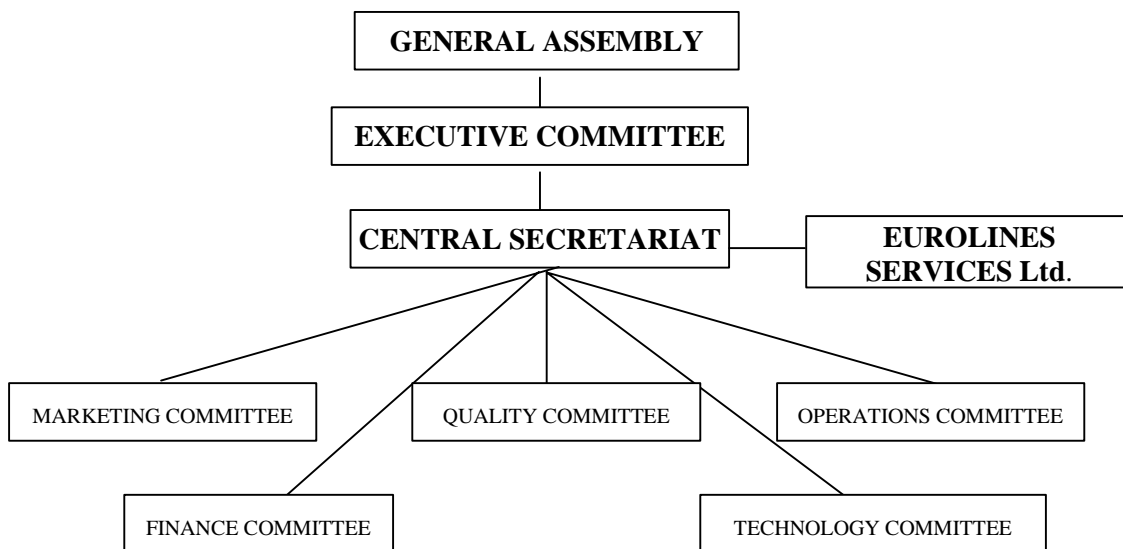
The list of reasons for exclusion is not exhaustive. Any member may, with appropriate justification, propose that one or more other members be excluded.

## **2.6. Structure of the Eurolines Organisation**

The Eurolines Organisation is administered by an Executive Committee (CA), made up of at least six and at most ten members. The directors are appointed by the General Assembly for a period in office of two years. The Secretary General is recruited by CA and carries out the on-going management of the Organisation under its supervision and authority. The Secretary General represents the Eurolines Organisation within the framework of its activities. He is in charge of carrying out the budget, managing the funds that are entrusted to him and applying the decisions of the General Assembly and the Executive Committee. CA holds four meetings per year, whereas AG holds two. The Secretary General also organises and chairs the meetings of the various working groups or committees, such as: the Quality Committee, the Marketing Committee, the Operations Committee, the Technology Committee and the Finance Committee. Each of these working groups

has a clearly defined scope and a membership according to interest (varying between 6 to 10 members). These committees have, on average, two meetings per year and formulate recommendations to CA/AG for approval. Once these recommendations are approved, they become resolutions that need to be implemented by all Eurolines members.

Figure 1. **Eurolines organisation**



**2.6.1. Scope of the various Eurolines working committees**

*2.6.1.1. Technology Committee*

To bring into use an organisation-wide set of technical standards which will enable the Organisation in general, and individual members in particular, to remove barriers to the corporate image. The Committee seeks to ensure a valid basis for examining and comparing the various technologies to achieve improved communication, consistency, efficiency and transparency (e.g. a current project is the examination of how to move forward in the establishment of a uniform reservation system).

*2.6.1.2. Quality Committee*

To consider all significant quality-related aspects regarding the Eurolines products and services that occur in the process of moving passengers by coach from one country to another, with the aim to develop, up-date and improve a Eurolines Quality Policy.

*2.6.1.3. Finance Committee*

To inform the Eurolines Organisation of the actions to be taken for the preparation of a detailed implementation plan to the Euro and to consider means of promoting the synergy with respect to financial issues in general, such as: tax-related subjects, cash and currency management, harmonization of pool accounts, conversion costs, etc.

#### 2.6.1.4. *Operations Committee*

The Operations Committee dedicates its efforts primarily to how the Eurolines network can be optimised by concentrating on decreasing the costs of the various Eurolines members. It will therefore identify how certain pools can be merged, how hubs can be created, how interchanges and frequencies of certain lines can be improved, how current stops can be repositioned, how the use of vehicles and drivers can be improved and where higher capacity vehicles would be appropriate. In short, the Operations Committee seeks to adapt the current network in a variety of its components (timetables, stops, frequencies, etc.) to better suit the customers and the Eurolines members.

#### 2.6.1.5. *Marketing Committee*

The Marketing Committee is another advisory committee, dealing with all marketing issues, such as product, image, promotion, pricing and sales strategies of the Eurolines Organisation, with the aim to improve the competitive edge, while using the most appropriate marketing tools, and thus to achieve optimum sales for all Eurolines partners individually and for the Organisation as a whole.

### 2.7. **Achieved progress**

We will, over the following pages, try to provide a summary of the main actions and areas in which the Eurolines Organisation was able to make significant progress over the last two years. They relate to a variety of issues and we therefore prefer to deal with them according to subject, rather than chronologically.

#### 2.7.1. *Our membership*

In March 1997, the Eurolines Organisation consisted of 26 member companies. Today (November 1998), the total has grown to 31 members. Two members were expelled (*Intersul* from Portugal and *Bus & Atlantic Tours* from Greece) and seven new members entered the Organisation (*Linebús* and *Saia* from Spain, *Touring Europabus Romania*, *Evrobus* from Bulgaria, *Österreichische Bundesbahnen* from Austria, *Centrotrans* from Bosnia and *Lasta* from Yugoslavia). Another eight applications -- upon which a decision by AG will be taken in April 1999 -- are in the pipeline for the moment and originate from *Segesta* (Sicily), *Bohemia Euroexpress International* (Czech Republic), *Nor-Way Bussekspress* (Norway), *Air Kona Eood* (Bulgaria), *Kautra* as well as *Toks* (Lithuania), *CTM* (Morocco) and *Cazmatrans* (Croatia). As opposed to previous years, the Eurolines Organisation also established a "*Membership Agreement*" since October 1997. It needs to be signed by any new member entering the Organisation. The entrance fee, originally determined at Euro 2 000, was increased to Euro 10 000 from July 1997. Membership fees now vary (according to category of membership) from approximately Euro 2 650 (minimum) to Euro 15 000 (maximum) per annum.

#### 2.7.2. *Our marketing*

In addition to the Eurolines logo, all Eurolines members use the *European network map* with the various connections that exist within the Eurolines network (see example on page 34). This map is often used in the manuals, on posters, in sales agencies, coach stations, etc., to enhance the awareness amongst our customers that Eurolines is indeed a pan-European network.



The Eurolines Organisation further undertakes *market surveys* on a regular basis, one during high-season and one during off-season. These questionnaires or surveys are available in more than a dozen languages and are implemented by the individual members. The driver distributes the surveys at the departure point and collects them upon arrival. The implementation phase is restricted to two or three weeks. During high season (August 1998) we were able to collect some 2 600 surveys, whereas during off-season (November-December 1997) we collected some 4 000 copies each time.

The Eurolines Organisation issues a quarterly *Eurolines Bulletin* or Newsletter, which is meant to inform our members of ongoing developments in the industry of passenger transport by coach and thus covers both technical and political issues. It often reproduces important information from sources of the IRU or from specific magazines and publications in the field of passenger transport (e.g. *Transport Europe*, etc.) which are not always widely accessible. The Bulletin also provides an ideal forum for our members to introduce themselves as a company to a larger public as well as to other members. It reveals information on their historical background as a company, on the lines they are operating, on their motivation, objectives and expectations within and towards the Organisation. The Bulletin is published in January, May and September of each year in French, German and English.

A Eurolines *Internet site* has been set up since October 1998, to which all Eurolines countries (25) and their respective members are connected. It can be consulted under <http://www.eurolines.com> and provides the most modern utility to inform our customers directly of the line services we offer throughout Europe.

In this context, it is noteworthy that 61 per cent of our customer-base is between 16 and 30 years of age and that meanwhile 78 per cent of those have access to the Internet and/or use e-mail (in 1997 this was still at 64 per cent). On average, 52 per cent of our customers travel unaccompanied (i.e. individually), 55 per cent of our customers are females. On average, 37 per cent of our customers are students, but we also attract professionals who work at managerial level (4.9 per cent), retired (7.4 per cent) and unemployed people (5.7 per cent). Almost 68 per cent travel with a return (i.e. full) ticket. Only 18 per cent of our customers claim that the coach is their preferred mode of transport to travel with; 43 per cent prefer the aircraft whereas 14 per cent prefer the train. When being asked from which medium our customers would like to receive information about Eurolines, the answers were as follows: 22 per cent from newspaper advertisements, 15 per cent from television, 6 per cent from radio, 14 per cent from the Internet, 28 per cent from travel agents and 13 per cent from flyers. However, when asked how they heard of Eurolines for the first time, 9 per cent claim to have been influenced by the Eurolines coaches on the road but 43 per cent claim to have been told about Eurolines by family or friends.

Our Marketing Committee is also looking into the feasibility of offering *direct sales via the Internet* and a trial project in that area is being developed and studied in France. We hope that a vast number of our members will offer this possibility by the year 2000, i.e. at a time when buying via the Internet has become a more familiar and popular way of purchasing goods and services.

In addition to the Internet homepage, all Eurolines members are connected via an Intranet which enables them to retrieve and download minutes of meetings, policy papers, meeting schedules, etc. directly. This Intranet has been introduced since the beginning of this year (1999) and already accounts for considerable cost-savings regarding postage and mail.

Finally, the Marketing Committee is also involved in the standardization of leaflets and informative documents to ensure a more coherent and recognisable group brand, in discussions regarding optimising pricing and promotional policies to improve both occupancy and profitability of the lines, to look into the diversification of methods of distribution and sales, the improvement of the

partnerships with agencies, tour-operators, etc. It will further focus on how to improve the communication on-board the coaches via new communications tools (not only video and tapes) and on developing additional services (beverages, snacks and related products) which could generate extra revenue. Thought has also been given to the development of loyalty programmes and to the promotion of certain line traffic (higher frequency, cheaper rates) in connection to major European events (Football Championship, World Exhibition 2000, introduction of the Euro, etc.) where the Eurolines mark can be promoted.

### **2.7.3. Our quality**

The Eurolines Organisation became *an Associated Member of the European Foundation for Quality Management (EFQM)* almost immediately after its Central Secretariat was moved to Brussels. As a member, we are committed to Total Quality Management (TQM) as a way to achieve continuous improvement. Via the seminars, lectures, workshops, literature, etc., which are organised and made available by this Organisation, our members can participate and learn from best practices and from other experiences that were made in the field of implementing and enhancing quality in service industries.

TQM is concerned with managing the entire system, and not only subsystems, isolated processes or functional departments. With our membership of EFQM, we have established an ideal platform to improve our way of integrating our concern for product and service quality with our customer focus. This will lead to increased value for the customer, because our customers have become more demanding, better informed and have plenty of alternatives available to them. In a world where a client is free to spend his or her money, supported by a global accessibility towards information and suppliers, it has become a normal habit to compare possible suppliers by analysing the relationship between quality and price. So, within Eurolines, we have systematically started to actually use the information gathered by inspection.

This inspection or *self-assessment* is done in a variety of ways. We send mystery-shoppers on board our coaches to inspect and fill out standardized and comprehensive check-lists which aim at summarising all aspects of a journey by coach: from the procedure of buying a ticket at the departure point, to the luggage handling at the final destination, from the appearance, friendliness and language capabilities of staff, to the reliability of the service, from the efficiency of the connections to the comfort and hygienic conditions on board the coach, etc. But, of course, we also listen to what the customer himself has to say via the previously mentioned market surveys. All of this generates useful information that forms the basis for process improvement and gives impetus to broadening the skill set of our front-liners as well as of their managers. Central to our endeavours is the need to convince members that quality is not something owned or held within a specific department or project group, but lies at the core of the Organisation. It therefore needs to be the prime responsibility of all managers. Let us now have a look at the progress we have made over the last two years.

First, we started to catalogue our coach fleet. At present, some 213 coaches drive throughout Europe in the appropriate Eurolines livery. A *Graphical Charter or Identity Manual* (see above), comprising four chapters, provides information and mandatory requirements to our members on how to comply with the Eurolines graphic features, the stationery, operating and information material and the coaches. We are currently in the process of adding two new chapters regarding commercial editing (posters, flyers, etc.) and the Eurolines environment (coach stops, sales offices, etc.). The number of coaches in Eurolines livery per country and per member is shown in Table 1.

All of our coaches are, at present, in *conformance with the IRU 3-star classification*, i.e. superior coaches for grand tourism (distant international tours, etc.). Space between seats is determined

at 77 cm, there are 13 rows of seats for a standard 12-metre long motor-coach, i.e. 52 individual passenger seats. This means that all vehicles have an additional braking system, independent air-conditioning facilities, individual reading lights for the passengers, sun protection via blinds or side curtains, a minimum luggage compartment of 120 dm<sup>3</sup> per passenger as well as a water-flushed or chemical toilet and washbasin. Facilities for cleaning and repair of the coaches are available in the immediate neighbourhood of the coach stations or premises of our members. Since April 1998, *all Eurolines services are, in principle, "non-smoking"*. Some members -- due to their business environment and social/cultural habits -- have difficulty in fully complying with this rule 100 per cent, as the profitability of certain lines (mainly in south-west Europe) might be endangered by a too strict adherence to this resolution. In addition, some member companies who use subcontracted operators (i.e. subcontracted coaches with subcontracted drivers) are not always demonstrating strict adherence to the non-smoking rule with the same degree of consistency.

Table 1

1.	Eurolines Austria (Blaguss)	:	3
2.	Eurolines Austria (ÖBB)	:	0
3.	Eurolines Belgium NV	:	14
4.	Eurolines Bosnia (Centrotrans)	:	0
5.	Eurolines Bulgaria (Evrobus)	:	1
6.	Eurolines Croatia (Autotrans Rijeka)	:	4
7.	Eurolines Czech Republic (CSAD-Klicov)	:	23
8.	Eurolines Denmark (Thinggaard)	:	2
9.	Eurolines Estonia (Mootor Reisi)	:	18
10.	Eurolines France SPRL	:	10
11.	Eurolines France (Les Cars Express)	:	2
12.	Eurolines France (Fram)	:	3
13.	Eurolines Germany (Deutsche Touring)	:	20
14.	Eurolines Hungary (Volanbusz)	:	18
15.	Eurolines Ireland (Bus Eireann)	:	12
16.	Eurolines Italy (Autostradale)	:	1
17.	Eurolines Italy	:	2
18.	Eurolines Latvia (BAL)	:	6
19.	Eurolines Spain (Linebús)	:	1
20.	Eurolines Netherlands	:	12
21.	Eurolines Poland (Pekaes Bus)	:	10
22.	Eurolines Portugal (Intercentro)	:	1
23.	Eurolines Romania (Touring Romania)	:	3
24.	Eurolines Slovakia (SAD Bratislava)	:	10
25.	Eurolines Peninsular (Julia/Via)	:	6
26.	Eurolines Spain (Saia)	:	1
27.	Eurolines Sweden	:	6
28.	Eurolines Switzerland (Eggmann & Frey)	:	6
29.	Eurolines Turkey (Ülusoy)	:	2
30.	Eurolines UK (National Express Group)	:	24
31.	Eurolines Yugoslavia (Lasta)	:	2

We developed a *common set of stringent quality standards*, i.e. specifications we wish to comply with. They were developed at a very high and demanding level and adherence to them is our main goal in improving our business quality. At the same time, these specifications allow us to benchmark our performance and to evaluate the progress we are making. Based on these standards, we started to develop a general and consistent *Eurolines Quality Policy* which will grasp the main criteria to which our members must comply and on which our customers can fully rely. The measurements we carried out during 1997-98 have enabled us to assess our shortcomings. We identified 40 key elements or issues of business performance a customer can judge upon while travelling with Eurolines. We then allocated these 40 elements to five major denominators or areas for improvement where measurement is required: the procedure of buying a ticket, the process of check-in and boarding the coach, the coach itself, the communication and the driver. Our results were then benchmarked to the ambitious specifications we had set for ourselves. From the results, it appears that our standards were ambitious but realistic and that they would constitute our goal for the years to come. The actual results clearly highlight those areas where considerable improvement is required. Generally speaking, the improvements relate mainly to the *comfort* and to all *communicative interactions*. In order to increase the comfort of our passengers, AG decided that all Eurolines members should ensure their services with IRU 4-star coaches (high-class, luxury coaches for long international tours) by Summer 2000. This target date was set to ensure a feasible and realistic vehicle replacement process by all members. This is the most powerful example of how customer satisfaction measurements are translated into customer satisfaction management. The consequences will be that space between seats will increase to 83 cm, there will only be 12 rows of seats for a standard 12-metre long motor-coach, i.e. 48 individual passenger seats. There are, obviously, differences from country to country as to the authorised and allowed length of the coaches, so not all our services are run with 12 metre coaches.

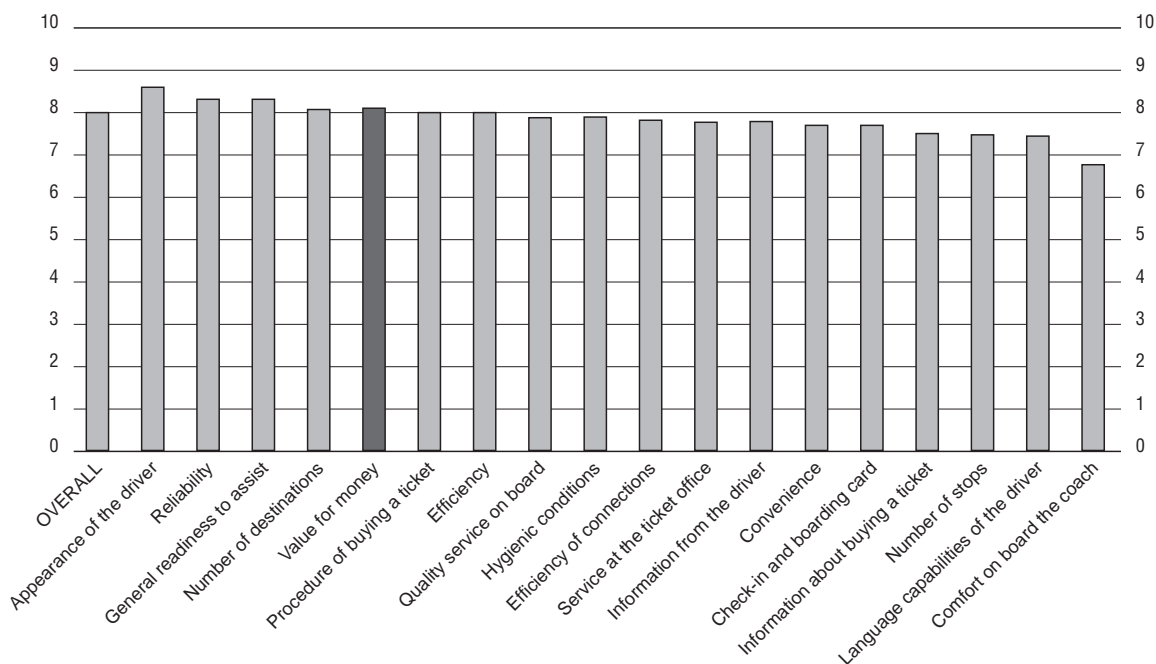
Table 2

– Austria	: longer than 12 metres is tolerated, but not authorised
– Baltic States	: only 12 metres is allowed
– Belgium	: 15 metres
– Bulgaria	: only 12 metres is allowed but changes are in progress
– Croatia	: longer than 12 metres is tolerated, but not authorised
– Czech Republic	: up till 18 metres
– Denmark	: up till 13, 7 metres
– Germany	: up till 15 metres
– Italy	: no authorisation for coaches longer than 12 metres
– Netherlands	: 15 metres
– Poland	: longer than 12 metres is tolerated, but not authorised
– Slovak Republic	: up till 18 metres
– Spain	: up till 13 metres
– Sweden	: up till 15 metres is authorised
– Switzerland	: 16 metres
– Turkey	: 15 metres
– United Kingdom	: no authorisation for coaches longer than 12 metres

As illustrated by the bar chart (Figure 2), our customers are, on average, 80 per cent satisfied with the services we provide. This may look good, but it surely is not good enough, and that is the reason why we are deeply involved with continuous improvement processes.

In addition to measuring our performance and the customer satisfaction, we have also developed a formula which enables us to calculate the actual *perceived customer value*. Quality is a wide concept and, in addition to measuring the *quality of the product* (the green bars) and the *quality of the service* (the blue bars), we wanted to know how our customers perceived the *quality of the price* (yellow bar) and the *quality of the customer cost* (the gap in the blue bars between 10 and the actual result), i.e. the effort, time and money spent prior to actually purchasing a ticket (e.g. making the reservation by phone, ease of contact with our staff, receipt of accurate information, accessibility of our sales offices, etc.). Based on those four building blocks, we could obtain an insight into the actual perceived customer value, using a simple mathematical formula. In multiplying the quality of the product with the quality of the service (each time rated on a scale from 1 to 10 with 10 being the best) and by dividing the result of that multiplication with the result of the multiplication of the quality of the price and the quality of the customer cost (rated each time on a scale from 1 to 10, with 1 being the best), we have an equation in place that tells us exactly how we are being perceived. Our results obviously vary from country to country, to equations in the range of 54/5 to 75/2, i.e. from 10 per cent to 40 per cent of perceived customer value.

Figure 2



The Organisation also developed a *Eurolines Emergency Policy* which entails a detailed scenario of all steps that need to be taken by the concerned member or operator in the case of an accident, with or without injuries. It covers standard procedures on dealings with the press, on establishing on-site emergency teams, on procedures on how to deal with present and future customers at the home front. It also entails two checklists, covering 35 different topics, that need to be monitored or completed in such exceptional cases (copies of the passenger list, special contact numbers, log cards, incident reports, setting up of an incident room, engaging interpreters, onward transportation arrangements, dealings with local authorities, etc.). On the basis of the IRU's "Safety Card for Coach Passengers" and the Eurolines UK's "Welcome Aboard Card", Eurolines developed a standardized *Welcome to Passengers Card*. These cards will soon be available on all our coaches in a bilingual recto-verso version (the

language on the recto side will differ according to country, the one on the verso side will always be English). Since the driver is the coach's captain, his conduct is crucial in the daily operations. For that reason, we also developed a harmonized and comprehensive *Eurolines Driver's Manual*. It entails all information the driver needs to know about operating regular coach line services, but it also gives a detailed description of all activities the driver is entrusted with during the trip, how to dress, how to comply to our standards concerning driving regulations (time and speed), how to deal with luggage, delays or early running, with difficult customers, which announcements to make, etc.

All of these recent developments in the field of quality under the Organisation's umbrella (such as the quality-related questionnaires and surveys for both internal and external use, the emergency policy, the driver's manual, the welcome-aboard card, the definition of our specifications and the measurements of our performance) must be considered as crucial building blocks in our journey towards enhanced quality management. It indicates that the quality issue is high on Eurolines' agenda and our results show that it must remain there for the following years to come. There is more than just a tendency towards focusing merely on increasing the financial profit or value only. We are, as an organisation, in the process of showing that we also focus on commercial, social and intellectual values. The increase of these values must become a real and desirable result, because these types of results are, in fact, conditions for further profit increase.

#### 2.7.4. *Our operational environment*

The mode of transport used is obviously of more importance to a passenger than to a consignor of freight. For the sender of goods, mode is a secondary consideration compared with the need to ensure their timely and secure delivery to their destination. Passengers, on the other hand, are concerned about more than just their time of arrival. Many travellers, particularly leisure travellers, have marked preferences for one particular mode. Some travellers have a fear of flying, a fear of the sea, or of travelling through tunnels, or may suffer from specific forms of motion sickness. The perceived risks of delay also vary according to mode. The nature of the travel experience also differs in other respects, notably in standards of comfort, ability to move around while on the move, the degree of personal control over when and where to eat, and the ability to take more than average amounts of luggage. There are probably many other subjective reasons for travellers to prefer one mode to another, and they will make their choice accordingly. Hence, in passenger markets, to a greater extent than in freight markets, the mode of transport used is a characteristic of demand as well as of competitive supply. Competition between modes remains very real, as the following table clearly indicates:

Table 3. **Competition between modes**

<b>Year</b>	<b>Private car</b>	<b>Buses &amp; coaches</b>	<b>Rail</b>	<b>Air</b>
<b>1970</b>	75.3 %	12.4 %	10.2 %	2.0 %
<b>1975</b>	76.1 %	11.9 %	9.4 %	2.7 %
<b>1980</b>	76.9 %	11.4 %	8.5 %	3.2 %
<b>1985</b>	77.3 %	10.3 %	8.0 %	4.3 %
<b>1990</b>	79.3 %	8.9 %	6.8 %	5.0 %
<b>1995</b>	79.9 %	8.0 %	6.0 %	6.1 %

Sources: "EU Transport in Figures: Statistical Pocketbook", 2nd Issue 1997, Eurostat-DG VII, European Commission.

"Pan-European Transport: Creating passenger and freight networks for the next century", by Derek Done in *Financial Times Automotive*, 1996.

Demand for leisure tourism, including travel to visit friends and relatives, is made up of a set of decisions about whether, when and where to take a trip, and about the kind of activities to be engaged in, and for how long. These decisions are themselves affected by personal circumstances, such as the age and number of family members and their preferences but, for most people, economic factors, such as levels of income, the price of holidays and currency exchange rates, will be among the most important determining factors. Among broad changes taking place in European society as a whole, there are several specific trends likely to influence tourism and other elements of passenger travel demand in the EU. For instance, in many countries of the EU, populations are ageing as life expectancy increases, with increasing numbers of people enjoying an active retirement. Short-break holidays, one or more being taken during the course of a year in addition to the main annual holiday, continue to increase. Another demographic trend is the rise in the number of single-parent families, particularly apparent in the northern countries of the EU. Also, as real incomes grow, car ownership and use continue to rise throughout the EU, although there is now a more general awareness that, because of its adverse environmental impact, this continued growth cannot be accommodated indefinitely. Passenger demand for pan-European transport services is influenced by development in both the physical and regulatory infrastructure. A reduction in the number of physical barriers to travel is one of the most important of these. The accession of new countries to the EU and the implementation of the Schengen Agreement in March 1995 (to which we will come back further on in this paper), are but two recent examples of a continuous move towards the easing of physical controls on movement between people living in the expanding EU area. Earlier events, such as the lowering of barriers to travel resulting from the establishment of the Single European Market in January 1993, the liberalisation of transport markets, particularly air transport markets and the improvement of transport infrastructure through such developments as the opening of the Channel Tunnel, continue to have an impact on our current levels of demand. One significant development is likely to be the removal of passport and customs controls throughout the EU, as more countries sign up to the Schengen Agreement, although not all are agreed about the extent to which such moves should be implemented in advance of the establishment of more secure external borders. Another development has been the creation of a common European currency. Although there is continuing controversy in some parts of the EU over this, it is, in any event, taking place. The Eurolines Organisation has taken a pro-active approach in both areas by establishing a *Financial Committee* and an *Operations Committee*. The scope of both working groups has been described above, but it is useful to have a look at the progress they have already achieved in the short period of their existence. In summary, their main achievements relate to the *harmonization of the Eurolines travel conditions, the development of a harmonized contract with subcontractors, the development of a harmonized pool contract, the development of a harmonized presentation of a pool account, research on the VAT situation in passenger transport by coach in the EU and beyond, development of a roadmap relating to the introduction of the Euro, the mapping of the Eurolines traffic with the identification of major hubs* and the *consideration of the implications of the Schengen Agreement*. It is not our intention to go into detail on all of these topics, but we will focus on our network, the pool accounts, our travel conditions and those two items which have an impact on our business and where the success of our endeavours is often determined by higher authorities: the unharmonized VAT regulations and the implications of the Schengen Agreement.

#### 2.7.4.1. *Eurolines travel conditions*

Albeit that the price for a ticket from any city in eastern Europe to any city in western Europe will always differ from the ticket price for the same journey in the reverse direction, we at least needed to harmonize the *conditions of travelling* to ensure consistency in the services we offer to our customers. Since April 1998, the following conditions apply:

- The minimum age to travel alone on board Eurolines is 16 years;
- Everyone on board the coach must have a seat and a ticket. Children up to four years old benefit from an 80 per cent reduction in ticket prices. No more than one baby per adult is allowed;
- For children between 5-12 years, a reduction of 50 per cent is allowed, except for destinations to Morocco and Ireland;
- Passengers between 13-25 years and those over 60+ travel at a 10 per cent reduction fare;
- Group reductions (i.e. from ten paying people onwards) are possible in principle; however, these details are established by each pool;
- No refund is granted in the case of lost or stolen tickets;
- Tickets have a maximum validity of six months;
- For cancellation within 48 hours, a fee will be charged according to the conditions defined in the manual (i.e. determined by each Eurolines member individually). For changes in date and time as well as cancellations over 48 hours and for bookings with open returns, a small administration fee may be charged;
- In case of cancellation of the return coupon, a refund is granted which will equal the return fare less the single fare and less an administrative charge;
- In the case of a “no-show” (as for lost or stolen tickets), no refund will be granted.

#### 2.7.4.2. *Eurolines pool accounts*

Our members work together in *pools* of which the pool members differ according to the line(s) they operate. Each pool has a pool accountant who ensures the draft of a pool account at regular intervals. Until recently, these pool accounts all looked somewhat different: in size, layout, provided information, statistics, presentation, etc. Harmonization in this area was thus required to ensure that each pool report could be read and understood in a common way. The Eurolines pool account now consists of the following building blocks:

#### **Collection of pool account information**

1. Retrieval of information from the ticket:
  - I. The numbers of the tickets (= ticket itself);
  - II. The total number of tickets;
  - III. The departure and the destination;
  - IV. The ticket fare (from which the age, currency, single or return ticket, etc., can be deducted);
  - V. The company name which sold the ticket.
  
2. Retrieval of information from the passenger list:
  - I. The coach number;
  - II. The journey date;
  - III. The departure and the destination;
  - IV. The name of the carrier company.



## **Presentation of the pool account information**

1. Traffic
  - I. General traffic per partner;
  - II. Breakdown of traffic per kms per partner, per month/year and percentage-wise.
2. Revenues
  - I. Sales per partner per month per year;
  - II. Percentage of sales per partner per month, per year [for pools between EU partner(s) and non EU partner(s), conversion in Euro and original currency should be presented];
  - III. Cost per partner (including VAT);
  - IV. Commission;
  - V. Net revenue;
  - VI. Division of net revenue per partner;
  - VII. Settlement (on the basis of the sales).
3. Statistics
  - I. Statistics of passengers per year, per month and per partner;
  - II. Kilometres per year, per month and per partner;
  - III. Sales per year, per month and per partner.

All pool accounts are computerized and a list of ticket numbers and other data is provided to the various pool accountants electronically. To ensure that the Organisation is fully informed of the ongoing Eurolines business, all pool accountants forward the information on statistics of kilometres and passengers per year, per month and per partner (Part B, Item 3: Statistics, I & II) to the Central Secretariat.

### *2.7.4.3. Value-added tax*

Regarding the VAT treatment of the carriage of persons for coach operators in the EU Member States and in a number of third countries, DKV has, in a recent publication, attempted to pass on its experiences in getting to grips with customs and VAT provisions in the individual European countries. In order to clarify which complex problems and questions arise in connection with this topic, the following items will indicate those which our operators and members are confronted with<sup>1</sup>.

#### **Within the European Union:**

- Does an operator fall under the VAT regulations when carrying persons? If so, what is the basis of assessment?
- Is any tax charge dependent on whether the service is rendered within the context of scheduled bus services, shuttle services or unscheduled services?
- Is it important whether the carriage falls under transit traffic to another EU Member State or a third country or whether the carriage does not cross any other border?
- Does the operator then fall under the general taxation regime or does an individual carrier's tax regime have to be implemented?

- If a tax charge is levied, can the operator claim the VAT charged against him as input tax against expenditure (e.g. fuel or other supplies and services), or are there limitations in this respect?
- If the operator does not fall under the general tax regime, can he nevertheless get a reimbursement of the input tax charged against him under a VAT repayment procedure?
- What does the operator have to do if he is subject to the VAT rules? For instance, does he have to appoint a tax representative or register as a business and apply for a VAT registration number? Who can act as a tax representative in such cases?
- What does an operator have to do in the case of an input tax reimbursement? For instance, does he have to appoint a tax representative or do the invoices presented have to satisfy certain requirements?
- In the event that certain input tax cannot be repaid under the reimbursement procedure or under the general tax regime, might there possibly be an option that could nevertheless make it possible to obtain repayment of input tax?
- What is the tax rate for a carriage service that is liable to tax?

### *Austria*

The tax procedure in Austria is very similar to that in Germany. The tax is levied on an operator performing carriage services, insofar as these are performed in Austria. The tax rate is 10 per cent. There is a right to deduct input tax. In the case of cross-border unscheduled services with third countries, a taxable basis of 60 *groschen* is taken as the average carriage charge per passenger kilometre. The tax liability arises at the time the border is crossed. Upon entering via a third country, for each individual journey the operator has to submit a tax declaration in duplicate to the customs post of entry. The tax levy is issued by official decision on the basis of the declaration and is immediately payable. During the journey, the decision must be carried in the vehicle and must be shown to the customs post of exit. If necessary, a corrected tax declaration has to be submitted. When entering from an EU Member State, the declaration has to be submitted to the customs post of exit. In connection with individual taxation, it is not possible to obtain reimbursement of input tax. However, the operator can claim deduction of input tax by rendering an advance value-added tax notice or tax return (possible as from 1995) to the relevant tax office. However, it must be pointed out here that the right to deduct input tax can be restricted or fully denied by order of the Ministry of Finance as regards operators from non-EU states, where this is necessary, so as to act in accordance with the principles of reciprocity. For operators from EU States, the right to deduct input tax cannot be restricted. If the passengers are carried between EU Member States, the foreign operator is obliged to arrange to be registered in Austria with the tax office. The tax procedure is then carried out in Austria according to the general rules<sup>2</sup>.

### *Belgium*

The carriage of persons is liable to tax for the portion of the journey undertaken in Belgium. The rate of taxation is 6 per cent. The charge relating to the portion of the journey in Belgium can be determined according to the following formula:

Charge for the portion of the journey in Belgium =

$$\frac{\text{Number of kms for} \\ \text{Net price for entire journey} \times \text{portion of journey in Belgium}}{\text{Number of kms for the whole journey}}$$

**Example:** Return Journey Cologne (Germany) – Ghent (Belgium)

Total km: 590 km Price for total journey (ex. VAT) Euro 572  
Belgian km: 420 km

$$\frac{\text{Euro } 572 \times 420 \text{ km}}{590 \text{ km}} = \text{Euro } 407.2$$

Basis of assessment:

= Euro 407.2

Exchange rate 40

BEF 16 288 x 0.06 = BEF 977 of VAT due.

Since 1.1.1996, it has been possible to apply for an exemption from the requirement to appoint a tax representative. This exemption is optional. Advance VAT returns have to be submitted quarterly if the tax liability amounts to more than BEF 100 000 (approximately Euro 2 500). Otherwise, an annual return is sufficient, together with payment of the VAT.

The application for registration, together with the issue of a VAT number and a dispensation from the requirement to appoint a tax representative, has to be sent to the *Bureau Central des assujettis étrangers* in Brussels. If no VAT return has hitherto been submitted, in spite of there being an obligation to do so, tax arrears as from 1.1.1993 are to be settled immediately, so that criminal penalties can be avoided as far as possible. By reason of the tax liability and payment of value-added tax, the operator is entitled to deduct Belgian VAT charged to him from his returns as input tax. There is an exception to this for input tax under Article 26 of the Sixth EC Directive (travel services under Art. 25 VAT Code; e.g. purchase of drinks during the journey through Belgium). There is no individual tax regime possible for operators from non-EU states<sup>3</sup>.

### *Denmark*

A foreign operator (non-Danish) has to engage a business acquaintance, sectoral organisation or VAT reimbursement agent established in Denmark to effect a VAT registration, obtain a VAT number and keep the “books”. It is a condition that the foreign operator carries out more than four trips a year. A benefit of registration is that the VAT payable (difference between value-added tax and the advance tax) only has to be paid within 85 days. Apart from that, there are guaranteed free border crossings. However, it is advisable always to carry a copy of the registration certificate.

In the case of unscheduled trips to and through Denmark (up to four trips per year), it is advisable to pay the VAT directly to the customs office at the border upon entry. That way, the operator can avoid the cumbersome notification prior to the commencement of the journey.

### *Finland*

Intra-Community carriage services are tax-free. Despite the tax exemption, there is a right to deduct input tax under certain conditions. The operator does not have to appoint a tax representative.

## France

The carriage of persons in France is liable to tax according to the normal VAT procedures under deduction of input tax. The tax rate amounts to 5.5 per cent. Transit carriage services through France are tax-free with groups of at least ten persons. The appointment of a tax representative in France is obligatory. Individual carriers' taxation for buses registered in third countries is only a possibility in relation to Switzerland. It is still being checked whether a tax charge is payable in this case. If a bus registered in a third country enters via an EU Member State, there is no tax charge at the border. The normal taxation procedure applies. Deduction of input tax is permitted with the exception of input taxes under Art. 26 of the Sixth EC Directive (e.g. purchase of drinks during the journey through France).

## Germany

In the case of carriage of persons on unscheduled services, with motor buses that are not registered in Germany, the so-called individual tax regime for carriers applies. This is implemented by the relevant customs office and charged against all taxable turnover. The tax has to be paid immediately to the customs office. In levying the tax, an average carriage charge of 8.67 *pfennigs* is taken as a basis for every passenger-kilometre driven in Germany. On the basis of a 15 per cent tax rate, the VAT tax to be paid thus amounts to 1.3 *pfennigs*. The relevant authorities for fixing the tax are the customs offices at the ports of entry and exit. The tax receipt must be carried during the trip. If the number of passenger-kilometres changes during the journey, a corrected tax declaration has to be submitted when exiting over the border into a third country. The customs offices are able, under Sec. 18 (11) VAT Act, to lay down the factors that are decisive for establishing the liability to VAT of buses not registered in Germany as part of their road traffic checks and to communicate these to the relevant finance authorities. When applying for a reimbursement of input tax, copies of the corresponding vouchers (VAT declarations to the customs offices) have to be enclosed. In the other case (i.e. individual taxation has not been or is not implemented), the operator is obliged to report the taxable turnover to the relevant tax office. The basis of assessment for the value-added tax is the portion of the agreed fare without VAT (net carriage charge) that is due in respect of the journey undertaken in Germany (including so-called light-running mileage), whereby the portion attributable to Germany is determined according to the ratio between the portions of the journey in Germany and abroad and the total price agreed. The tax rate is basically 16 per cent. The charge attributable to the portion of the journey in Germany can be determined according to the following formula:

Charge for the portion of the journey in Germany =

$$\frac{\text{Net price for entire journey} \times \text{portion of journey in Germany}}{\text{Number of kms for the whole journey}}$$

**Example:** Journey from any point to Paris for 1 trip per week  
 Total km: 1 276 km Price for total journey (ex. VAT) Euro 56.53  
 Km in Germany: 471 km  
 30 passengers per trip (estimate)  
 32 weeks per year

Net price =  $\frac{\text{Euro } 56.53 \times 471 \text{ km}}{1\,276 \text{ km}} \times 2$  (outward and homeward)  
 Net amount = Euro 41.72 x 30 pax x 32 weeks = Euro 40 051.2  
 Euro 40 051.2 is the basis of assessment that has to be reported in the value-added tax return.

The operator has to submit an advance return by the tenth day following the end of the advance reporting period and an annual return by 31 May of the following year. The advance reporting period is the calendar quarter. If the tax for the previous calendar year amounts to more than Euro 6 000 the advance reporting period is the calendar month. If the tax for the previous calendar year amounts to less than Euro 500, the tax office can grant the operator a dispensation from any requirement to submit advance returns. The operator can, of his own accord, opt to submit advance returns monthly if the tax for the previous calendar year has resulted in an excess in his favour of more than Euro 6 000<sup>4</sup>.

#### *Greece*

Carriage of persons is taxable. The tax rate is 8 per cent. A tax representative has to be appointed. Deduction of input tax is permitted with the exception of input taxes under Art. 26 of the Sixth EC Directive (e.g. purchase of drinks during the journey through Greece). The carriage of persons that begins and ends outside Greece and within one and the same EU country is only subject to VAT there and not in Greece as regards the Greek portion of the journey. VAT on repairs, for which proper tax invoices are issued, qualify for reimbursement. VAT on fuel should only be reimbursed if it is exported and evidence is shown that this is the case (difficult in practice). The VAT tax on fuel consumed in Greece is not reimbursed.

#### *Ireland*

Carriage services are tax-free. In principle, there is deduction of input tax under the reimbursement procedure. It is not necessary to appoint a tax representative.

#### *Italy*

Carriage services are tax-free. In principle, there is deduction of input tax. The operator must appoint a tax representative. In contrast to other countries, for extra service and lubricants, the operator still has to request a proper tax invoice from service stations in Italy.

#### *Luxembourg*

Carriage services are tax-free. In principle, there is deduction of input tax under the reimbursement procedure. The operator does not have to appoint any tax representative.

### *The Netherlands*

In principle, a foreign operator has to register in the Netherlands in order to subject the carriage service taxable in Holland to VAT (for the Dutch portion of the journey). The tax rate is 6 per cent of the charge made without VAT (for determining the basis of the tax charge, see Germany). This way, the operator qualifies for the deduction of input tax.

### *Portugal*

Carriage services are tax-free. In principle there is deduction of input tax under the reimbursement procedure. The operator does not have to appoint any tax representative.

### *Spain*

VAT is not charged in connection with the carriage of persons. For this reason, there is no entitlement to deduct input VAT.

### *Sweden*

Intra-Community carriage services are tax-free. Despite the tax exemption, there is a right to deduct input tax under certain conditions. The operator does not have to appoint a tax representative.

### *United Kingdom*

Carriage services are tax-free. Despite the tax exemption, there is a right to deduct input tax. The operator does not have to appoint a tax representative.

### **In non-EU member states:**

- Are there differences as against the treatment of operators from EU Member States and what are they?
- Are there other peculiarities that have to be borne in mind by these operators (e.g. formalities when crossing borders)?

Since the implementation into national law of the Sixth EC Directive No. 77/388 on the harmonization of the legal provisions of the Member States concerning VAT, the carriage of persons has, in principle, constituted a taxable event in each of the Member States. However, each Member State has the possibility of exempting this taxable turnover from tax. On 1.1.1993, the provisions concerning criminal penalties and fines in Articles 370 and 379 of the Tax Code were extended so that criminal sanctions also apply to VAT that is administered by other EU Member States. Moreover, within the context of the Act implementing the EC Directive, voluntary notifications are possible in cases of VAT evasion in other EC Member States via the mutual administrative assistance structures in the area of direct and indirect taxes (EC Administrative Assistance Act). We will now look at the VAT provisions as they exist in a number of non-EU Member States.

### *Norway*

The carriage of persons is not liable to VAT. There is no reimbursement of input tax.

### *Switzerland*

It is not possible to obtain a reimbursement of input tax in the repayment procedure, since under Sec. 18 (9), sentence 7 of the VAT Act, there is no reimbursement of VAT on fuel in, e.g., Germany for operators that are not established in the territory of the Community (no reciprocity). Contrary to commercial haulage traffic, a reimbursement of input tax in Switzerland is only possible under the normal taxation procedure since, similar to the German rule, the carriage service performed in Switzerland is, in principle, taxable in Switzerland. However, in order to carry through the taxation procedure, a tax representative is necessary. Apart from that, a guarantee has to be provided from a Swiss bank in the amount of the estimated annual tax liability.

### *Hungary*

Passenger-carrying services from abroad into Hungary are not liable to tax. There is no possibility of obtaining any reimbursement of input tax under the repayment scheme in Hungary, since, under Sec. 18 (9), sentence 7 of the VAT Act, there is no reimbursement of value-added tax on fuel in e.g. Germany for operators that are not established in the territory of the Community<sup>5</sup>.

In summary, the Eurolines Organisation identifies four major discrepancies regarding the issue of VAT:

- The different VAT levels between EU Member countries regarding transport by coach;
- The different controlling rules by national tax authorities varying from very stringent to less stringent;
- The unfair competitiveness between regular, licensed operators who pay VAT and the non-licensed, pirate operators who do not pay VAT;
- The different VAT levels between the various modes of transport, which is certainly the most important one as it puts us at a competitive disadvantage as compared to, for example, the aircraft travel industry.

We are currently assessing, under the Organisation's umbrella, which actions have so far been taken by our members and what progress they have achieved in their lobbying efforts against the present situation at national level. It is clear, however, that once we have a complete file at hand, we will develop a systematic and structured approach to undertake an appropriate and persistent lobbying at EU level to ensure rectification and improvement of the present situation. This will apply to Directorate General DG VII (Transport), DG IV (Competition) and DG XV (Taxation, Internal Market).

### *Free movement of persons: Schengen*

#### **General Remarks**

The Europe Agreements (EAs) concluded with the Central and Eastern European Countries (CEECs) are characterised by limited regulation concerning free movement of persons. Free movement of persons is, after all, one of the four freedoms to be ensured within the Internal Market, according to Article 7A of the Treaty on the European Union (TEU). If the CEECs are to prepare for accession, there is no reason why this subject should be excluded. However, even within the EU itself, free movement of persons has not yet been fully achieved. It should be stressed that the

Schengen Agreements also contain provisions on a wide range of issues other than, although closely related to, movement of persons, such as police and security, the Schengen Information System (SIS), the fight against narcotic drugs and drug-trafficking, etc. It would go far beyond the scope of the present contribution to examine these provisions in detail.

The very start of what has become known as the Schengen process was on 14 June 1985, when five Member States of the European Community, namely, the Benelux countries, France and Germany, signed the Schengen Agreement. This Agreement in turn grew out of the earlier 1984 Saarbrücken Agreement between France and Germany, which aimed at abolishing controls at their common borders. The purpose of this agreement was twofold: *to make substantial progress towards the achievement of the so-called "citizens' Europe" on a limited scale* and, at the same time, *to set an example for the European integration process*. Soon the Benelux countries showed interest in joining France and Germany. The exploratory talks finally resulted in the signing of the Schengen Agreement. Since then, the other Member States of the European Union, except the UK, Ireland, Denmark, Sweden and Finland, joined the Schengen contracting parties. One of the reasons why the latter States preferred not to become Schengen Member States is that they hold different views on how far free movement of persons should go. It is well known that the UK, for instance, has a certain distrust of the way some Schengen contracting parties carry out immigration controls. The difference in policies on narcotic drugs forms another impediment for these States to join the Schengen process. The 1985 Agreement could be described as a framework for co-operation. Indeed, the five originating countries agreed on a number of short-term and long-term measures which had to be implemented, as the Agreement expressly states, before 1 January 1990. The deadline turned out to be unrealistic because of the scope of the measures to be taken. The measures which aimed at relaxing police and customs controls on persons and goods at the internal borders caused few problems and could be dealt with in the short term. The long-term and compensatory measures were, on the other hand, not so easy to implement. Compensatory measures were deemed necessary because of the ambitious goals of the contracting parties. Indeed, the abolition of internal border controls does not mean that all controls are necessarily eliminated. Rather, it results in the transfer of controls from the internal borders to the external borders. The compensatory measures envisaged concern, *inter alia*, particularly sensitive areas such as the prevention of illegal immigration into the Schengen territory, the improvement of international co-operation at the level of the police and the judiciary, the harmonization of visa and immigration policies and of legislation on the control of illicit traffic in narcotic drugs and firearms, the transfer of controls on the transport of goods from the borders to the interior of the Schengen territory. It is important to stress that, although only Member States of the Community participate, the whole Schengen process was from the beginning, and is still now, developing outside the Community framework. "Schengen" is a purely intergovernmental initiative, without any significant participation of the Community institutions. It was only after a while that an EC Commission representative was invited to attend the meetings of the Schengen Central Negotiating Group and of the Ministers and Under-Secretaries of State. Moreover, the Commission representative joined those meetings only as an observer, without having the possibility of participating in the discussions or influencing the orientation of the debates. The Commission nonetheless never raised any objections against its observer status. This is a remarkable fact, considering that the Schengen contracting parties' aim is also one of the main objectives of the 1985 Commission White Paper on the Completion of the Internal Market, namely, the free movement of persons. The negotiations directed at implementing the objectives of the 1985 Schengen Agreement resulted in the conclusion of a comprehensive Implementing Convention signed, again in Schengen, on 19 June 1990. The name *Implementing Convention* accurately reflects its content, i.e. provisions implementing the objectives and measures mentioned in the 1985 Agreement. The Implementing Convention distinguishes between crossing internal frontiers and crossing external borders. The ultimate aim is to do away with the last impediments for achieving the free crossing of *internal frontiers*. Internal borders may be crossed at any point without any checks on persons being carried out. However, an exception can be made when



public policy or national security so require. In that case, a contracting party may decide that, for a limited period of time, national border checks will be reinstalled and the other contracting parties should be informed about the measures taken.

As regards the crossing of external borders, attention should be drawn first to the definition of *alien* in the Implementing Convention, as this is an important concept throughout the entire Convention. The Implementing Convention defines in its first title the concepts used in the following provisions. An alien is defined as “*any person other than a national of a Member State of the European Communities*”, while the term “third State”, however, “shall mean any State other than the Contracting parties”. As a consequence, the term “third country national” could theoretically refer to nationals of one of the Member States that do not yet belong to the Schengen group. Thus, while a distinction is made between Schengen contracting parties and other Member States of the European Union, no similar distinction is made between Schengen contracting party nationals and nationals of an EU Member State which has not signed the Schengen Convention. The reason is to be found in the already-mentioned parallel between the Schengen initiative and the free movement of persons objective within the Community. The simple fact that all the Schengen contracting parties are EU Member States and the fact that the Schengen initiative partly pursues the same goals as the EC Internal Market programme could possibly create problems of compatibility with relevant Community rules. The definition of “alien” was inserted in order to avoid those conflicts. In particular, the principle of non-discrimination between EU nationals was at stake. By inserting the “alien” definition in the Implementing Convention, non-discriminatory treatment of all EU nationals, whether they are Schengen State nationals or not, is assured.

According to Article 5, contracting parties may grant entry into their territory for visits not exceeding three months to aliens who fulfil the following conditions:

- Being in the possession of a valid document or documents and a valid visa if so required;
- Having sufficient means of support;
- Not being reported as a person to be barred from entry;
- Not being considered as a person who is a threat to public order, national security or the international relations of any of the contracting parties.

The expression “may be granted”, is of particular importance here. The contracting parties have indeed the possibility of granting entry to the alien who fulfils all the conditions of Article 5, but are by no means obliged to do so. Moreover, the conditions mentioned are in fact minimum standards, so contracting parties can always decide to impose other or stricter conditions for entry into their territories. On the other hand, the contracting parties have the obligation to refuse entry to any alien who does not fulfil all the conditions mentioned above. Moreover, the conditions must be fulfilled regarding each Schengen contracting party. As a consequence, the controlling state becomes the watch-dog for all the Schengen states, because it is obliged to examine, for instance, the threat to public order, national security or international relations in each Schengen state individually. If the alien at the Schengen border is considered a threat in one of the Schengen contracting parties, he no longer fulfils the conditions of Article 5. Therefore, the examining state must refuse entry. Thus, in practice, the most restrictive standard applied by one of the contracting parties becomes the common standard. It is striking that the common approach of the Schengen states towards admitting or refusing an alien is only formulated in a negative way. In fact, if one of the contracting parties raises an objection to the entry of an alien, the refusal must be taken into account by all the other contracting parties. Should, on the contrary, a state decide to derogate from the obligation to refuse entry on humanitarian grounds, the others are not obliged to share that opinion. The derogation is restricted to the territory of the Member State concerned.

## Visa policy

Visas are dealt with in Chapter 3 of Title II of the Implementing Convention. This chapter contains provisions on visas for long and for short visits. As regards the latter, the contracting parties will try to harmonize their individual policies by common agreement. Some aspects have already been harmonized; a uniform Schengen visa has been introduced which is valid for the entire territory of the contracting parties. Consequently, only one visa is needed for the alien wishing to travel throughout the Schengen territory, and this uniform visa is sufficient to cross the internal borders of the Schengen territory, once the external border is crossed. Nevertheless, a visa will be issued only if the alien fulfils the conditions of Article 5. This means that the entry conditions of Article 5 will be controlled when issuing the visa *and* when entering the Schengen territory. Furthermore, some gaps remain in the visa arrangements. The Schengen system sets out three lists of countries regarding the issuing of visas.

First, the Schengen contracting parties agreed on a list of third countries, whose nationals are subject to visa requirements common to all the contracting parties (the so-called negative list).

Secondly, there is a list of countries whose nationals do not need a visa to enter the Schengen territory (the so-called positive list).

A third list contains those countries on which the Schengen contracting parties could not reach an agreement as to visa requirements (the so-called grey list). Some Schengen states do require a visa from nationals of those countries, others have abolished visa requirements for them. This system clearly has consequences for the principle of free movement within the Schengen territory. A contracting party still has the possibility to derogate from these provisions and issue a territorially restricted visa. This derogation applies where a contracting party would like to issue a visa to an alien who does not fulfil all the conditions of entry laid down in Article 5.

## Initiatives at EU level

Since the beginning of EC integration, visa issues and even the entire immigration question were deemed to belong to the exclusive competence of the Member States. However, when the Commission presented its White Paper on the Completion of the Internal Market in 1985, it became clear that, sooner or later, an initiative would have to be taken at Community level. Free movement of persons in an Internal Market without internal frontiers could not exclusively be reserved to EC citizens, simply because otherwise frontier controls would have to be maintained after all. If not, how could one differentiate between EC nationals and non-EC nationals? It was equally beyond doubt that the Community would take the Schengen philosophy as a guideline for the completion of the Internal Market: the transfer of controls from the internal borders to the external borders seemed to be the best solution. This necessitated, *inter alia*, a common visa policy. It took some time, in fact until the Maastricht Treaty, before substantial progress was made concerning visa policy. According to the new Article 100C of the EC Treaty, the Council, acting unanimously on a proposal from the Commission and after consulting the European Parliament, shall determine the third countries whose nationals must be in possession of a visa when crossing the external borders of the Member States. The Council shall also “adopt measures relating to a uniform format for visas” [Article 100C(3)].

Shortly after the entry into force of the EU Treaty, the Commission presented an important communication in which two proposals were made. One concerned a proposal for a regulation determining the third countries whose nationals must be in possession of a visa when crossing the external border of the Member States. The second proposal, complementary to the first one, concerns a decision establishing the Convention on the crossing of the external frontiers of the Member States. While the regulation has already been adopted by the Council, the decision establishing the external borders Convention is still pending. Based on the draft External Borders Convention, agreed upon by the EC Immigration Ministers in the Ad Hoc Group on Immigration in 1990, a Council decision remains blocked by the dispute between the UK and Spain on the status of Gibraltar.

Council Regulation 2317/95 of 25 September 1995 establishes a list of countries whose nationals require a visa when crossing the external border of the Member States. The objective of this regulation is very limited. Only a negative list of countries has been established. Although the Commission has stated in its proposal that Article 100C also implied a competence for drawing up a positive list, the Council rejected this point of view and simply deleted the reference to a positive list. Moreover, only visas issued for a three-month period or for transit through a Member State's territory are covered by the regulation. On the other hand, transit through the international zones of airports and transfer between airports in a Member State are not within the scope of the regulation. According to the preamble of the regulation, these and other aspects of the harmonization of visa policy, including the conditions for the issue of visas, are matters to be determined under Title VI of the EU Treaty.

As a result, visa policy is now being dealt with at three different levels: the national level (visas valid for more than three months); the intergovernmental level (Schengen); and the EU level. This dispersion of competencies makes a harmonized visa policy within the EU illusory. Finally, it should be mentioned that the Council adopted Regulation 1683/95 of 29 May 1995, laying down a uniform format for visas. The EU format is different from the one introduced by the Schengen contracting parties. This is because the list of countries whose nationals need visas used by the Schengen states, is not identical to that used at EU level.

### **Carrier sanctions**

Following the example set by certain EC Member States, the Schengen Convention obliges the contracting parties to impose sanctions on carriers bringing inadmissible persons into the Schengen territory. Inadmissible persons are described in the Convention as *aliens who do not possess the necessary documents* and are transported *by air or sea from a third State to the territories of the Schengen contracting parties*. Moreover, the carrier should take all the necessary measures to ensure that the alien is in possession of the documents required for entry into the territory of the contracting parties. In other words, carrier personnel is charged with the tasks of border authorities and immigration officers. If an alien is refused entry into the territory of one of the contracting parties, the carrier which brought the alien to the external border is obliged to assume responsibility for the alien again without delay. The contracting parties must incorporate this guiding principle into their national legislation. The carrier must even return the alien to the third State from which he or she was transported, to the third state which issued the travel document, or to any other third state to which the alien is guaranteed entry.

These provisions have been much criticised, notably also by Eurolines. The Dutch Council of State, for instance, makes reference to the Chicago Convention on International Civil Aviation. This Convention permits a distinction to be made between a situation in which there is evidence of a particular negligence by the carrier in taking precautions to ensure that the passenger concerned complied with document requirements for entry, and the situation where the passenger possesses

falsified documents. In the latter situation, no responsibility should be put on the carrier while, in the former, the carrier can be held responsible. No such distinction is made in the Implementing Convention, which will lead to a restrictive attitude towards aliens and refugees in case there is any doubt about them possessing the required (and legitimate) documents. Rather than taking the risk of being imposed severe sanctions, travel operators will most likely refuse to bring such persons to the external borders of the Schengen territory. This practice is already observed in those Schengen contracting parties which had implemented legislation on carrier sanctions before the Implementing Convention was signed.

In conclusion, the system of carrier sanctions is, in fact, another way of blocking the entry of third country nationals into the Schengen territory. A first elimination of immigrants (including refugees) is made in the country of origin by the carrier personnel. We should be concerned about the imposition of carrier sanctions and strict visa requirements which do not distinguish asylum seekers from other aliens. By those provisions, a very important responsibility is placed in the hands of those who are in fact unauthorised to make asylum determinations on behalf of states, who are untrained in asylum procedures and who are obviously more motivated by economic rather than humanitarian principles<sup>6</sup>.

### *The Eurolines network*

As mentioned before, our network covers at least 300 European cities at present. As the network grows, the need for optimising and improving interchanges and connections equally increases. This is dealt with by our *Operations Committee*, which develops proposals related to the creation of new hubs and the optimising of our vehicle use. To this end, the Eurolines traffic (departures and arrivals and the frequency of all services) needs to be analysed and broken down for all major European cities. This analysis, which is in the process of being developed, must also make the distinction between traffic during high and low seasons. The results of this analytical work will have implications on all the operational components of our business: timetables, stops, frequencies, interchanges, connections, destinations, etc.

Consequently, wasteful duplication of certain lines with low seat occupancy will be deleted by merging certain pools and travelling time for the passengers will reduce if certain stops are repositioned (i.e. closer to main highways, but always with ample parking availability and links to the urban transport facilities). This will result in cost savings for our members on both kilometres and time and it will improve our speed so that ultimately more cities can be added to the network. Where volumes are sufficient, we will make more use of higher capacity vehicles (e.g. double-decker coaches or longer coaches where allowed). It will also ensure higher flexibility to respond to event-related opportunities and enhance our networking.

A major weakness in the Eurolines Organisation is, beyond question, the lack of a uniform and harmonized reservation system between its members. We are working on this issue within our *Technology Committee* where we assess the feasibility and possible scenarios of growing together in this field. This implies the cataloguing of what information systems exist at present within our member companies, it implies the definition of what is required to satisfy our needs in that respect, it implies the search for useful and appropriate expert advice from third parties on developing a feasible concept with a future and mid-term focus and, above all, it implies the required commitment and political will of all members to grow together and thus to invest in adapting their soft- and hardware to one another. If we want to be successful in tomorrow's travel environment, we will need to improve the communication between our operation departments by use of on-line data exchange. We must improve the quality and the compatibility of our information and reservation systems (e.g. ATB tickets used by all our members, tickets with check digits, centralised pool accounting, etc.). Only in this way



will we be able to maximise our sales and increase our load factors. In addition, we should establish a centralised statistical database on the basis of the pool accounts. It would allow us to update our information year by year and ascertain global statistics of the Eurolines Organisation concerning kilometres, passengers and sales. By using this database we would be able to identify synergies and develop cross-references which would ultimately optimise our decisionmaking processes. It would allow us to study the different kinds of potential customers country per country, identify their potential growth and their contribution and impact on the future profitability of our member companies. Although this information is without question available at national and company level, it is surely the greatest challenge for the Organisation at present to obtain an overall insight into that information in order to present general figures and statistics.

Nevertheless, we maintain a positive mind-set and are confident that our progress in growing together will evolve as time goes by. What initially started as a franchising operation in 1985 has meanwhile developed to a solid and thorough organisation of which the trademark is protected in over 35 different countries. The trademark is, beyond question, our strongest weapon in illustrating our network ambitions and in ensuring our growing presence in the field of international line services by coach.



The Organisation developed a *catalogue of the situation of the mark* in the various countries so that we are fully aware of which company has prior rights to the use of the mark. Whereas the Organisation is owner of the international marks No. 655784 (see above) and No. 620147, the founding members of the Organisation often hold prior rights to their national mark. This is the reason why the Organisation has recently deposited an application for a Community Trademark. This Community mark will cover all countries of the EU, whereas the International Trademark will be maintained for all non-EU countries and beyond. This implies that any new incoming member will no longer need to deposit the mark at national level. At the time of writing, there are applications from another eight companies under consideration by AG, as we mentioned before. Three of them originate from countries not yet represented in Eurolines: Norway, Morocco and Lithuania ... the network is thus indeed continuously growing and expanding.

### **3. THE EUROLINES SERVICES**

In October 1998, the Eurolines General Assembly decided to establish from April 1999 onwards a separate legal entity under the auspices of the Eurolines Organisation, called *Eurolines Services BVBA*. This new body, is involved with supporting commercial activities to the member companies. It is at the moment difficult to provide a detailed description of all the activities this new organisation will be involved in, but three main areas of activity can already be highlighted:

- Administration and promotion of the Eurolines Pass;
- Development of co-operation agreements with third parties (e.g. highway restaurants, youth hostels, attracting sponsorship, etc.);
- Development of specific promotional campaigns linked to international events, cataloging promotional gadgets, co-ordinating publicity and advertising efforts, etc.

The Eurolines Pass is a common Eurolines product: it is a passport to travel, allowing the customer to enjoy unlimited travel around the continent for 30 or 60 days. It was first launched in 1995. At that time, 16 cities were offered: this was expanded to 18 cities in 1996, 21 cities in 1997 and 30 cities in 1998, covering 16 countries. In 1997, 2 922 passes were sold, an increase of 104 per cent as compared to the 1 432 passes sold in the previous year. In 1996, 16 Eurolines members sold 84 per cent of the passes and the rest was sold by non-European agents. In 1997, the members sold 71 per cent of the passes and the number of foreign agents increased to 41. In 1998, 300 000 brochures were printed in twelve languages.

The Eurolines Services BVBA is involved with promoting the pass to travel agencies. It develops its brochure, takes care of the administration and accountancy and distributes the income from sales to the applicable members. The total sales are currently at approximately 1 million Euros per annum (a 60-day pass is purchased at Euro 250). Ideal for young and old alike, the Eurolines Pass provides an opportunity for customers to explore Europe at their own pace. They can plan their route in advance, create their own itinerary, travel when and where they like and stay for as long as they like. With the Eurolines Pass, customers can travel almost throughout the entire Eurolines network and take advantage of the daily departures on many services (some up to five times per day). The fare includes unlimited coach travel between the thirty European cities, together with any applicable ferry crossings, road tolls and travel taxes. The only extras may be for excess luggage. Youth fares are for passengers up to and including 25 years of age. Senior fares are for passengers aged 60 years and over. Provided it has been validated, bears the holder's name, passport number and signature and has not reached its expiry date, the Pass entitles the holder to travel between the designated 30 cities (not beyond). Customers are also advised to reserve their onward journey at the local Eurolines office at least 24 hours in advance. During peak periods they must reserve their seat as far in advance as possible in order to obtain a reservation. It is possible to turn up and travel, but a seat cannot always be guaranteed unless a reservation is made in advance. On booking each leg of the journey, the customer will receive a travel coupon which he must show at check-in.

The premises of the Eurolines Services BVBA are located in the same building as the Eurolines Organisation, i.e. at Avenue de la Métrologie 6, B-1130 Brussels, and a Product Manager takes care of the day-to-day business under the supervision of the Managing Director. The latter is Secretary General of the Organisation. Members of the Executive Committee of the Organisation are also members of the Board of Directors of the Eurolines Services BVBA.

#### **4. CONCLUSION**

Since its creation in 1985, the Eurolines Organisation has constantly grown and obtained a market leadership position in international line services by coach. It has developed a balanced network in which competitive pricing and strong co-operation agreements between its members are the basis for future success. The Organisation is change driven and has, with the Eurolines mark, a common denominator in place amongst its members. Much work still needs to be done in facilitating

our communication processes, not only by developing a harmonized reservation system but also by improving our common goal-setting and by enhancing our corporate identity. Through a spread of resources over many countries, we sometimes suffer from a lack of consistency. We have, however, a common set of stringent and generally accepted quality standards in place. With the Eurolines Pass, we also have a common product in place. By trying to appeal to new market segments, seeking co-operation agreements with third parties (highway restaurants, sponsors, tour operators, etc.) and by developing strategic alliances in the field of marketing, quality and operations, we are on the way to success in creating a more adaptive and flexible Organisation.

Our development of - and our progress made in - our measurement systems has led to a better linkage between our daily activities and our strategic objectives. Based on measurement and feedback, we have implemented process improvements which originated from information gathered from process analyses, customers and employees. Our surveys allow a deeper and more detailed assessment of performance, which enables us to provide focused feedback and supported reinforcement of the desired behaviour of our front-line staff, drivers and employees. Nevertheless, our developed approach and philosophy, which can be viewed as prerequisites for future success, will take more time to mature and to come to fruition. Whereas our members measure and experiment individually and autonomously, we think and act collectively. Despite the differences between our members, which mainly can be attributed to varying commercial backgrounds and development phases, they have elements in common such as a focus on customers, developing strong partnerships and competencies, the human factor in a central role and a premium on information processing and learning. Consequently, we do not stick to merely simple improvement, but want to be able to create renewal processes. As such, the members are investing significant effort, time and energy in participating at our special committees and in becoming a learning organisation. Without neglecting the operations, we will have to continue to put considerable effort into dealing with strategic issues. Eurolines has developed the appropriate organisational structure to understand and analyse its external and internal environment by which it can create a solid basis for innovation and renewal.

However, growth in European road passenger transport by coach has been lower than overall growth in personal mobility for many years, mainly as a result of the growth in the share of travel by private car. It appears unlikely that this trend can be reversed in the short term, despite efforts by national governments, local authorities and others. This is largely because of the ineffectiveness of many of the traditional measures adopted in bringing about the changes in attitude and lifestyle required. The liberalisation of the market, the increased competition within the same mode of transport, mergers and acquisitions, governmental cost-increasing measures, increased bureaucratic market entry and the discrepancies in the regulations regarding fuel taxes and VAT returns, constitute additional burdens to our field of activity. As regards the latter, we will lobby at all possible levels against the imposition of VAT on coach travel in those countries where this is still applicable. In addition, we will focus on attracting the best people in the industry, on promoting our trademark aggressively, on developing and launching new products, on reinforcing progressively our current mechanisms of controlling and improving our quality and on diversifying our sales methods (direct and indirect). Our partnerships with agencies, tour operators, youth associations, call centres, etc. will also be further developed.

Whereas Europe's single market was in 1985 still largely on the drawing board, today it is virtually complete: we move from one country to another and we have obtained a single European currency. The political norm for generations of Europeans has vanished, leaving us with challenges and opportunities we never dreamt possible in 1985. While adapting our business methods to the requirements of the market, we are building today the foundations for tomorrow's profitability and prosperity.



## NOTES

1. DKV (1998), *Mehrwertsteuer - Information für Omnibusunternehmer*, Status: 01.04.1998.
2. Leaflet issued by the Graz Tax Office.
3. Leaflet issued by the Belgian Ministry of Finance.
4. Leaflet issued by the German Ministry of Finance.
5. This information is based on research carried out by DKV, comments from tax advisors and communications from tax offices. Since, in a number of countries, we have to assume a certain legal uncertainty, legislative provisions and requirements may deviate from the practical implementation of the rules. We cannot give any guarantee as to the accuracy or completeness of the foregoing information. With particular reference to the frequent amendments to tax legislation, no liability can be assumed for the completeness and continued validity of the experience presented.
6. Maresceau, Marc (1997), *Enlarging the European Union: Relations between the EU and Central and Eastern Europe*, New York, pp. 209-236.  
Pollet, Kris: “*Free Movement of Persons and the Issue of Migration*”.

**ANNEX: MARKET SURVEYS UNDERTAKEN BY EUROLINES**

Figure 1. Age of the respondents

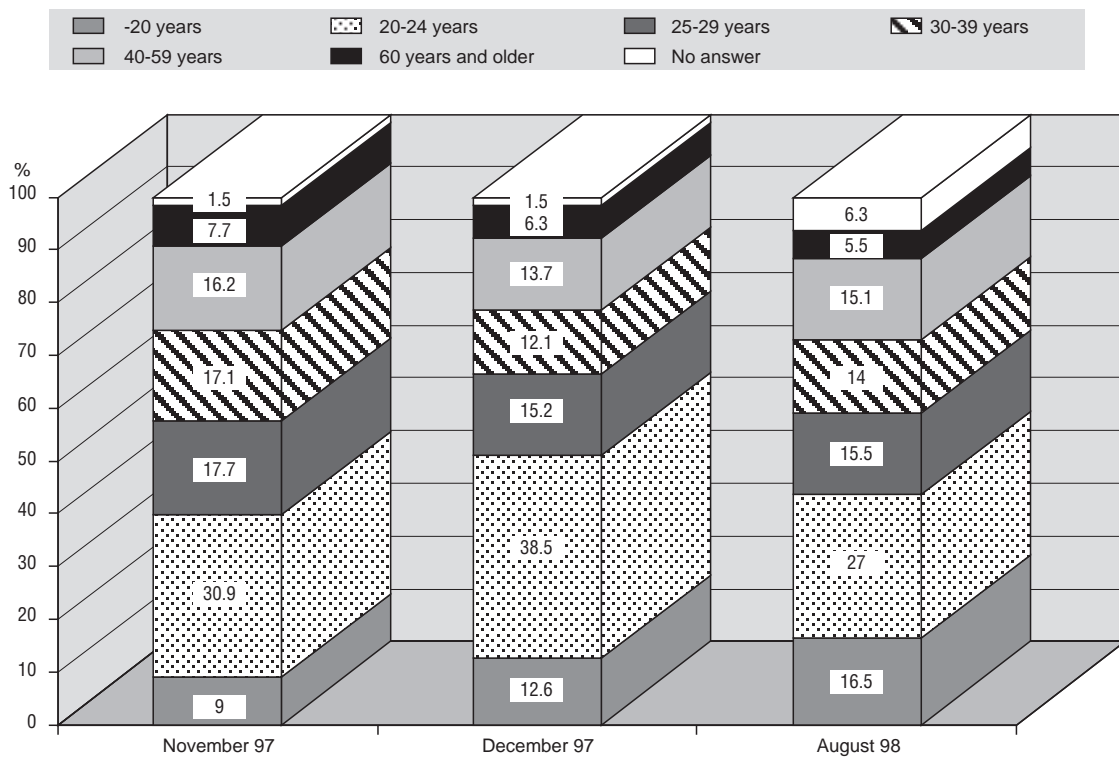


Figure 2. Gender of the respondents

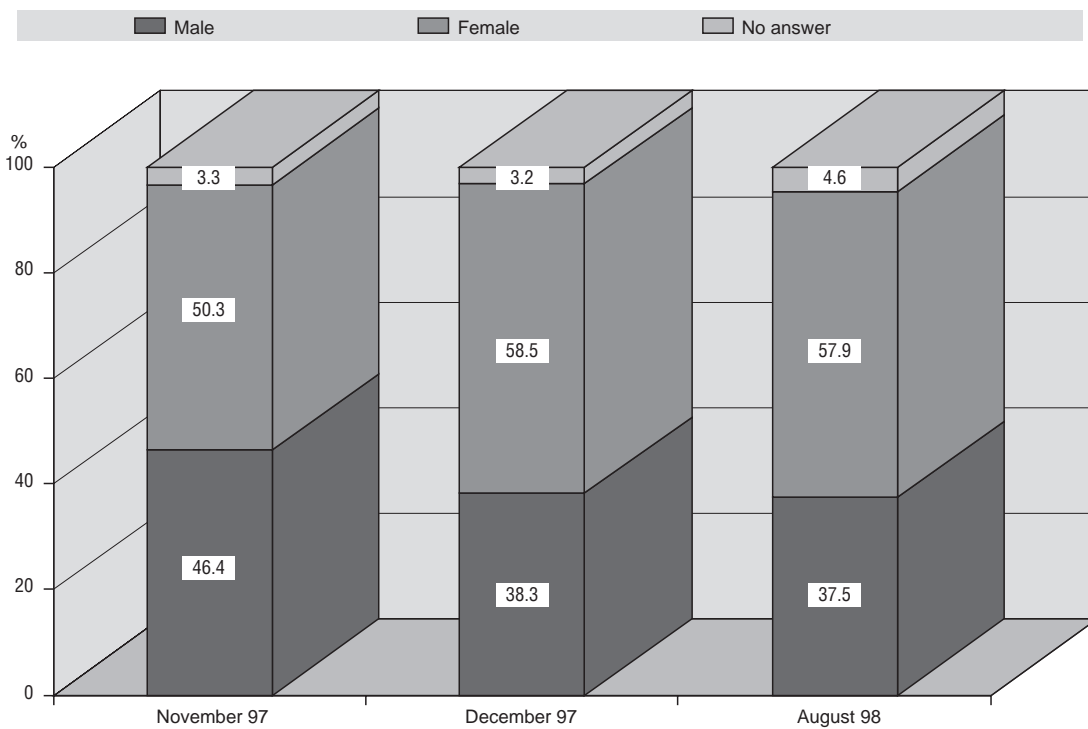


Figure 3. Preferred mode of transport

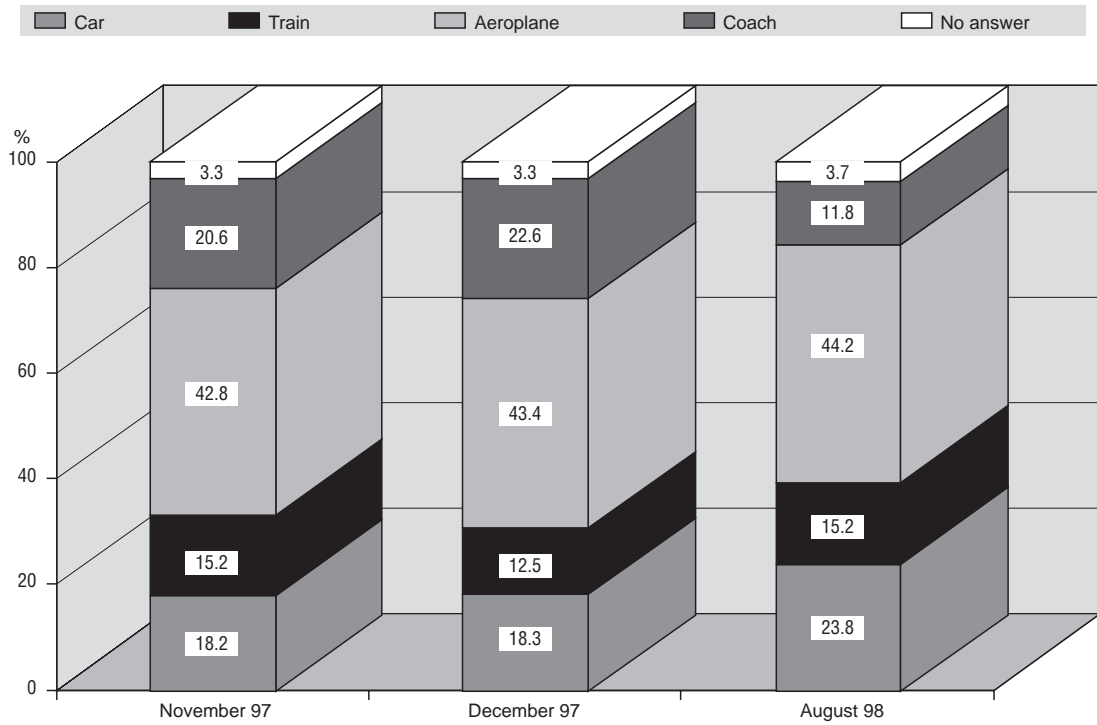


Figure 4. Profession of the respondents

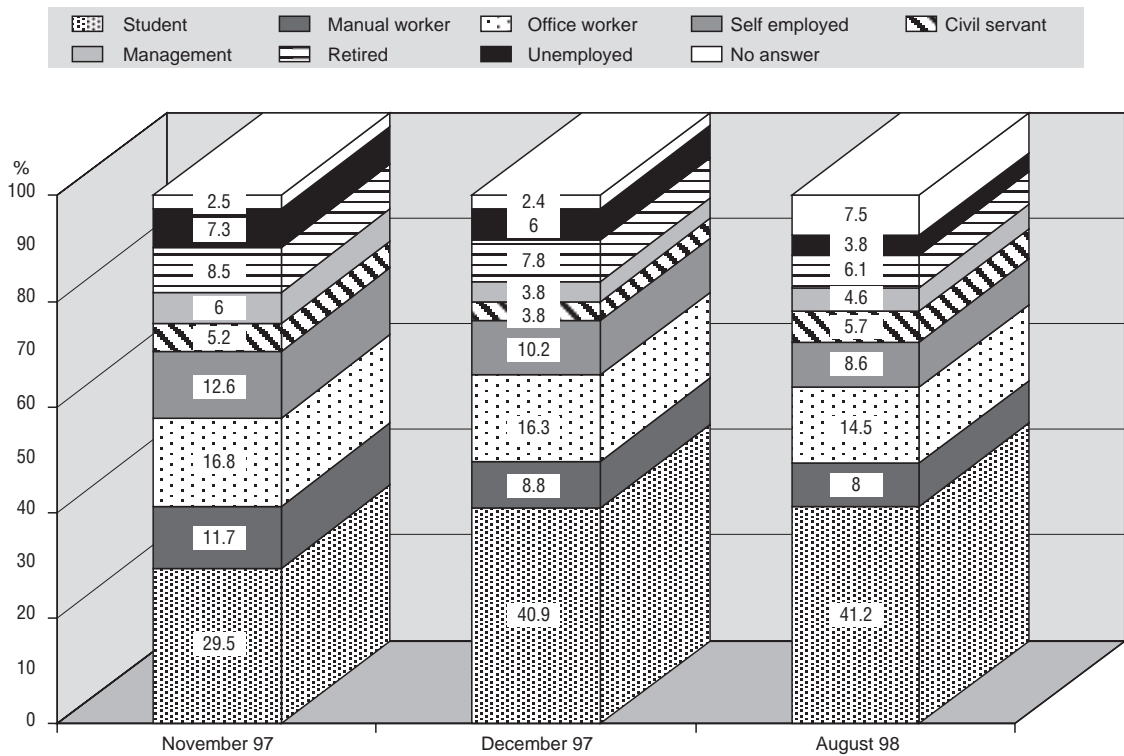
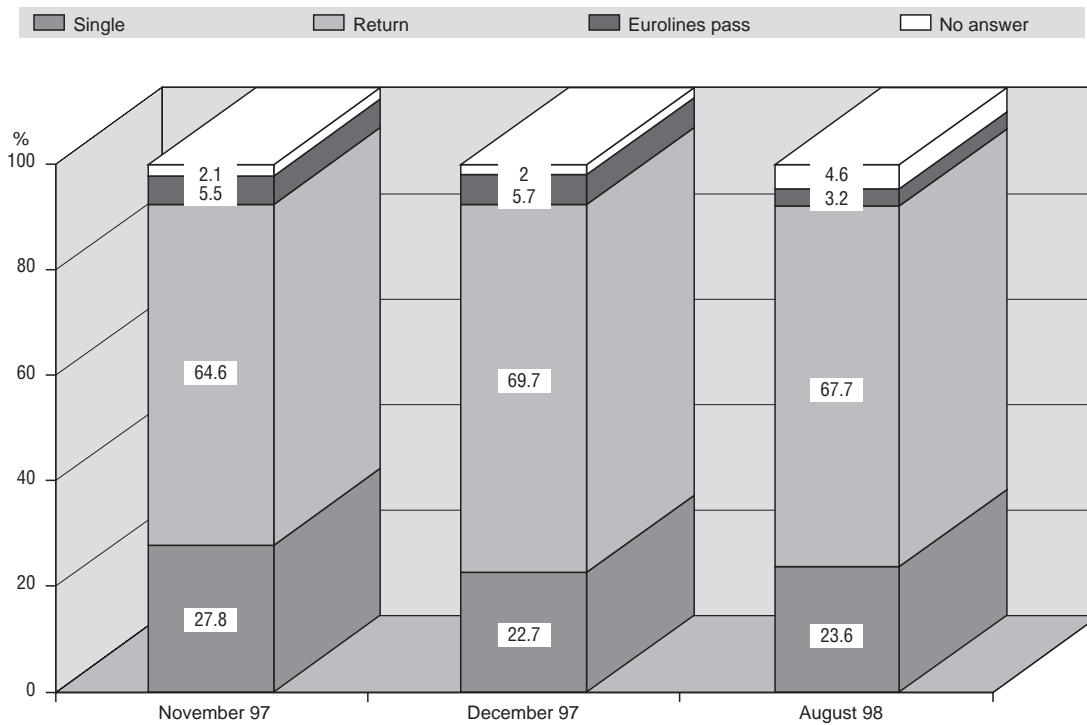


Figure 5. Type of ticket



POLAND

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**THE DEVELOPMENT OF INTERNATIONAL BUS TRANSPORT  
IN CENTRAL EUROPE: THE CASE OF POLAND**

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Warsaw, June 1998





## **1. INTRODUCTION**

When investigating the spatial structure of long-distance bus transport in Poland, we are obliged to treat the domestic and international lines entirely separately. While, namely in the case of international connections, the primary subject of analysis is the development of a new transport phenomenon, in the case of domestic connections analysis is centred on the structural changes which have taken place since 1989 in a network which had existed and been growing for many years. Moreover, the two kinds of connections are serviced by different transport companies. Likewise, their development perspectives, in conditions of progressive socioeconomic change and approaching integration with the European Union, are also different.

The main objectives of the present report are as follows:

- To present the changes in demand for passenger transport, which took place in Poland after 1989, and their influence upon the development of the international and long-distance coach network.
- To characterise the development of international bus transport between Poland and the rest of Europe, which occurred during the 1990s.
- To determine the dynamics and directions of change in the scope and structure of the network.
- To characterise the transport operators active on the market.
- To indicate the economic and formal limitations to the further increase of transport flows and the perspectives in this domain linked with future Polish membership of the European Union.

The report also contains complementary and thus, out of necessity, quite short comments concerning (1) the changes in domestic long-distance coach transport and (2) the situation in other selected countries of the region.

## **2. CHANGES IN DEMAND FOR INTERNATIONAL PUBLIC PASSENGER TRANSPORT AFTER 1989**

The demand for domestic public passenger transport services (including road transport) continually increased during the whole period of the centrally-planned economy, the 1980s included. This increase was related to mass job commuting and to artificially lowered transport rates, owing to subsidies. During its best year, 1989, the State bus company (PKS) provided service to more than 2.5 billion passengers. On the other hand, demand for international transport services was conditioned by a quite different set of factors, of both an economic and political nature: the current passport and visa-issuing policies, the black market exchange rates of the western currencies and the profitability of

tourist and business travel. Demand increased for the first time in the 1970s due to the policy of opening up to the West, to then be restricted during martial law (1981) and the closing to the Poles of neighbouring socialist countries' borders due to fears concerning possible spreading of propaganda. Since 1983, though, demand has been constantly on the increase again.

Transformations in the magnitude and structure of demand for public passenger transport (after 1989) took a different course in the fields of domestic and international transport service. Thus, in the domestic domain there has been a drastic limitation of demand connected with (1) a massive increase in car numbers; (2) a decline in suburban and regional job commuting (layoffs in the large industrial enterprises and lowering of employment numbers); (3) a serious decline in incomes for some of the population during the first transformation phase, coupled with an unavoidable increase in transport rates. The specific nature of the above factors meant that the decline in demand concerned, to a greater extent, regional connections and, to a lesser extent, local and long-distance ones. The resulting demand structure was also significantly influenced by the policy of the largest transport operator to date, the Polish State Railways (PKP), through closure of unprofitable railway lines and raising rail transport rates to a level equal to or even higher than the bus rates. Simultaneously, due to an enormous jump in air fares and shorter travel times by express rail, domestic air travel underwent further marginalisation.

After 1989, demand for international public passenger transport services was mainly affected by two factors, i.e. a dramatic increase in transborder traffic and the mass growth in passenger car numbers. Consequently, a high proportion of the rapidly growing demand for international transport was being satisfied by private car travel. The situation differed very much, however, depending on geographical direction as well as the standard of living in Poland and its neighbouring countries and transport operators' rate policies.

## **2.1. The intensification of transborder traffic and changes in its structure**

The increase in intensity of transborder passenger traffic at the beginning of the 1990s was of an unprecedented nature, never before observed in the history of Poland. Thus, while in 1989 the Polish borders were crossed by a total of 59.2 million persons, a year later this number was at 84.3 million, and in 1992 at 157.4 million (more than 2.5 times the number from three years earlier). The increase slowed down somewhat in subsequent years, but it would still exceed 10 per cent per annum. In 1996, the borders were crossed in both directions by 262.3 million persons, out of which 33.4 per cent were Poles.

The original cause of this increased traffic intensity was the political and economic transformations which took place in Central and Eastern Europe after 1989. Direct factors which contributed to this increase include:

- The liberalisation of Polish passport regulations.
- The signing of agreements on non-visa entry between Poland and the majority of European countries.
- The signing of agreements on minor border traffic with Germany, the Czech Republic and Slovakia.
- The far-reaching facilitation of passport procedures in the countries of the former Soviet Union.
- The decentralisation and privatisation of car transport and foreign trade.

- The unification of Germany and of the German Mark, connected with a rapid rise in the cost of living in the former German Democratic Republic (leading to a search for cheaper goods and services beyond the Polish-German border).
- The impoverishment of the societies of the former Soviet Union (motivating travel to Poland in order to sell low-quality goods -- especially until 1993-94) and of a segment of Polish society (demand for such goods).
- The competitiveness (good quality accompanied by prices lower than the western European ones) of some Polish-produced goods (cosmetics, food, garments, furniture) on the markets of the eastern and, in part, southern neighbours (home equipment commodities), coupled with a dramatic increase in the prices of consumption goods in these countries (motivating petty imports from Poland).
- The high excise tax and tariffs on alcohol in Poland, motivating petty smuggling from beyond the eastern and southern borders.
- The improvement in quality of tourist services in Poland, causing increased inflows of tourists from Germany and other countries of western Europe.
- The increased wealth of a part of Polish society, linked with increased costs of domestic tourist services, conducive to the renewed development of foreign tourism (directed during the summer mainly to the Mediterranean countries, and during winter to the Alps and Slovakia).

There was also during this period an essential transformation in the structure of border traffic (Table 1). In 1980, only slightly more than half of persons crossing the borders would take the roads (including those on foot). One-fifth crossed the borders by rail and slightly over 4 per cent travelled by air. Since the end of the 1980s, road traffic has been systematically on the increase, to the detriment of rail and air. In 1996, the share of road transport was already above 94 per cent, with the railways taking a mere 3.1 per cent and air 1.1 per cent. Simultaneously, beginning in 1990, there was a decline in absolute numbers of people crossing the borders by rail (from 15.6 million in 1990 to 8.0 million in 1996) and, since 1991, by air (from 2.4 million to 1.9 million).

**Table 1. Passenger traffic across the borders of Poland in 1980, 1990, 1993 and 1996 according to transport mode**

Mode of Transport:	1980		1990		1993		1996	
		%		%		%		%
Railway*	7 636 391	19.92	15 645 297	18.57	13 506 223	7.28	8 045 679	3.07
Road*	21 800 667	56.87	60 579 269	71.90	166 315 066	89.63	247 554 945	94.36
Air	1 572 364	4.10	2 378 854	2.82	2 111 332	1.14	2 949 589	1.12
Sea	431 286	1.12	703 916	0.84	1 244 959	0.67	1 564 196	0.60
River	18 708	0.05	444	0.00	6 079	0.00	10 850	0.00
Non-passport	6 877 451	17.94	4 942 524	5.87	2 552 315	1.38	2 228 829	0.85
Total for Poland	38 336 867	100.00	84 250 304	100.00	18 551 514	100.00	262 354 088	100.00

\* In 1993 together with the Polish-German minor border traffic, in 1996 together with Polish-German, Polish-Czech and Polish-Slovak minor border traffic.

\*\* *Inter alia*, planes, ferry and train crews; military traffic.

Sources: Own calculations based on Border Guards' statistics.

The drastic decline in the importance of international rail transport was primarily due to: (1) a significant increase in prices of international rail tickets; (2) acute competition from the dynamically developing international coach transport; (3) the rapid development of motorisation both in Poland and in the countries of the former Soviet Union; and (4) polarisation of the wealth status of persons travelling abroad by public transport (the "rich" ones choosing air transport, the "poor" ones opting for the cheap and uncomfortable bus trip).

The railways' importance in international transport declined during the 1990s along all the borders of Poland, although less rapidly on the eastern border. A relatively high significance was preserved only on the border with Belarus (in 1996, still at 28.7 per cent, explained by transit trains between Russia and western Europe and the traffic of small traders on the specially introduced train connections between Terespol and Brest – a total of 2 kms in length!) and to some extent on the Ukrainian border (9.4 per cent). Rail passenger traffic with Germany, the Czech Republic and Slovakia preserved its significance only during the first two years of the socioeconomic transformations (in 1990, the railways' shares were, respectively, 15.9 per cent, 21.4 per cent and 13.6 per cent). Already in 1991, the percentage of train passengers travelling across these borders started to decline rapidly. By 1996, they had dwindled to 1.7 per cent on the German border, 1.5 per cent on the Czech border and 2.6 per cent on the Slovak border.

The initial stagnation in the development of international air transport resulted largely, on the other hand, from the official dollar exchange rate being more closely aligned to the real exchange rate. Until the end of the 1980s, the sale of air tickets according to the so-called official exchange rate gave rise to incomparably low prices for air travel. The second factor was the influence of global trends in this domain. While, however, the decline of railway passenger traffic on international lines seems to be a persistent phenomenon, the increase in air passenger traffic over the Polish borders started to regain a significant momentum from 1994 (in 1993, 2.1 million persons crossing the border in this manner, in 1996, 2.9 million).

There have also been important changes in the directional structure of transborder traffic (Table 2). Until 1994, there had been a steady increase in the already extremely high concentration of traffic along the Polish-German border. In 1980, this border was crossed by 41 per cent of all those who participated in Polish transborder traffic, while in 1994 the figure was almost 62 per cent. This tendency slowed down and stagnated, and the percentage share declined in 1996 to 49 per cent. An essential increase in traffic intensity was also observed along the borders with Belarus, Ukraine (a massive increase was observed there, primarily in the first period of petty trade trips, i.e. in 1990-1991, followed by stagnation and, in the case of Ukraine, even a decline in traffic) and the Czech Republic (dynamic increase in traffic intensity in 1994).

As from 1994, the border guards' statistics make it possible to separate coach traffic, most interesting for us here, from total passenger traffic (Table 3). Thus, in 1994, the borders of Poland were crossed by 517 thousand coaches, in 1995 by 564 thousand and in 1996 by 542 thousand. The stabilization in number of coaches crossing the borders is linked with the gradual ordering of the market for regular international coach connections. Many eastern border crossings have fixed upper daily limits for coach clearances, so fluctuations in their numbers are minimal. In the period 1994-1996, the number of coaches crossing the Belarusian and German borders decreased and, after 1995, the same happened on the Russian, Lithuanian and Czech borders. Only along the Ukrainian and sea borders was a continued growth in traffic observed. In 1996, the percentage shares in coach traffic were as follows: 20.6 per cent on the German border, 19.7 per cent on the Czech, 18.1 per cent on the Ukrainian, 14.9 per cent on the Slovak and 14.6 per cent on the Belarusian border.

It can be easily seen that the distribution of coach traffic among the borders is much more uniform than the distribution of passenger traffic in general. This results from the enormous demand for coach transport persisting in the East, and the large amount of tourist coach travel to the Mediterranean countries (most often transiting via Slovakia or the Czech Republic).

Table 2. **Passenger traffic across the borders of Poland in 1980, 1990, 1993 and 1996, according to traffic directions**

Border with:	1980		1990		1993		1996	
		%		%		%		%
Russia	5 072	0.01	82 932	0.10	1 124 808	0.61	4 199 049	1.60
Lithuania	4 575	0.01	995 544	1.18	3 548 930	1.91	2 938 968	1.12
Belarus	1 714 992	4.47	5 567 211	6.61	8 926 227	4.81	10 878 645	4.15
Ukraine	998 556	2.60	4 272 310	5.07	5 563 168	3.00	10 629 354	4.05
Slovakia**	2 763 904	7.21	6 225 679	7.39	8 055 846	4.34	16 749 761	6.38
Czech Republic**	8 180 763	21.34	16 716 760	19.84	33 909 521	18.27	82 452 006	31.43
Germany*	15 787 904	41.18	42 364 574	50.28	118 514 408	63.87	127 763 691	48.70
Sea border	431 286	1.12	703 916	0.84	1 244 959	0.67	1 564 196	0.60
Air border	1 572 364	4.10	2 378 854	2.82	2 111 332	1.14	2 949 589	1.12
Non-passport traffic	6 877 451	17.94	4 942 524	5.87	2 552 315	1.38	2 228 829	0.85
<b>Total for Poland</b>	<b>38 336 867</b>	<b>100.00</b>	<b>84 250 304</b>	<b>100.00</b>	<b>18 5551 514</b>	<b>100.00</b>	<b>262 354 088</b>	<b>100.00</b>

\* In 1993 and 1996 together with the minor border traffic.

\*\* In 1996 together with the minor border traffic.

Source: Own calculations based on border guards' statistics.

Table 3. **Bus traffic across the borders of Poland, 1994-1996**

Border with:	1994		1995		1996	
		%		%		%
Russia	16 824	3.26	18 145	3.21	17 554	3.24
Lithuania	44 098	8.53	50 473	8.94	45 243	8.34
Belarus	84 003	16.25	84 837	15.02	79 414	14.64
Ukraine	78 278	15.15	96 484	17.08	97 878	18.05
Slovakia	59 439	11.50	69 871	12.37	80 574	14.86
Czech Republic	105 442	20.40	116 564	20.64	106 930	19.72
Germany	126 047	24.39	125 625	22.24	111 668	20.59
Sea border	2 710	0.52	2 858	0.51	3 072	0.57
<b>Total for Poland</b>	<b>516 841</b>	<b>100.00</b>	<b>564 857</b>	<b>100.00</b>	<b>542 333</b>	<b>100.00</b>

Source: Own calculations, based on border guards' statistics.

The analysis of transformations in the transborder traffic demonstrates the enormous potential demand for international passenger services. Still, taking into account the trade-oriented nature of the local transborder traffic and the increasing numbers of passenger cars, one should state that only a part of the persons crossing the borders can be treated as potential public transport passengers. In the case of the eastern borders, an additional factor which significantly influences demand is the continued administrative interdiction to cross the borders on foot.

## 2.2. The development of motorisation

Until the 1970s, Poland remained a country with few private cars, where public transport dominated passenger traffic. Although during the decade 1970-80 the number of cars doubled, there were still only 67 passenger cars on average per 1 000 inhabitants (Table 4). A true motorisation boom only began at the end of the 1980s, and is still ongoing today. Between 1990-1991, the number of private passenger cars increased by almost 900 thousand (mass private imports of second-hand cars from western Europe), to then increase in consecutive years on average by 300-400 thousand (with new cars sold in Poland gradually taking the dominant position). Currently, 208 passenger cars are registered in Poland per 1 000 persons (1996). In some of the leading provinces (the region of Greater Poland, the large urban agglomerations) this indicator approaches 300, and in Warsaw province it attained 360, which is comparable to the values observed in some western Europe countries (e.g. Denmark).

Table 4. **Development of motorisation in Poland in the period of 1970-1996**

Years	Number of passenger cars			Number of buses (thousands)
	Total (thousands)	Per 1 000 inhabitants	Previous year 100	
1970	479	15	***	33
1980	2 383	67	***	66
1985	3 671	98	***	83
1990	5 261	138	***	92
1991	6 112	159	116.2	87
1992	6 505	169	106.4	86
1993	6 771	176	104.1	86
1994	7 153	185	105.6	87
1995	7 517	195	105.1	85
1996	8 054	208	107.1	85

Source: Rocznik.(1978, 1993, 1997).

In domestic transport, the private car took over a very significant share of passenger travel, both local (especially urban) and regional, as well as long-distance. Driving a car became a status symbol for the increasingly affluent Polish middle classes, so that some would use their cars even on routes where the railways provided attractive and rapid express connections. In spite of a significant rise in gasoline prices, they are still lower in Poland than in neighbouring Germany, and even than in the Czech Republic or Slovakia.

For international transport, the factors limiting private car travel were, in the case of western Europe: (1) high gas prices; (2) the poor technical state of some cars used in Poland and the danger of breakdown and high repair costs; (3) very long distances; (4) insurance costs. For countries to the east of Poland, additional negative factors were fears concerning car thefts and kilometres-long waiting lines at the borders. Nevertheless, the role of private vehicles in international travel is constantly on the increase. For a three- or four-person family, travelling to southern Europe for a holiday, the private car became competitive in terms of costs for the first time ever. At the same time, foreigners visiting Poland in large numbers for shopping purposes generally opt for the car in order to bring back more goods, while the Germans benefit from the cheaper car fuel as well.

### **2.3. Other factors**

Within the framework of the Comecon (Council for Mutual Economic Assistance, CMEA), until the mid-80s, railway rates had been kept at an artificially low, entirely unrealistic level. Consequently, such absurdities occurred as, for instance, the train ticket from Warsaw to Hanoi (Vietnam, some 10 000 kms of travel) costing some 3 000 *zlotys* at that time, i.e. less than the average monthly salary, but also less than the ticket between Warsaw and Paris. On the other hand, for travel to the hard currency countries, the Polish airlines, LOT, as well as the airlines of other Comecon countries, were beyond any competition. The rates were calculated for them on the basis of the official US dollar exchange rates. The difference between these rates and the black market rates (the latter being higher in Poland by, on average, a factor of five) made air fares really cheap. The existing bus connections were not very price competitive, and therefore the demand for them was limited.

At the beginning of the 1990s, all transport rates started to be calculated in western currencies and thus prices became proportionally normalised. The increase in rail and air ticket prices had for a couple of years been ahead of the increase in average incomes, when calculated in US dollars. Hence, an enormous opening appeared for the supply of cheap international public transport. This occurred in parallel with the deregulation of the transport market, which allowed for the spontaneous development of, initially, mainly illegal or semi-legal international bus lines. With time, the position of bus transport stabilized, while the railways, in spite of numerous efforts -- e.g. the introduction of 40 per cent round-trip fare reductions for journeys to the Czech Republic, Hungary and Slovakia -- were not capable of regaining the lost market (with the exception of the rapid and relatively comfortable Eurocity connections with Berlin and Vienna). In the second half of the 1990s, a dangerous competitor to the bus lines appeared in the shape of cheap charter flights organised during the summer season between Warsaw and the tourist regions of southern Europe (e.g. Crete, Majorca, Turkey) and to the Alps during the winter. These flights, though, are capable only of attracting the conventional tourists, who travel over a given route just once a year. For those who travel more frequently (e.g. working abroad, visiting their families), the price of the bus ticket -- still more than two times lower -- remains the key argument when selecting the means of transport.

The effects of the dynamic economic growth which has taken place in Poland since 1992 apply in varying degrees to the different social groups. There has been a rapid increase in real incomes within the emerging middle class (highly-skilled professionals and small businesses), while at the same time there has been a stagnation or even a decline in income among millions of low skilled workers, primarily the inhabitants of high-unemployment regions. Still, even the incomes of the poorest increased significantly if expressed in convertible currencies. Yet, at the end of the 1980s, the average wage (in black-market terms) was between US\$20-30. It has now exceeded US\$300. This had a decisive influence on the material situation of the average Pole travelling abroad, with a



transformation from the job-seeker or poor half-peddler, half-tourist into the modest but authentic tourist or the legally-operating small business entrepreneur. Consequently, the increased demand for international passenger transport services appeared within varied social groups, and was only to a limited degree correlated with the incomes of their members. While the more wealthy consistently chose to travel by air or car, the poorer -- or those travelling more frequently (e.g. persons employed in Germany and visiting their families each weekend) -- would look for the cheapest offers. The offer by the newly-established bus lines was addressed to the latter category. In time, the existence of coach lines connecting Poland with the touristically attractive areas of western Europe (e.g. France) triggered off new demand for transport in this direction. The possibility of making a relatively inexpensive excursion (costing approximately 1.5 times an average monthly wage for a week-long stay and round coach trip) encouraged an increasing number of persons, including the inhabitants of small towns and villages, to make such trips.

With respect to the countries of the former Soviet Union, travelling by bus also ensures a greater ease in crossing the border. This refers to the long train stops on the eastern Polish border (to change the running gear between standard and wide-gauge rail lines), on the one hand and, on the other, to the clearance of regular coaches without waiting in long lines at the overcrowded road crossings (the average waiting time for passenger car clearance on the Polish-Belarusian border is about 10 hours, but may sometimes exceed 24 hours).

### **3. THE SCOPE AND DYNAMICS OF CHANGE IN THE INTERNATIONAL COACH NETWORK IN POLAND**

International coach lines constitute a new phenomenon on the Polish transport market. Their beginnings date back to the 1970s. The state-owned company, PEKAES-SA, serviced at that time connections to London, Manchester, Lille, Stockholm, Rome, Dubrovnik, Burgas (in Bulgaria) and Budapest (Lijewski, 1986). Most often, these were seasonal connections with low trip frequency. There were also local connections between some border towns in Poland and Czechoslovakia (e.g. between Jelenia Góra and Jablonec), which provided a commuting service for those employed on the other side of the border (within the framework of the so-called minor border traffic). The reason for the limited international bus transport in the period of socialist Poland, as mentioned previously, was primarily due to the competitive price level of both rail and air tickets.

The situation started to change gradually at the end of 1980s. The State gave up its monopolistic position in bus transport, and the first private transport operators appeared. They initially serviced connections with western Europe (Germany, France, England), frequently functioning in a semi-legal manner, without having obtained adequate licences from the countries of destination. Simultaneously, the first western firms seized the opportunity of developing bus connections with Poland. After 1991, with the beginning of market-oriented reforms and the liberalisation of passport regulations in the countries of the former Soviet Union, a dynamic growth in eastward connections took place. Customers are primarily from the Commonwealth of Independent States, entering Poland for trading purposes. Over time, the market of bus connections has become much more civilised, though still subject to spontaneous, inexplicable transformations. This is reflected, in particular, by the fact that until now no unified international timetable of bus connections has been published.

Table 5. International coach transport in Poland

Countries	Number of lines			Number of agents		Number of lines per agent		Increase in number of lines		Increase in number of trips 1996 (1993=100)
	1993	1996	1998	1993	1996	1993	1998	1996 (1993=100)	1998 (1996=100)	1998
Austria	4	8	8	28	68	7.0	8.5	200	100	243
Belgium	4	3	8	5	8	1.3	2.7	75	267	160
Belarus	43	44	56	489	493	11.4	11.2	102	127	101
Bulgaria	2	1	3	2	4	1.0	4.0	50	300	200
Czech Republic	12	18	13	101	104	8.4	5.8	150	72	103
Denmark	2	3	3	2	5	1.0	1.7	150	100	250
Estonia	1	1	1	7	6	7.0	6.0	100	100	86
France	10	9	16	19	40	1.9	4.4	90	178	211
Greece	0	1	1	0	1	***	1.0	***	100	***
Spain	2	2	5	2	2	1.0	1.0	100	250	100
The Netherlands	2	2	12	4	6	2.0	3.0	100	600	150
Lithuania	30	38	43	222	300	7.4	7.9	127	113	135
Latvia	1	1	4	7	7	7.0	7.0	100	400	100
Moldavia	0	0	1	0	0	***	***	***	***	***
Germany	88	91	114	236	360	2.7	4.0	103	125	153
Norway	1	3	2	1	7	1.0	2.3	300	67	700
Russia	16	13	19	140	88	8.8	6.8	81	146	63
Romania	1	1	1	3	7	3.0	7.0	100	100	233
Slovakia	11	16	17	44	64	4.0	4.0	145	106	145
Switzerland	1	1	4	1	1	1.0	1.0	100	400	100
Sweden	2	4	7	2	4	1.0	1.0	200	175	200
Turkey	8	8	6	10	9	1.3	1.1	100	75	90
Ukraine	61	55	94	416	498	6.8	9.1	90	171	120
Hungary	3	1	1	10	2	3.3	2.0	33	100	20
United Kingdom	19	18	37	28	35	1.5	1.9	95	206	125
Italy	1	7	9	1	9	1.0	1.3	700	129	900
<b>Total</b>	<b>325</b>	<b>349</b>	<b>485</b>	<b>1 780</b>	<b>2 128</b>	<b>5.5</b>	<b>6.1</b>	<b>107</b>	<b>139</b>	<b>120</b>

Source: Own calculations, based on data from the Ministry of Transport and Maritime Economy.



Figure 1. Network of regular bus connections from Poland to other European countries  
 -- August 1993



Figure 2. Network of regular bus connections from Poland to other European countries - June 1998

An analysis of international bus connections was carried out in three temporal cross-sections, for the years 1993, 1996 and 1998. The data for 1993 and 1998 come from the registry of licences issued by the Ministry of Transport and Maritime Economy and, for 1996, from the list compiled by the Polish Association of International Coach Transport Operators. The data for 1998 contain only information on numbers and routes of the lines serviced by particular operators. They do not account for the number of round trips per week. In 1993, the existing routes were already established for all directions except towards Germany. Among 88 lines then connecting Poland with Germany, only nine had at that time a permanent licence from the Polish Ministry of Transport. The remaining 79 functioned on the basis of temporary licences valid until 30th September 1993. In August 1993, there were altogether 325 international bus lines in Poland (Komornicki, 1996), over which 1 780 round trips per week were taking place (Table 5 and Figure 1). They ensured transport connections with 25 European countries. In addition, seven regular transit lines crossed Polish territory. In 1996, the network of connections still serviced 25 countries. At the same time, though, the number of lines increased by 7 per cent (up to 349), and the number of round trips per week by 20 per cent (up to 2 128). In the period 1996-98, the number of lines increased by 39 per cent to 485 lines). The network now encompasses 26 countries, the latest addition being Moldavia (Figure 2).

We lack complete data on the total length of the international bus connections, because the data published by the Central Statistical Office of Poland (GUS, Table 6) do not account for the smallest enterprises (up to five persons employed). However, the length of lines serviced by the medium and large firms increased in the period 1993-96 from 122 thousand to 254 thousand kms. Simultaneously, the share of international lines for the whole of the network increased (from 10.5 per cent to 19.1 per cent). The numbers of passengers transported on the international lines increased during the 1990s even faster than the length and number of lines (from 718 thousand persons in 1990 to 1 786 thousand in 1996). The simultaneous rapid increase in the length of lines and in the number of passengers transported meant that, in the period 1990-96, the overall transport effort increased fourfold. This is also related to the lengthening of the average transport operation on international lines from 738 kms to 1 115 kms, and demonstrates the frequent and ever-increasing use of transcontinental connections with western Europe.

In August 1993, the greatest number of permanent bus connections, namely 61, linked Poland and Ukraine. The greatest number of roundtrips per week, though, were carried out between Poland and Belarus (489). In 1996, the greatest number of connections existed between Poland and Germany (91). In terms of the number of trips per week, though, the leading positions were preserved by Ukraine and Belarus (498 and 493 roundtrips per week, respectively). The most pronounced increase in the number of connections between 1993 and 1996 took place in the directions of the Czech Republic, Slovakia (re-establishment of the local transborder connections) and Lithuania. Simultaneously, there was a slight decrease in the number of connections with Ukraine and Russia. In the case of Ukraine, though, the decrease in number of lines was accompanied by an increase in number of trips per week, the vehicle stock being thus concentrated on the most profitable connections. A significant increase in number of trips also occurred towards Germany (while the number of connections there remained almost unchanged) and Italy. The average number of round trips per week over one connection increased from 5.5 to 6.1. The highest trip frequencies are continually observed towards Belarus, Ukraine, Lithuania and Austria.

As already mentioned, in the period 1996-98 a rapid expansion of the international bus network was again observed. This can be linked, on the one hand, to an ever-increasing demand and, on the other, to the abandonment of the hidden economy (the "grey zone") by some operators and the official registration of the, until now, semi-legal bus lines, primarily those directed to the West. In the eastern

direction, the greatest increase in number of lines (by 71 per cent) occurred among the connections with Ukraine, although important increases were also noted for connections with Lithuania, Belarus and Russia. In the western direction, new registrations concerned primarily the lines to Germany, the United Kingdom (doubling of the number of lines) and France, as well as Belgium and The Netherlands.

Table 6. **Bus transport in Poland in the years 1990-1996**

INDICATORS	1990	1993	1996
<b>Total length of bus lines in kms</b>	***	1 164 855	1 333 221
out of which: international lines in kms	***	122 156	254 363
in %	***	10.5	19.1
domestic long-distance in kms	***	138 239	148 797
in %	***	11.9	11.2
<b>Number of bus lines</b>	***	28 217	31 095
out of which: international lines	***	125	174
in %	***	0.4	0.6
domestic long-distance	***	602	580
in %	***	2.1	1.9
<b>Passengers transported (thousands)</b>	2 064 244	1 380 762	1 085 438
out of which: international transport	718	986	1 786
in %	0.03	0.1	0.2
PKS enterprises (total)	2 054 122	1 295 656	998 508
in %	99.5	93.8	92.0
Share of PKS in international transport	90.9	68.1	63.0
<b>Transport intensity in thousand passenger-kms</b>	46 300 279	37 811 428	33 984 480
out of which: in international transport	530 131	829 100	1 990 873
in %	1.1	2.2	5.9
PKS enterprises (total)	45 918 576	34 037 571	29 538 588
in %	99.2	90.0	86.9
Share of PKS in international transport	97.3	46.3	30.0
<b>Average distance of transport in kms</b>	22	27	31
out of which: in international transport	738	841	1 115
<b>Average distance of transport by the PKS enterprises</b>	22	26	30
out of which: in international transport	790	572	531

Source: *Transport* (1991, 1994, 1997).

In 1993, the six Republics of the former Soviet Union (Belarus, Estonia, Lithuania, Latvia, Russia and Ukraine) together accounted for 46.9 per cent of all international connections (152 lines) and 72 per cent of all trips (1 281). In 1998, their share of lines was still at as much as 44.9 per cent. In the case of Lithuania, connections are mainly between various Polish towns and Vilna (25 out of 43 existing lines), Lazdijai and Kaunas, located close to the border and the spa towns of Palanga and Druskiennikai. There is one daily connection with Estonia (Warsaw-Tallinn) and four connections with Latvia. For bus connections with Russia, those to Kaliningrad dominate (12 out of a total 19), yet there are also lines to Moscow, Saint Petersburg, Smolensk and Rostov on Don. A new development

is the extension of the line from Saint Petersburg and Moscow to the towns of western Poland (Poznań, Zielona Góra, Szczecin), which is an evident necessity for the servicing of passengers travelling through Poland to Germany and western Europe. Similarly, in the cases of Belarus and Ukraine, the extent of the lines is not merely limited to the border-adjacent localities. There exist regular connections with distant centres such as Mogilev, Gomel, Kiev, Donetsk, Dnepropetrovsk, Zaporozhie and Kharkiv. The greatest number of lines, though, connect Poland with the area of north-western Belarus (Grodno, Lida, Novogrodek, Voronovo), with the towns located along the route towards Moscow (Brest, Kobryn, Minsk -- connections both over Brest and through Grodno and Lida), with Volhynia (Kovel, Rovno, Lutsk), as well as with L'viv and the sub-Carpathian localities of the L'viv province (Dolina, Stryi, Drogobitch, Truskavets, Ivano-Frankovsk). The detailed customs controls still carried out on the borders separating the countries of the former Soviet Union mean that the lines follow routes cutting as little as possible through the borders (thus, for instance, none of the Polish-Lithuanian lines takes the shortest route from Warsaw to Vilna, i.e. through Grodno in Belarus).

The network of bus lines connecting Poland with its southern neighbours, the Czech Republic and Slovakia, is much less developed. Practically, the only functioning connections are the local ones: along the line Rzeszów-Kosice, in the area of the Tatra Mountains (to Poprad and Dolny Kubin), in Cieszyn and Opole Silesia (to Ostrava, Jablunkov and Jasenik), as well as in the region of the Sudety Mountains (from Klodzko, Jelenia Góra and Walbrzych to Liberec, Hradec Kralove and Trutnov). There are, on the other hand, several transit routes crossing the former Czechoslovakia on the way to southern Europe. Thus, there are three connections with Bulgaria, one to northern Romania (though passing through Ukraine), one to Hungary, one to Greece (Athens) and as many as nine to Italy (including those to Turin, Genoa, Rome and Naples). All the Austrian lines end up in Vienna, bringing passengers from various Polish cities. The importance of passenger connections with Turkey is on the decline (decreasing popularity of petty trade, and, in the summer season, competition from cheap charter flights), although in 1998 there are still six lines to Turkey. Even though, since the Yugoslavian crisis, all the lines ending in the former territory of this country have been suspended, buses to Greece and Bulgaria cross Serbia on the way.

Similarly, as in the cases of Belarus and Ukraine, the coach lines from Poland reach almost all the corners of Germany. The majority of lines lead, though, to the former western Germany and especially to its central and northern parts. Connections with the area of the former German Democratic Republic are limited to a couple of lines to Berlin, and an urban line connecting with Zgorzelec and Görlitz across the border. The majority of lines connect Polish towns with Stuttgart, Cologne, Bremerhaven and Aachen. On the Polish side of the border, many lines originate from regions with particularly strong ties with Germany (areas populated in the past by Germans and/or presently by a German minority, i.e. Upper Silesia, Opole Silesia, Masurian Lakeland). Attention should be paid to such exotic lines as Gizycko-Bremen, Leœnica-Cologne, Zawadzkie-Aachen and many others. The major part of direct lines to Germany originate from Warsaw, Olsztyn, Gdańsk, Katowice, Opole and Cracow.

Almost all the bus lines to western Europe also cross German territory. The majority of such lines run through Berlin, Magdeburg, Hanover, the Ruhr Basin and Aachen to the Belgian border, or along the northern edge of the Basin to Vanlo on the Dutch border. Several lines also run directly to France, through Strasbourg. There are altogether eight lines linking Poland with Belgium (including a connection between Siemiatycze and Brussels, intended to serve the inhabitants of a small town in eastern Poland, traditionally illegally employed in Belgium), twelve with The Netherlands, and 16 with France (out of which eleven with Paris). The connection between Warsaw and Saint Jean de Luz

crosses the Czech Republic, Austria and northern Italy. The "English" lines make use of the ferry connections between Calais-Dover, Ostend-Dover and Flushing-Sheerness. The majority of lines to the United Kingdom terminate in London, two of them in Manchester, Cardiff, Bradford, Swansea, Liverpool and Leeds. There are altogether five connections with Spain (more than 40 hours of travel!). Four of them connect Warsaw, Białystok and Przemyśl with Madrid, while one links Rzeszów with Alicante. Out of four lines to Switzerland, two end in Geneva and two in Zurich.

Bus connections have decidedly less significance in transport relations with Scandinavia. Three lines crossing Germany connect Poland with Denmark (i.e. with Copenhagen, Aalborg and Hirtshals). The ferry connection between Swinoujście and Ystad is used by buses travelling from Warsaw and Cracow to Oslo (the sole connection with Norway) and to Gothenburg. The second connection between Warsaw and Gothenburg uses the ferry line Gdynia-Karlskrona. Buses to Stockholm and Kopparberg take advantage of the ferry line Gdańsk-Öxelosund.

In comparison with connections to neighbouring countries, the majority of trans-European lines originate from the larger Polish towns, most often Warsaw, Cracow, Gdańsk and Wrocław. It often also occurs that their routes while in Poland visit a number of large towns, e.g. Warsaw-Lódź-Poznań-Paris or Warsaw-Katowice-Wrocław-Madrid. Several lines to western Europe start from the smaller towns of eastern Poland. This allows the picking up of passengers during a long journey throughout Poland while catering to the inhabitants of less wealthy parts of the country who travel to seek employment.

Attention should also be paid to the relatively low share of short local connections in the total number of international bus lines. There is virtually only one line which has the nature of an urban line, serviced by municipal transport enterprises, connecting Zgorzelec and Görlitz on the Polish-German border (ten times a day, six days a week). It is striking that the twin cities along the borders (e.g. Gubin/Guben, Frankfurt/Slubice, Cieszyn/Tesin, Terespol/Brest) do not have this sort of transport connection. There are, on the other hand, several local transborder lines to the Czech Republic and Slovakia. They are mainly oriented towards tourist traffic in the areas of the Tatra and Sudety Mountains and to so-called "minor border traffic" job commuting, as well as family contacts (Cieszyn Silesia). The frequency of these connections is generally limited, however. The situation is somewhat different along the eastern border. Short-distance bus connections run through virtually all the border crossing points. However, due to their competitive prices, as well as providing local services they take on board train passengers from distant locations in the former Soviet Union. To be included in this group of lines are connections between Sejny and Łazdijai, Sokółka and Grodno, Białystok and Grodno, Biała Podlaska and Brest, Chelm and Kovel, Tomaszów Lubelski and Rawa Russka and between Przemyśl and L'viv. The high demand for such connections is also due to the ban on crossing the border on foot, still in force on the other side of the eastern border. Some of the eastern routes also facilitate contacts by ethnic minorities with the mother country. For instance, the small town of Puńsk, the centre for a Lithuanian minority in Poland, has a daily bus connection with Vilna. From Siemiatycze, where a section of the population is Belarusian, buses run daily across the border to Grodno and Molodechno. The routes of these latter buses on Polish territory run through Hajnówka, where again the Belarusian minority is concentrated. Likewise, on the other side of the border, many bus lines end in localities where large shares of the population are of Polish origin (Vilna, Grodno, Lida, Novogrodok, etc.).



#### 4. TRANSPORT OPERATORS IN INTERNATIONAL BUS TRANSPORT

A licence for the opening of an international bus line can be granted in Poland to any firm which has the right to conduct international passenger transport (the current cost is 10 500 PLN, i.e. some US\$3 000 per bus). The licences are issued by the Department of Car Transport of the Ministry of Transport and Maritime Economy (the cost of a four-year licence is now 4 000 PLN, i.e. approximately US\$1 200). Such a licence can also be granted to a foreign firm, provided that it demonstrates having entered into collaboration with a Polish enterprise for this purpose. Consequently, the majority of the existing lines are serviced jointly by Polish and foreign firms. In some cases, though, given the temporary character of such a situation, the above rule is not adhered to. In order to obtain a licence, the operator must present a detailed route map, timetable, price schedule and list of vehicles to be used on this line, along with the registration numbers. The applicant firm must also present the licences from the destination and transit countries, respectively. When issuing its decision, the Ministry is guided by the principle of protection of existing lines, in such a way as to avoid overlapping of routes used by the various operators. Where, justified by the existing demand, an application is made to open a line analogous to one already in operation, the priority for running the additional connections remains with the operator already functioning along this route. A new Law on Conditions for the Execution of International Road Transport (Ustawa, 1997a), passed in 1997, introduces requirements concerning experience in carrying out domestic transport services, as well as professional records and the non-penalisation of drivers. This new law aims to align Polish regulations with those of the European Union, in particular, through the requirement that operators satisfy three basic criteria for access to the profession: good reputation, financial standing and professional qualifications (Mokrzyszczak, 1995). The rules governing the organisation of regular international coach lines took ultimate shape with an Order, issued by the Minister of Transport and Maritime Economy, of 28th November 1997 (Rozporządzenie, 1997a).

Operators which maintain regular international bus lines can be classified into the following basic groups:

- Large firms in existence before 1989, and either already operating regular bus lines or providing an occasional bus transport service (e.g. PEKAES BUS, Orbis, Gromada).
- Smaller tourist firms, which extended their activity to bus lines (such as Harctur, or the regional chapters of the Polish Tourist Association, PTTK).
- The now independent enterprises of the State Bus Transport (PKS) concern, seeking escape from a very often difficult financial situation through international passenger operations.
- New, dynamic firms, frequently with a share of foreign capital (Sovpolda, Biacomex).
- Polish branches of foreign carrier companies (e.g. National Express).
- Small, private firms, often providing service for just one or two lines.
- Municipal enterprises of the border-adjacent towns, engaged in urban and/or regional transport [e.g. Urban Transport Enterprise (MZK) in Przemyśl].

Together with the known European transport companies, foreign partners of Polish firms consist of enterprises established abroad by persons of Polish extraction. For the countries of the former Soviet Union, the role of partner is most often played by the ex-state bus companies. In some instances, this role is also played by companies with a share of Polish capital.

In 1996, the 349 international lines then in existence were serviced -- from the Polish side -- by 116 transport agents (Table 7). In 1998, there were 485 lines operated by 144 firms. Thus, in the period 1996-1998, the number of connections per transport agent increased from 3.0 to 3.4. For the majority of transport directions, though, the market remains distributed among numerous transport agents. The share of the largest of them (countries with which there are just one or two connections) does not often exceed 30 per cent and, in the case of the largest German market, it amounts to just 6.1 per cent. An exception is found in the Jordan company from Cracow, which monopolised the lines between Polish towns and Austria.

In 1998, the largest Polish transport agent using international bus lines was BIACOMEX from Bialystok (Table 8). It provided service over 54 lines (out of which 51 to the East, primarily to Belarus, Russia and Lithuania), i.e. 11.1 per cent of all Polish international connections. The consecutive ranks are occupied by PKS Przemyśl (22 lines exclusively to Ukraine, Moldavia and Romania), Orbis (20 lines, mainly to western Europe), PEKAES BUS (18 lines, also to western Europe) and PKS enterprises in Warsaw, Rzeszów, Tomaszów Lubelski and Ostrowiec Swietokrzyski, primarily with connections to the East. The majority of large transport operators concentrate their services either on the eastern or the western market. Exceptions are the PKS enterprises in Olsztyn (connections to the Kaliningrad District and Germany) and in Siemiatycze (to Belarus and Belgium as well as The Netherlands).

In 1990, the share of the PKS enterprises in medium- and long-distance passenger transport was as much as 97.3 per cent. Later on, this share rapidly declined (see Table 6), reaching 46.3 per cent in 1993 and merely 30 per cent in 1996. Simultaneously, in opposition to the general trend, according to which the average distance of international bus connections has been getting longer, the average distance of such a connection in the case of PKS decreased, respectively, from 790 km to 571 km and then to 531 km. This is an indication of the progressive segmentation of the market and of the PKS enterprises' continued strong position in the domain of local connections (to the Czech Republic and Slovakia) and of regional ones (to the countries of the former Soviet Union). The PKS have, on the other hand, lost their market share in the western direction to the advantage of:

- Large transport and tourist agencies (PEKAES BUS, Orbis), which, in contrast to PKS, dispose of modern vehicle stock.
- Small firms characterised by the low cost of operations.

For connections with western Europe, there are cases where the requirement of joint management of a line by both a Polish and a foreign partner is abandoned, in anticipation of the future EU membership of Poland. An instance is provided by the Warsaw-London line, operated by the British company, National Express. Although joint management of a line secures a balanced access to the market, it is, in principle, not devoid of a number of shortcomings. The most fundamental of them is the system of financial clearance. The vast majority of tickets for the western European lines are purchased in Poland. Consequently, Polish transport agents are obliged to pay their foreign partners a strictly calculated sum, in order for the two enterprises to equally participate in the profits. Since the respective transfers take place with a delay (to which the low efficiency of the Polish banking system also contributes), the foreign firms, when financing the trips of their buses to Poland, are in fact constantly crediting their Polish partners.

Table 7. Transport agents engaged in international bus transport in Poland

Countries	Number of lines		Number of agents		Number of lines per agent		Number of trips per agent	Largest agent: market share in terms of no. of lines	
	1996	1998	1996	1998	1996	1998		1996	1998
Austria	8	8	1	1	8.0	8.0	68.0	100.0	100.0
Belgium	3	8	3	8	1.0	1.0	2.7	33.3	12.5
Belarus	44	56	19	22	2.3	2.5	25.9	27.3	39.3
Bulgaria	1	3	1	3	1.0	1.0	4.0	100.0	33.3
Czech Republic	18	13	14	9	1.3	1.4	7.4	16.7	23.1
Denmark	3	3	2	3	1.5	1.0	2.5	66.7	66.7
Estonia	1	1	1	1	1.0	1.0	6.0	100.0	0.0
France	9	16	7	11	1.3	1.5	5.7	22.2	18.8
Greece	1	1	1	1	1.0	1.0	1.0	100.0	100.0
Spain	2	5	2	5	1.0	1.0	1.0	50.0	40.0
The Netherlands	2	12	2	5	1.0	2.4	3.0	50.0	33.3
Lithuania	38	43	18	18	2.1	2.4	16.7	21.1	27.9
Latvia	1	4	1	2	1.0	2.0	7.0	100.0	75.0
Moldavia	0	1	0	1	0.0	1.0	***	***	100.0
Germany	91	114	44	57	2.1	2.0	8.2	7.7	6.1
Norway	3	2	2	1	1.5	2.0	3.5	66.7	100.0
Russia	13	19	8	9	1.6	2.1	11.0	38.5	52.6
Pomania	1	1	1	1	1.0	1.0	7.0	100.0	100.0
Slovakia	16	17	8	7	2.0	2.4	8.0	18.8	35.3
Switzerland	1	4	1	4	1.0	1.0	1.0	100.0	25.0
Sweden	4	7	2	4	2.0	1.8	2.0	75.0	42.9
Turkey	8	6	7	5	1.1	1.2	1.3	25.0	33.3
Ukraine	55	94	18	26	3.1	3.6	27.7	20.0	21.3
Hungary	1	1	1	1	1.0	1.0	2.0	100.0	100.0
United Kingdom	18	37	14	25	1.3	1.5	2.5	16.7	10.8
Italy	7	9	6	8	1.2	1.1	1.5	28.6	22.2
<b>Total</b>	<b>349</b>	<b>485</b>	<b>116</b>	<b>144</b>	<b>3.0</b>	<b>3.4</b>	<b>18.3</b>	<b>7.7</b>	<b>11.1</b>

Source:: Own calculations, based on data from the Ministry of Transport and Maritime Economy.

Table 8. **The largest international bus operators in Poland in 1988**  
(providing service over five or more lines)

Operators	Number of lines maintained				
	Total	With breakdown into directions			
		Eastern <sup>1</sup>	Western <sup>2</sup>	Southern <sup>3</sup>	Northern <sup>4</sup>
Biacomex Bialystok	54	51	3	0	0
PKS Przemysl	22	21	0	1	0
ORBIS S.A.	20	2	13	5	0
PEKAES BUS	18	0	14	2	2
PKS Warszawa	17	13	1	1	2
PKS Rzeszow	14	8	0	6	0
PKS Tomaszow Lub.	12	12	0	0	0
PKS Ostrowiec Sw.	11	11	0	0	0
Sovpolda	11	8	1	0	2
Almabus Wroclaw	9	0	8	1	0
Eurotrans Lubliniec	9	1	7	0	1
Confort Lines Ltd. Zabrze	8	1	7	0	0
Jordan Krakow	8	0	0	8	0
PKS Siemiatycze	8	3	5	0	0
PKS Olsztyn	7	3	4	0	0
PKS Suwalki	7	7	0	0	0
PTTK Katowice	7	0	3	1	3
PKS Nowy Targ	6	0	0	6	0
Duo Tourist Opole	6	0	6	0	0
Europa Express Warszawa	6	0	5	1	0
Perfect Tours Lodz	6	0	6	0	0
PKS Bialystok	6	6	0	0	0
Gromada Warszawa	5	1	4	0	0
MZK Przemysl	5	5	0	0	0
Olivia Gdansk	5	0	5	0	0

- 1) Countries of Former Soviet Union (Russia, Belarus, Ukraine, Moldova, Lithuania, Latvia and Estonia).
- 2) Countries of western and south-western Europe (Germany, France, Belgium, The Netherlands, Switzerland, Spain, United Kingdom).
- 3) Czech Republic, Slovakia, Hungary, Austria, Italy, Romania, Bulgaria, Greece and Turkey.
- 4) Scandinavia (Sweden, Denmark, Norway).

Source: Own calculations, based on data from the Ministry of Transport and Maritime Economy.

Co-operation between transport agents operating on the market of international connections is still rare. There is no co-ordination in the establishment of timetables (except a passive one, carried out by the Ministry of Transport and Maritime Economy at the stage of licence issuing) and no common rate policy. On the other hand, though, tickets are being sold not only by the operators themselves, but also by specialised tourist agencies, which offer tickets for lines operated by many companies. In contrast to some other countries of the region (the Czech Republic, Baltic States) and in spite of significant efforts aimed at entering the central- and eastern-European market, Polish transport agents (except PEKAES BUS) have been quite reticent to integrate the Eurolines system of connections. As mentioned earlier, the Polish Association of International Passenger Coach Transport

Operators groups together the operators functioning on foreign lines. The main purpose of this organisation, however, is to represent the transport agents in their contacts with the Ministry, and not to co-ordinate routes or rates. The Association has only 43 member firms, primarily those operating on the western-European lines (including the largest ones, like PEKAES BUS and Orbis), and it does not include the PKS enterprises, nor the largest “eastern” operator, BIACOMEX.

The quality of coach stock used on the international lines has been constantly improving (except for illegal lines, see below), due, in particular, to more rigorous regulations. Foreign partners, however, still generally dispose of newer vehicles. The average service-life of a coach in the larger companies with lines to Poland is approximately six years. During this time, the vehicle often runs more than 800 thousand kms (purchasing on credit necessitates an intensive use of stock). Some enterprises, though, still make use of buses which are 10 years and older, due, in particular, to car servicing capacities. A Polish transport agent knows that practically any vehicle that is operated by them, in case of breakdown, can always be repaired in western Europe. On the other hand, western partners, when renewing their vehicle stock, with increased quality of service, apprehend having their modern coaches, equipped with sophisticated electronics, break down in Poland. The poorest quality vehicle stock is usually run by partners from the former Soviet Union (coaches of own production, a dozen years old as a rule) and, among Polish enterprises, by the PKS on the eastern lines.

#### **4.1. The semi-legal bus connections**

The initial increase in demand for international bus transport, in the absence of modern regulations, resulted in the emergence of a great number of semi-legal bus lines. They most often had a Polish licence for international passenger transport, but no authorisation for providing a regular service. Consequently, these agents could not obtain licences from the destination and transit countries. Illegal trips were usually carried out with old vehicles, often with mini-buses, and the firms providing such service frequently had just one such vehicle and no adequate financial resources. Thus, in the case of a breakdown, generally unavoidable, the passengers could not change coach, nor be provided with temporary accommodation. Fundamental safety standards were not respected: often, just one driver, with no replacement, would cover a distance of two thousand kms. On the other hand, these semi-legal transporters offered very competitive rates, attracting clients away from the legal operators, whose very existence thus became threatened.

In the second half of the 1990s, the significance of the semi-legal line started to decline, due to inspections carried out in some of the western European countries, and to customers’ increased awareness of which transport operators to avoid. Polish buses abroad were involved in a number of dramatic accidents, widely covered by the media, due to the poor technical condition of the vehicles or the sleepiness of the driver. It is, for instance, estimated that at the beginning of 1990s as much as 80 per cent of the bus transport market between Poland and France was taken by the illegal enterprises. The current estimate of this share is 20 per cent.

However, semi-legal mini-bus trips continue in the direction of Germany, many of which are entirely illegal. The passengers are presented at the border, for instance, as acquaintances of the driver, making a joint shopping trip. In contrast to the governments of other EU countries, the German Government, aware of this situation, introduced mini-bus inspections at the beginning of 1998 and border fees, amounting to 500 DM, on the German side. Consequently, in March 1998, one of the border crossings was blocked by 40 mini-buses from Szczecin.

## **5. TRANSFORMATIONS IN DOMESTIC LONG DISTANCE BUS TRANSPORT -- THE CASE OF POLAND**

Until the end of the 1980s, the State Bus Transport Enterprise (PKS), established in January 1945, held an exclusive monopoly of the domestic passenger transport market (with the exception of municipal transport). The only complement to PKS activity were "enterprise lines", providing commuter services to employees of certain enterprises and virtually inaccessible for other passengers. In the post-war period, the rapid development of the PKS network was an essential factor in the social advancement of the Polish provinces. The very first transformations in PKS, one of the largest transport enterprises in Europe, took place at the beginning of the 1980s, when the PKS Board was liquidated. It was replaced by the National PKS enterprise and three independent enterprises with headquarters located in Warsaw, Koszalin and Olsztyn. PKS remained in this form until 1990, when -- with a view to the decentralisation and privatisation of coach transport -- each of the 167 local chapters were transformed into independent enterprises. The majority of enterprises were busying themselves both with passenger and cargo transport. In subsequent years, though, PKS lost the competitive battle for commodity transport on the foreign and domestic markets to the advantage of private transport agents, and its present share on this market does not exceed 1 per cent. The radical reform process did not take into account the specific situations of individual companies and, consequently, the PKS enterprises underwent a rapid polarisation, many of them finding themselves in a very difficult financial position (Pozniak, 1996). The drastic decentralisation was not coupled with rapid privatisation of the enterprises, a necessity under these circumstances. Even today, the resulting enterprises have not been turned into "single-person companies of the State Treasury", this transformation being regarded as the initial phase in the process of privatisation. There are numerous decisionmakers who are mistakenly convinced that coach transport still plays -- as in the past -- an important social role and so requires special protection by the State. While not accelerating the privatisation process, though, the same State systematically limits subsidies and thereby sentences numerous PKS enterprises to bankruptcy, due to the impossibility of renewing the vehicle stock and to frequent poor management (Swiatecki, 1997).

The situation of the PKS was salvaged only by the continual decrease in transport volumes. Thus, in 1996, the whole of the domestic bus transport in Poland (except for municipal operations) already carried a mere 1.08 billion passengers -- almost 2.5 times less than seven years before. In contrast to the Polish State Railways (PKP), though, the PKS did not respond to the declining demand by mass closures of connections. Consequently, there was a paradoxical improvement in service quality, since buses were no longer so overcrowded. There has been, however, a systematic decrease in frequency of trips on particular connections, due to a wearing out of the coach stock and/or to the sale of vehicles. It was only in 1995, after an interval of several years, that the purchase of new vehicles started afresh (Polish Autosan coaches). Simultaneously, the PKS' share of the domestic bus transport market decreased gradually (from 99 per cent in 1990 to 92 per cent in 1996). With a decline in intensity of public passenger traffic, the interest of private firms concentrated on those segments of the market where the decline was smallest and where competition with the PKP railways would be least. Those segments were as follows:

- The suburban lines, often parallel to the railway lines but somewhat cheaper, more regular and providing transport to the downtown areas of large cities.
- Long-distance lines, especially between Warsaw and towns with relatively poor railway connections.
- The international lines.

While on the suburban lines the new transport agents were generally small firms having at their disposal just one or two old buses, the long-distance lines became the object of interest to large travel companies and, until now, the only larger foreign company -- the British National Express Group, which founded the Polski Express company in Poland. This firm started to operate in mid-1994 and since 1997 has been operating eleven lines totalling 2 258 kms and linking Warsaw with several centres (Zurkowski, 1998). The small suburban transport firms constituted a serious threat to the parallel PKS connections, in particular because they set their timetables in such a way as to always be ahead of the PKS coaches. On the other hand, Polski Express posed greater competition for Polish railways than for the PKS.

POLBUS Ltd. was formed in 1995, by merging 21 out of the existing 174 PKSs, and with two private shareholders, one of which (Madar) was engaged in international transport. The objective of the undertaking was to establish a modern network of long-distance connections, capable of competing with Polski Express and with other potential foreign competitors. The company currently serves over forty such lines, brought into the company by its shareholders on a voluntary basis (Rydzkowski, Rolbiecki, 1996).

In spite of the decrease in transport volumes and the difficult situation of many enterprises, the total length of the network of domestic bus connections increased during the 1990s (by 36.2 thousand kms in the period 1993-1996). There has also been an extension of the average length of trip from 22 kms in 1990 to 27 kms in 1993, and then to 31 kms in 1996, which can be linked with the collapse of job-commuting travel (i.e. frequent and short trips). In August 1997, the Government introduced a new Law on Conditions of Conducting Domestic Passenger Transport (Ustawa..., 1997b).

Summing up, it should be noted that the sudden increase in demand for international passenger transport had a positive influence on the situation of domestic transport, due, in particular, to:

- Improvement of financial conditions for many PKS enterprises through the opening of profitable international lines.
- A *sui generis* training in conditions of keen competition, offered to Polish transport agents by the European market.
- The enforced modernisation of the vehicle stock, which also started to be used on some domestic lines (e.g. by the POLBUS company).
- The broadening of some of the legal and formal conditions, previously required only of international transport agents, so as to include domestic transport agents (notably, the stipulation of the above-mentioned new Law concerning the necessary financial assurances).

## **6. INTERNATIONAL AND LONG-DISTANCE BUS CONNECTIONS IN OTHER SELECTED COUNTRIES OF THE REGION**

An attempt at comparing the situation of Polish long-distance and international bus connections with the changes in networks and transport operations of other countries of the region encounters essential difficulties. As in Poland, in these other countries too, complete international timetables are not published. Moreover, the statistical data available are entirely incomparable, since in each country they include different sections of transport activity (e.g. only long-distance, or the whole of transport

but without the municipal lines, etc.). The data shown in Table 9 indicate that in the whole of Central and Eastern Europe there has been a drastic decline in bus transport intensity. In Ukraine and Lithuania it was greater than in Poland, and comparable with Poland in Russia and Latvia.

Table 9. **Bus transport in selected countries of Central and Eastern Europe**

Countries	Total in millions of passengers transported			
	1990	1992	1995	1996
Bulgaria*	no data	487	343	no data
Lithuania*	no data	642	404	360
Latvia*	573	288	184	149
Poland	2 064	1 439	1 132	1 085
Ukraine**	8 331	no data	3 483	3 305
Russia*	705	520	358	no data

\* In long distance transport

\*\* Together with municipal transport

*Sources* Statistical yearbooks of Bulgaria, Lithuania, Latvia, Poland, Ukraine and Russia (see Bibliography).

The development of international transport, which took place in all countries of the former socialist bloc, was closely related to the similarity of currency-clearing mechanisms and of transport rates which had previously been in force in these countries. The dynamics of this development, though, depended directly upon the intensity and structure of the border traffic. In these countries, where job-related travel to western Europe and petty trade traffic were important, extensive connection systems developed. In the countries of central Europe connections with the West play an important role and, for the former Soviet Union, connections with neighbouring countries (e.g. Poland, Romania, Slovakia and Hungary). In the former case, an essential role is played by the private transport agents. In eastern Europe, on the other hand, the semi-independent state enterprises still dominate.

Croatia is an example of a country with a relatively developed network of connections with western Europe. Just one company, Panturist from Osijek, provides service on the lines to Berlin, Frankfurt on Main, Karlsruhe, Mainz, Freiburg, Stuttgart and Zurich; though also to the Hungarian towns across the border, to Tuzla in Bosna-Herzegovina and even to the Serbian border, with a connection change to Belgrade. The orientation of the network towards Germany is due to the high number of Croatian citizens working there. On the other hand, Latvia, which has a high number of connections with the nearby countries (including Poland), serviced by the former state transport enterprises or by small private firms, also has a network of transcontinental connections belonging to the Eurolines system. Within its framework, Riga is connected, in particular, with Munich, Cologne, Bremen, Stuttgart, Vilna and Kalinigrad. The specific feature of the Estonian international lines is the high number of bus-and-ferry connections with the main cities of Scandinavia (including Oslo, Gothenburg and Tampere) as well as numerous lines to Saint Petersburg, located close by.



The transport systems of the republics of the former Soviet Union have seen a rapid disintegration (decrease in number of connections, including bus connections), accompanied by an increase in linkages with neighbouring countries (expressed, in particular, through the appearance of the previously almost non-existent international lines), see Trakhov (1997). Thus, while in 1990 the Russian international bus lines transported some 100 thousand passengers, by 1995 this number had increased to 1 million. Several bus lines connected Saint Petersburg and Vyborg with Finland, the Kaliningrad district with Poland and Germany; Lithuania, Belarus and Ukraine with Poland; and Moldavia with Romania. In 1988, the then Ukrainian Socialist Soviet Republic had no international bus connections. In 1995, there were 1 550 round trips per week from Ukraine to nine European countries. From the town of Cherniovtsi alone there were 24 connections per week, including 20 with Romania, two with Poland, and two with Turkey, the typical petty trade direction (Trakhov, 1997).

## **7. BUS TRANSPORT AND FUTURE MEMBERSHIP OF THE EUROPEAN UNION**

The development of international and domestic long-distance bus transport in Poland and in other countries of this part of the continent will, in the coming years, be influenced by the process of negotiations and future membership of the European Union. This influence will be expressed through:

- Changes in the magnitude and structure of demand for bus transport.
- The necessary legal adjustments.
- Full mutual opening of markets and, therefore, a verification of transport agents' capacities under the new conditions.

Polish membership of the Union will exert an influence on the demand for international passenger transport, in both western and eastern directions. On the one hand, the anticipated economic growth after accession and the gradual improvement in living standards in Poland may lead to lowered demand, due to competition from air transport and perhaps railways (especially if central Europe is included in the system of high-speed train connections: there are plans for construction of a TGV-type connection between Paris-Berlin-Warsaw). On the other hand, though, the potential opening of the western European labour market will cause an intensified movement of persons employed in western Europe (at first, mainly in low-paid jobs), who will generate new demand for inexpensive coach transport. The potential accession of Poland to the Schengen Treaty will entail tighter surveillance of the eastern border of Poland and, consequently, a disinterest for trade trips in that direction, as well as a fall in demand for the Polish-Belarusian and Polish-Ukrainian bus lines. The first symptoms of this situation are already visible. When, in December 1997, the Polish Government hastily (a couple of months before negotiations started with the European Union) tightened the regulations concerning invitations and prepaid accommodation vouchers for citizens arriving from Russia and Belarus, the number of tourist-traders visiting Polish markets decreased several times over. This was a direct blow for numerous Polish enterprises, including the coach transport agents active on this market (more than 50 per cent of lines were suspended during the first months of 1998).

It can be assumed, though, on the other hand, that admission to the European Union will not drastically influence the demand for long-distance domestic bus connections. The slow decline in this demand will presumably persist, in relation to the growing numbers of cars. At the same time, even the appearance of a greater number of western European transport agents on the market, offering

high-quality service, will not cause a perceptible increase in the competitiveness of long-distance bus transport. The major limiting factor to this development is the poor condition and thus decreasing transport capacity of Polish roads. Until the motorway network is constructed (according to government plans, not earlier than 2015), the buses will move more and more slowly on Polish roads, and so their competitiveness with respect to the more rapid and comfortable trains would be strengthened only by lower prices. In this context it seems that foreign firms may be more interested in entering the smaller Czech or Hungarian markets, where the condition of the roads is much better.

From the legislative point of view, Poland has already made great efforts to adjust itself to the EU laws, as reflected by the above-mentioned 1997 legislation concerning the conditions for conducting both domestic and international bus transport services. It is quite telling, however, that road transport legislation in Poland and in the Union evolves in somewhat different directions. After the complete liberalisation of the early 90s, Polish regulations have become increasingly restrictive, which is understandable in view of the necessity to put the market in order, to eliminate the semi-legal transport operations and improve transport services (including, primarily, passenger safety). At the same time, in conditions of a mature market and after a period of strong regulation, the western European regulations are being gradually liberalised, mainly with the objectives of lowering costs and enhancement of competitiveness (e.g. already in 1988 the EC Commission proposed to shorten the minimum daily leisure time of drivers from 12 to 11 hours) and in some countries there is government support for the inflows of foreign tourists. Consequently, while we observe in Poland a concentration of the market, in western Europe the position of "bus giants" (like Eurolines) has been threatened. In this situation, it cannot be excluded that, after its accession to the Union, Poland will be forced to subsequently revise the solutions previously adopted.

Accession to the Union will entail significant simplification in organising the international lines. Instead of obtaining licences from the destination and transit countries it will be sufficient to have an authorisation (licence) from the domestic decisionmaking body. Taking into account the fact that the majority of Polish regulations concerning international lines already conform to western standards, this may provide an impetus to the further development of the network. In domestic transport, the problem may not be so much the adoption as the observation of the Union standards (e.g. technical condition of vehicles). It can be assumed that most of the Polish international transport agents are more or less prepared for external competition (owing in part to their constant collaboration with foreign partners), while domestic agents are not prepared for such competition. If, in spite of the decreasing demand, some of the western European firms with significant capital (and thus capable of maintaining low prices over several years) decide to take a strong position in a definite segment of the Polish market, then the position of the competing PKS will be in obvious danger. Thus, it appears more advantageous for the PKS enterprises to make efforts now to enter into collaboration with strategic foreign partners.

## BIBLIOGRAPHY

- Bakowski, W. (1996), Wizja rozwoju przedsiębiorstw PKS (Development prospects for PKS enterprises. In Polish), *Przegląd Komunikacyjny*, No. 10.
- Fiedorowicz, K. (1992), Międzynarodowe Powiązania Transportowe Polski (International Transport Connections with Poland. In Polish), Instytut Turystyki, Warsaw.
- Komornicki, T. (1995), Ruch osób i pojazdów na granicach Polski w latach 1990-1994 (The traffic of persons and vehicles across the borders of Poland in the years 1990-94. In Polish), *Opracowania tematyczne No. 152, Dział Analiz i Dokumentacji Europejskiej, Biuro Studiów i Analiz Kancelarii Senatu RP*, Warsaw.
- Komornicki, T. (1996), Bus connections between Poland and other European countries, *Transport Reviews*, 16, No. 2, pp. 99-108.
- (1997), *Latvijas statistas gadagramata 1997 (Latvian Statistical Yearbook 1997*. In Latvian), Latvijas republikas Valsts statistikas Komiteja, Riga.
- (1997), *Lietuvos statistikas metraštis 1997 (Lithuanian Statistical Yearbook 1997*. In Lithuanian), Metodiuis Leidybiuis Centras, Vilnius.
- Lijewski, T. (1986), *Geografia transportu Polski (Geography of transport in Poland*. In Polish), PWE, Warsaw.
- Mokrzyszczak, H. (1995), Organizacja rynku pasażerskich przewozów samochodowych w krajach UE (Organisation of the passenger car transport market in the EU countries. In Polish), *Przegląd Komunikacyjny*, No.12.
- Pozniak, S. (1996), 50 lat of PKS -- i co dalej? (50 years of PKS -- and what's next? In Polish), *Przegląd Komunikacyjny*, No.4.
- Rocznik...* (1978), *Rocznik Statystyczny 1977 (Statistical Yearbook 1977*. In Polish), GUS, Warsaw.
- Rocznik...* (1993), *Rocznik Statystyczny 1992 (Statistical Yearbook 1992*. In Polish), GUS, Warsaw.
- Rocznik...* (1997), *Rocznik Statystyczny 1996 (Statistical Yearbook 1996*. In Polish), GUS, Warsaw.
- (1996), *Rossiiskii Statisticheskii Ezhegodnik 1996 (Russian Statistical Yearbook 1996*. In Russian), Goskomsat Rossiyi, Moscow.

- Rozporządzenie... (1997a), Rozporządzenie Ministra Transportu i Gospodarki Morskiej z dnia 28 listopada 1997r. w sprawie dodatkowych warunków do udzielania zezwolenia krajowym przedsiębiorcom na prowadzenie regularnej międzynarodowej komunikacji autobusowej, przewozów wahałowych i okazjonalnych (The order of the Minister of Transport and Maritime Economy of 28th November 1997, on the additional conditions for granting authorisation to domestic entrepreneurs for the conduct of regular international bus transport, shuttle and occasional travels. In Polish), *Dziennik Ustaw*, No. 148, 990.
- Rozporządzenie... (1997b), Rozporządzenie Ministra Transportu i Gospodarki Morskiej z dnia 3 grudnia 1997r. w sprawie określenia wysokości opłat za uprawnienia przewozowe w międzynarodowym transporcie drogowym, trybu ich wnoszenia oraz jednostek uprawnionych do ich pobierania (The order of the Minister of Transport and Maritime Economy of 3rd December 1997, on the fees for the transport licences in international road transport, the manner of fee payment and the agencies entitled to fee collection. In Polish), *Dziennik Ustaw*, No. 148, 992.
- Rydzkowski, W., R. Rolbiecki (1996), Sytuacja przedsiębiorstw PKS po deregulacji samochodowego rynku transportowego (The situation of the PKS enterprises after the deregulation of the car transport market. In Polish), *Przegląd Komunikacyjny*, 6.
- (1997), *Statisticki Letopis 1997 (Statistical Yearbook 1997*. In Slovenian), Statisticki Urad Republike Slovenije, Ljubljana.
- (1996), *Statisticheski Godishchnik 1996 (Statistical Yearbook 1996*. In Bulgarian), Natsionalen Statisticheski Institut, Sofia.
- (1997), *Statistichnyi Shchorichnik Ukraini 1996 (Statistical Yearbook of Ukraine 1996*. In Ukrainian), Ukrainska Entsyklopedia, Kiev.
- Swiatecki, P. (1997), Dwie nowe ustawy o transporcie drogowym [(1) i (2)] [Two new laws on road transport (1) and (2). In Polish], *Przegląd Komunikacyjny*, Nos. 11 and 12.
- Trakhov, S.A. (1997), Transportnaia integratsiya i dezintegratsiya postsovietskogo prostranstva: izmieniye pasazhyrskikh svyazei posle raspada SSSR (Transport integration and disintegration of the post-soviet space: changes of passenger links after the collapse of the USSR. In Russian), *Seriya Geograficheskaya*, No. 3, Moscow.
- (1991), *Transport. Wyniki Dzialalnoœci 1990 (Transport. Activity Report 1990*. In Polish), GUS, Warsaw.
- (1994), *Transport. Wyniki Dzialalnoœci 1993 (Transport. Activity Report 1993*. In Polish), GUS, Warsaw.
- (1997), *Transport. Wyniki Dzialalnoœci 1996 (Transport. Activity Report 1996*. In Polish), GUS, Warsaw.
- Ustawa... (1997a), Ustawa z dnia 2 sierpnia 1997r. o warunkach wykonywania międzynarodowego transportu drogowego (Law of 2nd August 1997, on conditions of conducting international road transport. In Polish), *Dziennik Ustaw*, No. 106, 677.

Ustawa... (1997b), Ustawa z dnia 29 sierpnia 1997r. o warunkach wykonywania krajowego drogowego przewozu osób (Law of 29th August 1997, on conditions of conducting domestic road passenger transport. In Polish), *Dziennik Ustaw*, No. 141, 942.

Zurkowski, A. (1998), PKP a "Polski Express" -- trzy lata konkurencji (PKP and "Polski Express" -- three years of competition. In Polish), *Przegląd Komunikacyjny*, No. 4.

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## **1. INTRODUCTION**

A review is presented of the current role of interurban coach services in Europe. Definitions of vehicle and service types are firstly considered, highlighting the need to cover a range of service types if the role of the coach industry is to be fully understood. Emphasis is then placed on the experience in Britain since deregulation in 1980, especially of express scheduled service development. The international market between Britain and Europe is then examined, together with the development of the coach industry in a selection of other European countries. Finally, overall prospects for the industry are outlined in the light of this analysis.

## **2. THE DEFINITIONS OF “COACH” AND “EXPRESS”**

### **2.1. By vehicle type**

Until recently, there was no formal definition of a “coach”, in the sense of a specified vehicle type, in Britain. However, arising from concerns over excessive speeds, it was found necessary to define such vehicles for the purposes of requiring the installation of speed-limiters, i.e. a vehicle capable of 100 kph, and with a gross weight of over 7.5 tonnes. Such vehicles are required to be fitted with a speed limiter set at 100 kph (62 mph): until 1 July 1999, a partial exemption, up to 105 kph, applies to vehicles registered before 1 January 1988.

In practice, most vehicles generally identified by operators and public as “coaches” are single-deckers of up to 12 metres in length, seating around 45 (with wide seat pitch, and toilet), or up to 53 (in a higher-density configuration). Double-decker layouts are also found, seating 70 or more, often in a three-axle form to accommodate the resultant gross weight of up to 24.4 tonnes (a two-axle rigid vehicle is limited to 17 tonnes for domestic use, although this has been raised to 18 tonnes for international services, following the end of a period of derogation from EC standard weights). Articulated single-deck vehicles of up to 18 metres in length are also in use, while elsewhere in Europe a rigid 15 metre layout is also popular (usually a three-axle single-decker) and may, in due course, be used in Britain.

### **2.2. Types of interurban bus and coach service**

A number of categories are defined for purposes of international services within the EU (currently being revised), and domestic service category definitions may vary within countries. The following broad categories are useful for this report (they should not be regarded as exactly matching legal definitions):

1. Scheduled public express/interurban coaches, operating to a fixed timetable and route, open to all members of the public at separate fares;
2. Day excursion: a “round trip” at an inclusive return fare to a destination such as seaside resort, theme park, etc.;
3. Tour: service providing a “round trip”, including one or more night overnight stay, in which hotel accommodation is provided as part of a package through the coach operator, or tour company.
4. Private hire: a coach is hired by an organisation (such as a voluntary society) to provide a trip for its members. A single sum is paid to the operator by the organisation, rather than the operator collecting separate payments from each traveller.

### **2.3. Service definition by length of passenger journey**

In terms of service types, an “express service” was defined under the British Transport Act 1980 as one carrying all of its passengers a distance of at least 30 miles (about 48 km), measured in a straight line. Under the Transport Act 1985, this dividing line was revised downward to 15 miles (24 km), scheduled services carrying some or all of their passengers over shorter distances being classified as “local”. The 1985 Act also removed previous distinctions between other types of service, such as “excursions”, “tours” and “contract”.

The most recent estimates in Britain indicate that “other” (non-local) bus and coach kilometres run were 1 657 million in 1998-99, generating a revenue of £1 309 million, i.e. about 79p per kilometre. Average cost would thus lie below this figure. It is estimated that about 14 per cent of the vehicle-km and about 17 per cent of this revenue are derived from “express runs over long distances”, and that holiday travel and day excursions account for about 60 per cent of non-local services (DETR, 1999). Hence, revenue attributable to scheduled express would be about £220 million.

An incentive exists for operators to register services as “local” (i.e. to ensure that stops are provided at least every 15 miles, or 24 km), since most of the fuel duty is rebated for such services (approximately halving the fuel cost per litre), whereas “other” services pay the full duty. Many commuter, regional and cross-country services seen by users as “express” are in fact registered as local services. In some cases, a through service may form an “express” operation over the motorway section (for which no registration procedure at all applies), but be registered as a “local” service over the section operated over other roads (e.g. a service from London to Penzance might run as express to Plymouth, thereafter as “local”).

### **2.4. Service definition by length of route**

In some cases, length of a service may be used to define a category (as distinct from length of passenger journey). A route of over 50 kilometres is defined under EU Article 4(3) of Regulation 3820/85 for purposes of drivers’ hours rules -- incorporated in British law under the “Drivers’ Hours” (Harmonization with Community Rules) Regulations 1986 (SI 1986 No. 1458). In the British case, this is significant, in that shorter regular routes fall within the domestic drivers’ hours rules, which are more flexible than those under the EU as such -- both in hours worked (e.g. a maximum of 5.5 hours driven before taking a break, compared with 4.5 hours) and the lower age limit (18 versus 21). The EU rules also generally apply to international services operated under the European Agreement on International Road Transport (AETR).

It has been common practice for many years in Britain for operators running interurban “regular services” routes which are longer than 50 km, to register them as a series of connecting routes, each of under 50 km, so that only the domestic drivers’ hours apply. In practice the driver works through, and a through service is advertised to the public. This practice has been tacitly accepted by the Traffic Commissioners, with whom service registrations must be made. However, a legal case has recently challenged this assumption. Northumbria Motor Services operates the Newcastle-Carlisle route (a 2h 30mn journey of approximately 80 km), and had registered it as a series of routes each under 50 km. Following a prosecution of the operator and a subsequent appeal, the Divisional Court has ruled that such a practice was not permissible in this case, with implications for services operated on a similar basis elsewhere in Britain.

This distinction may not be significant in future, as the British Government stated, in November 1996, that it plans to phase out the separate British hourson regulations in favour of the EU regulations.

## **2.5. Service definition under taxation rules**

A 50 km “journey” is also of relevance to taxation of fares paid by users. In two cases, local public transport (under 50 km) is taxed at a lower rate of VAT than that for longer distances. In Germany, local public transport pays a reduced VAT rate of 7 per cent, but over 50 km the standard rate of 15 per cent applies. Likewise, in Italy, there is a differential between 10 per cent and 19 per cent, respectively (Higginson, 1996). In the British case, VAT is charged neither on local nor on longer-distance fares. Elsewhere in Europe, zero-rating to this extent is unusual.

## **2.6. International services**

For international operations, the following definitions apply under EC regulations 684/92 and 2944/93 :

- a) “Regular” and “Special Regular” -- services which provide for the carriage of passengers along specified routes at specified intervals, passengers being taken up and set down at pre-determined stopping points (the British services of under 50 km to which less stringent drivers’ hours rules apply are a sub-category of this type). “Special regular” services cater for a specialist clientele, e.g. students;
- b) “Shuttle” services -- those where, by means of repeated outward and return journeys, previously-formed groups of passengers are carried from a single place of departure to a single destination and back (typically, operations as part of package holidays, between the passengers’ home areas and a resort);
- c) “Occasional services” -- operated at frequencies according to demand (corresponding to excursions, tours and private hire within Britain).

In general, these categories of international services have remained tightly regulated within the EU. Regular services are licensed for periods of up to five years, and require the approval of each of the countries through which they pass, as well as the destinations.

An element of cabotage for regular services was introduced under Regulation 2454/92, which continued in force, despite being annulled on procedural grounds by the Court of Justice in 1994. Subsequently, the Commission proposed a simplification of 684/92, liberalising all occasional and special regular services, including those on own account. The categories of “shuttle” and “regular occasional” services would be abolished. This would make it easier to use additional vehicles on regular international services. Competition with railways would no longer be grounds for refusal of an authorisation. The latest moves within the EU have resulted in cabotage on purely internal services being rejected (e.g. a British operator running a route between two German cities) but cabotage on international services is now allowed (e.g. a British operator running from London to Frankfurt via Cologne being able to carry Cologne-Frankfurt traffic).

A general revision under Regulation 11/98 comes into effect from 11 December 1998, together with cabotage under Regulation 12/98 (replacing Regulation 2454/92), and a standard Community licence for public service vehicle operation (both domestic and international) was introduced in June 1999.

## **2.7. Service definition by user surveys**

Data on use of coach services may be collected from operators -- for example, total vehicle-km and total passenger trips, per year. This may depend upon the degree of regulation (for example, in Britain no passenger data are collected from operators, except for “local” services). This may be classified according to the service types described above.

In other cases, a much better picture of modal shares may be obtained by use of household surveys covering all modes on the same basis. However, the classification of services will depend upon the users’ perception, which may not match exactly operator or legal definitions.

In the British case, the Long-Distance Travel Survey (LDTS) of the 1970s covered all trips over 25 miles (40 km). Subsequently, such data has been collected in the National Travel Survey (NTS), the definition of “long-distance” being changed to trips over 50 miles (80 km) from the 1989-91 NTS. Until the beginning of 1992, the NTS did not collect origin/destination data, but did collect length, mode etc., for each journey made (hence an estimate of trip frequency and modal market shares could be made for all long-distance journeys taken together). Since the start of 1992, O&D data has been collected and coded to county level. In addition, users are asked to recall their long-distance journeys for three weeks prior to the detailed one-week diary (which covers all trip lengths), giving a total of four weeks’ data (and hence a larger sample size). However, the total number of long-distance journeys recorded is fairly small, and aggregation over several years is desirable to produce robust results. Definitions used in the NTS are “Stage bus”, “Coach/Express bus”, “Excursion/tour bus” and “Other private”. The term “stage bus” would correspond to a regular local service. A private hire coach may be classified under “excursion/tour”.

The total sample size is such that data at a county level are not statistically significant. However, trips may be grouped by economic planning regions to produce meaningful estimates of coach market share (about 8 per cent of all journeys over 100 miles). Table 1 gives an example of such data.

Table 1. **Coach and rail shares of the land passenger transport market in Britain**  
**Flows to and from the Southeast region, or Heathrow Airport**

Region	Trips to/from Southeast region, over 100 miles		Trips to/from Heathrow, excluding air interline	
	Coach	Rail	Coach	Rail
Scotland	10 [5]	24 (air 46)	32	48
Northern	9 [5]	25 (air 7)	25	40
Yorkshire + Humb.	11 [4]	14	25	30
North Western	8 [4]	23	20	26
East Midlands	8 [3]	12	<u>16</u>	14
East Anglia	5 [1]	10	<u>24</u>	11
West Midlands	9 [5]	10	<u>27</u>	7
Wales	7 [3]	14	<u>32</u>	17
South West	7 [4]	14	<u>30</u>	10
Total (weighted average)	8 [3]	13	<u>26 [18]</u>	14

Source: CAA Survey, 1996.

Notes:

Underlining indicates coach share higher than rail.

- Flows for trips to/from South-East Region 1992-96 are derived from special tabulations from 1992-1996 NTS. The percentage of coach traffic on scheduled express services is shown in square brackets, e.g. [3]. The total sample size (all modes) is 9 624 and of coach journeys, 738 (of which 334 scheduled express).
- The balance (not shown) is almost entirely car/van. Except for the Scotland and North region flows, as shown above, air is no more than 2 per cent, and “other” modes no more than 3 per cent to/from any single zone.
- Flows to/from Heathrow are derived from special tabulations from the CAA Survey 1996 (coach sample approximately 3 800; rail 2 040).

## 2.8. By roadside or cordon surveys

Coach use may also be estimated by roadside traffic counts, in which traffic is classified by vehicle type and perhaps also by occupancy. In such cases, it is not generally practicable to distinguish service types, except where detailed local knowledge can be used -- such as in the central London coach surveys in which commuter/regional, long distance express, round-London sightseeing tours and “other” were distinguished. In most cases, stopping the vehicle to interview passengers is also impracticable, especially if motorway running is taking place.

Such data may, however, give a broad indication of trends in coach vehicular traffic: for example, bus and coach flows on motorways in Britain rose by 54 per cent between 1978 and 1986, associated with coach deregulation in 1980.

In some cases, a national boundary or physical barrier may provide a convenient cordon at which such data may be collected, possibly including passenger interviews as well as vehicular counts. The island nature of Britain clearly permits this. For example, estimates have been made by the consultants employed by Eurotunnel, of the total cross-Channel market by all modes (see Chapter 11). The International Passenger Survey (IPS), in which passengers are interviewed on arriving or departing from Britain, also enables such estimates to be made.

## **2.9. Use of National Express as proxy for trends in Britain**

As indicated earlier (Section 2.3.), total revenue from express services in Britain was about £220m in 1998-1999. Given that National Express (NE) coach revenue (for all its coaching activities) was £164 million in calendar year 1998 (National Express, 1999), its share of revenue is thus approximately 73 per cent, subject to effects of including those services registered as local and some European operations. However, it is likely that its share of the all-year-round market is greater than this, since most independent operation is of a seasonal nature. Hence, it is reasonable to view passenger totals for NE as a proxy for express coach trends in Britain as a whole.

## **3. TRENDS IN EXPRESS COACH MARKET VOLUME IN BRITAIN**

### **3.1. Effects of deregulation in 1980**

The Transport Act of 1980 removed most regulation applying to express coach, excursion and tour operations in Britain. Taking the scheduled long-distance services as the main element of interest, a dramatic impact could be seen. Total trips rose by about 50 per cent by 1985 (Robbins and White, 1986). This was associated with extensive price competition (both between coach operators and between coach and rail), together with higher frequencies, faster timings making better use of the motorway network and quality improvements such as on-board refreshments. However, the degree of inter-operator coach competition was perhaps less than expected. National Express remained the dominant operator, with 70 to 80 per cent of the market. Its share grew further with the takeover of Scottish Citylink in 1993, and no comprehensive competing network exists, although independent competition is significant on certain corridors.

The 1980 Act also created the possibility of operating “commuter coach” services into London, as services carrying all their passengers distances of over 30 miles were deregulated. Growth developed more slowly than in the long-distance market, but was stimulated by the rail strikes of 1982. Activity has been concentrated mainly on the North Kent and South Essex corridors (characterised by low-income travellers and poor-quality rail services) and the M4 corridor to the west (with better motorway access). By 1986, over 400 coaches were entering central London in the morning peak period, although they only represented 1 to 2 per cent of all commuter movement.

Using National Express as a proxy, it can now be seen that 1985 represented a peak in coach travel. Table 2 shows trips on the National Express network. A steady decline from the mid-1970s had occurred, with just over 9 million trips in 1980 itself. The early 1980s saw a rapid growth, peaking at about 15.4 million in 1985, then subsequently falling to 10.5 million in 1992 and 9.8 million in 1993. A recovery to 10.9 million

Table 2. National Express passengers, revenues and revenue per trip, 1975-1997

Year	Passengers (million)	Revenue (£million)	Revenue at 96/97 prices (£million)	Revenue per trip at 96/97 prices (£)
1975	13.0			
1976	12.0			
1977	11.7			
1978	10.7			
1979	10.4			
1980	9.2	31	71	8.40
1981	12.5	41	84	6.70
1982	14.0	52	98	7.00
1983	13.5	51	92	6.80
1984	15.0	57	98	6.50
1985	15.4	71	114	7.40
1986	14.7	73	114	7.90
1987	13.1	78	115	7.90
1988	13.1			
1989	13.9	91	104	7.50
1990	13.5			
1991	12.0	99	112	9.50
1992	10.5	94	103	9.80
1993	9.8	92	100	10.20
1994	10.9	98	104	9.50
1995	11.0	98	100	9.10
1996	11.7	106	106	9.10
1997	12.1			

Sources: (to 1994) : National Express, and technical press reports, notably:

- Rod Davey "Express Developments", *Coachmart*, 30 March 1989, pp. 20-23 (passenger and revenue data, 1980-87 inclusive).
- "The Nat Ex/WMT deal explained", *Transit*, 1 April 1995, pp. 7-10 (revenue data, 1994-95 inclusive).
- MMC 1996, Table 3.4 (1991 revenue data).
- MMC 1997b. Table 3.3.
- Data include Stagecoach Scottish services (trunk and interurban) from takeover in 1989. Revenue, but not passengers, from the takeover of Citylink services within Scotland from 1993 are included. Other independent takeovers also included, notably Flightlink in 1996.
- A substantial expansion of through services took place in 1986. This had the effect of reducing the apparent total number of journeys (due to less re-booking) but of increasing revenue per trip.
- Revenue is converted into real terms at 1996-97 prices using the Retail Price Index.
- Total revenue is shown to the nearest £million, and revenue per passenger trip to the nearest 10 pence, given the approximations involved.
- 1982 and 1994 traffic was boosted by rail strikes.
- No specific passenger figures have been published since 1994 : 1995 and 1996 figures are based on a statement by the Chief Executive that the NEG coach market had grown by 6 per cent per annum for the last three years (from *Transit*, 11 June 1997, p. 9) -- assuming that this applies to trips, not revenue -- and applying it to the 1993 base (due to rail strike effects in 1994). A 3 per cent growth is assumed between 1996 and 1997.
- Note that revenue per trip for National Express shown above also includes miscellaneous income sources. Allowing for this factor, and inclusion of Citylink revenue, average passenger fare per trip in 1998 was about £8.50. In 1998, about 12 million trips were carried.



took place in 1994, of which NE attributed 0.4 million to the effects of rail workers' strikes in the summer of 1994, the rest to new ridership (*Transit*, 1995). Demand grew by about 6 per cent per annum in 1995 and 1996, and by 3 per cent between 1996 and 1997.

In 1998, a total of about 12 million passengers was carried on the network, operated directly under the "National Express" name in England and Wales (the definition used above), including the "Flightlink" long-distance services to major airports. It thus remains somewhat below the peak level of the mid-1980s. Including other coach activities of the National Express Group in Britain -- Citylink (services within Scotland), Speedlink (regional airport services in South East England) and its share of Eurolines international operations -- the total was 17.7 million passengers (National Express, 1999, p. 4).

Other data sources give similar trends from the mid-1980s to early 1990s. From 1986 to 1994, a central London coach survey was carried out in a fairly consistent form, on behalf of the Statistics Directorate of the Department of Transport. Roadside counts were taken each summer, classified by service type (commuter/limited-stop, long-distance express, general tour and other). Table 3 indicates results for a cordon around the central area (intercepting major coach corridors) up to 1994 inclusive. A peak in express movement in 1986 is evident, followed by a decline. A similar trend is seen for commuter coach activity, but with some recovery in 1994.

Table 3. Trends in coach movement in central London

Service style	1986	1988	1991	1993	1994
Scheduled express	251	154	122	122	115
Commuter/ regional	847	632	528	504	552
Other	1 172	1 348	1 173	1 337	1 428
Total	2 270	2 134	1 823	1 963	2 095

*Source:* Central London Coach Survey, 1994 (*Department of Transport Statistics Bulletin*, 95 (29), February 1994), Table 2a. The 1994 survey was undertaken by the London Research Centre, the 1993 survey by Wootton Jeffreys Consultants Ltd; and the 1988 and 1991 surveys by the Polytechnic of Central London (now the University of Westminster).

*Notes:* Data shown is for total movements observed at 23 cordon sites, both directions combined. Surveys were taken for a three-hour morning peak (07.00-10.00) and a three-hour evening peak (16.00-19.00). An average for Tuesdays-Fridays is shown. In the "other" category, the main group is that of general tour and shuttle operations. Also included were staff and works buses, empty movements and round-London sightseeing tours.

Coach vehicle departures from Victoria Coach Station in London rose from 128 000 in 1979 to 284 000 in 1984, then fell in each year, to 152 000 in 1991. Movements then increased from 1992, partly through more operators using the station, and more recently some increase in total coach activity, rising to reach 176 000 in 1996-97. A fairly stable total is currently envisaged (London Transport, 1998).

The initial phase of growth in long-distance express travel in the early 1980s was largely explained by a combination of higher frequencies on trunk routes, greater motorway running to raise speeds, and fare reduction of about 50 per cent immediately upon deregulation, together with increased public awareness of coach travel.

### **3.2. Coach market share**

In 1994, National Express handled about 10 million passenger trips, compared with about 60 million on services within the then “InterCity” sector of British Rail. However, it is likely that the average trip length by NE is somewhat greater (the BR InterCity sector included the Gatwick-London service and substantial commuting flows into London, for example), giving it a somewhat higher share of passenger-km in the combined coach/rail long-distance market than passenger trips alone might suggest: around 2 700 million passenger-km in 1994 (Dick, 1994) compared with 12 200 million passenger-km for the InterCity sector in 1993-1994.

Estimating the share of the all-modes market represented by express coach on specific corridors is somewhat more difficult. However, by using the National Travel Survey (NTS) a comparison can be made with that for corridors between the South East and other regions, as shown in Table 1. Of the coach share, averaging 8 per cent, some 3 per cent was by scheduled express services (largely NE), the rest by tour, excursions and private hire.

An average coach share of 8 per cent also applied to all journeys in Britain over 100 miles in 1992-1994, including flows between regions other than the South East (NTS 1992-1994, Table 8.2). The NTS also reveals a fairly strong seasonal pattern in coach use, as might be expected. Based on a monthly average index of 100, distance travelled on local buses ranges between 88 (December) and 117 (October), but express coach use ranges between 52 (February) and 151 (August), with an even wider range for excursions and tours (21 in January, 302 in August). By day of week, averaged for the year as a whole, there is a greater concentration on weekend travel (an index of about 130 for express and 150 for excursions and tours), whereas local bus carries lower volumes at such times (NTS, 1994-1996, Tables 4.2 and 4.60).

Note that data excludes journeys by non-UK residents. The latter comprise about 5 per cent of NE’s passengers, but may form a greater proportion of private hire and tour traffic handled by other operators, some of whom specialise in incoming tour parties via major airports.

The overall coach share fell from 10 per cent in the mid-1970s to 8 per cent in the early 1990s, bearing in mind, however, that in absolute terms the total long-distance market rose substantially. The coach share fell on all corridors, except that to/from Scotland, on which it rose, probably associated with exceptionally strong price competition.

However, despite service quality improvements, very few firms’ business trips have been attracted to coach. The survey of passengers at Victoria Coach Station undertaken as part of the London Area Transport Surveys in 1991 (LRC, 1994) gave a very similar picture to our own surveys in the early 1980s, the most important single journey purpose (some 44 per cent of passengers) being “visiting friends or relatives” (VFR). Details are shown in Table 4, compared with the journey purpose split from NTS (giving a nationally-based sample). The latter indicates a higher share of holiday travel (42 per cent) and lower share for VFR (20 per cent), but this may be largely attributable to the fact that in the NTS, a VFR visit of over three nights is classified as a “holiday”. The surveys of domestic tourist travel

within Britain by the British Tourist Authority suggest that, in 1995, bus and coach services represented about 3 per cent of all tourist travel (i.e. all journey purposes involving an overnight stay), with coach tours comprising a further 5 per cent (the other major elements being car at 80 per cent and rail at 7 per cent). However, the bus and coach share was greater in respect of VFR trips.

Table 4. **Main journey purposes**

	<b>LATS 1991</b>	<b>NTS 1992-94</b>
Visiting friends and relatives	44	20*
On holiday	24	42
Personal business	6	9
Work/employer's business	4	3
Day trip/other leisure	n.a.	25

Percentages, to nearest whole number.

\* NTS VFR definition may be more restrictive.

LATS 1991 data is from a survey at Victoria Coach Station (unpublished).

NTS 1992-94 data relates to scheduled express services, carrying passengers over 100+ miles, all O&D zones in mainland Britain.

#### **4. INDEPENDENT COMPETITION**

From the first day of deregulation in October 1980, a rival consortium of independent operators, British Coachways, introduced competing services on the main trunk routes, but was unable to match the high frequency of service that National Express was able to offer. National also “saw off” the competition by cutting its fares to the levels of British Coachways, in some cases by 50 per cent, notably on trunk routes to London. A fuller description is provided by Robbins and White (1986), and of subsequent events by Doganis and White (1990). Price reductions were also made on major cross-country routes and other London-based services. National Express benefited from their greater number of sales outlets and access to coach stations, notably London Victoria. They were already a nationally known name which could take advantage of the publicity given to coach travel as a whole, whereas British Coachways was not. The independent consortium gradually broke up and ceased in January 1983.

Thompson and Whitfield (1995) estimate that the “incumbent advantage” of National Express is equivalent to a price differential of 6 to 8 per cent.

Substantial independent competition has continued on a number of corridors, but no single operator has been able to establish a competing network as such. Recently, significant all-year-round competition has been focused primarily on the following corridors:

- London-M3-Poole (by Excelsior of Bournemouth, sole survivor of the “British Coachways” network, taken over by National Express as part of its “Flightlink” network in February 1998);

- London-M4-Bristol-Somerset (three operators, now merged into two);
- London-Leeds/North East corridors (now ceased);
- London-Glasgow/Edinburgh. This trunk route offers very attractive scope for high vehicle utilisation (running daytime in one direction, overnight in the other). A succession of operators has emerged. One “independent” service is currently provided.

Map 1 illustrates the current scope of all-year-round daily independent services, which compete with National [at that time, the most substantial independent, Cambridge Coach Services (CCS), operated a network complementing, rather than competing directly with National Express and, hence, is not shown. It was, in any case, acquired by NE in November 1999].

Map 2 shows, in diagrammatic form, the National Express network, highlighting the “Flightlink”, and “Citylink” services. The “Shuttle” services are those operated on a number of London-based routes, in which pre-booking is not necessary and payment made direct to the driver.

Until March 1996, probably the most substantial example of long-term competition was that offered by the “Flightlink” services running from the West Midlands to Heathrow and Gatwick airports, and also north to Manchester airport, carrying about 350 000 passengers per year. This operation is now part of National Express, although retaining a separate marketing identity.

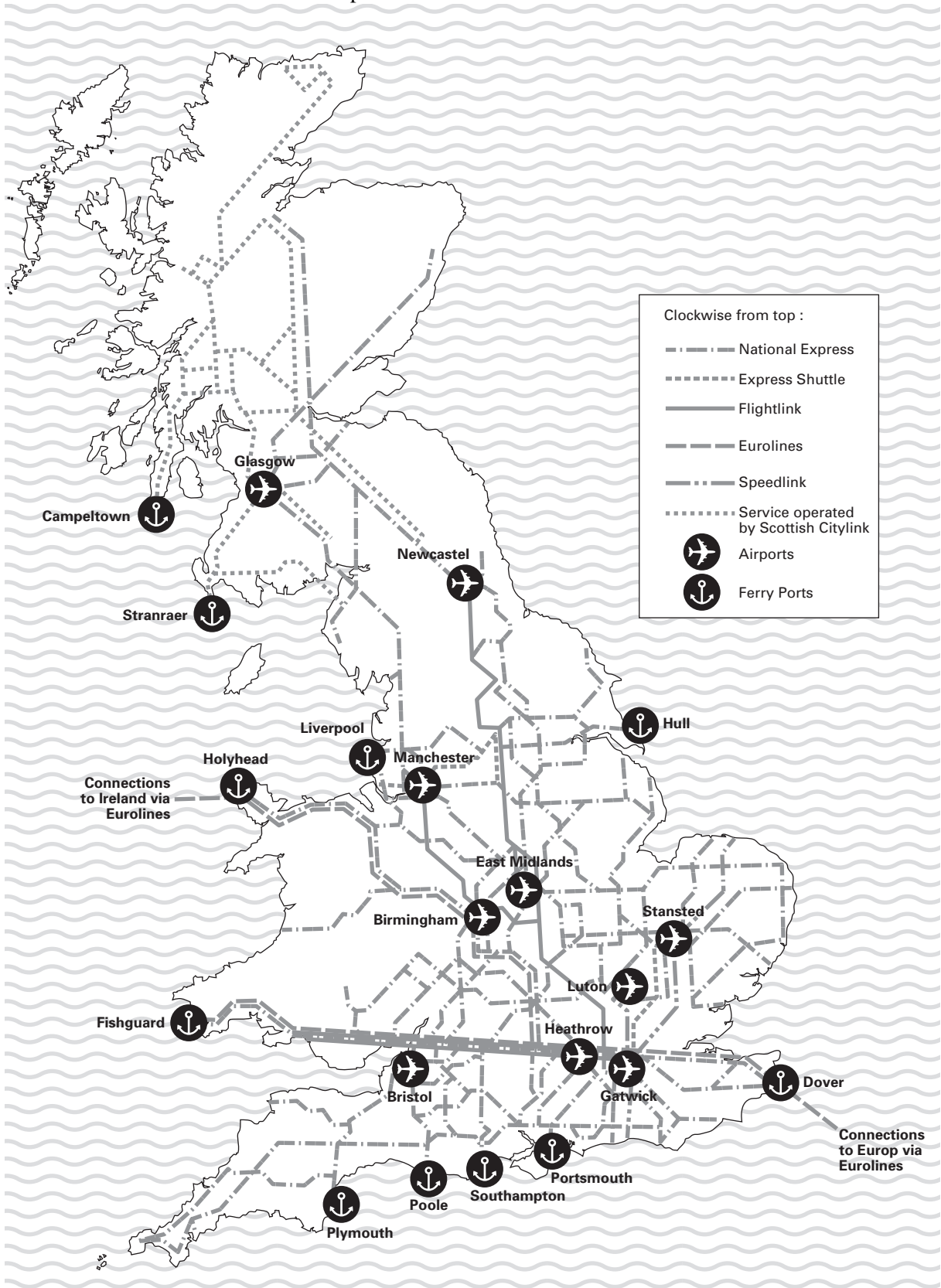
The most extensive “network” competition in recent years was that between National Express and Express Travel Ltd. of Liverpool, who operated a network of services between the North-West and London from September 1994 to June 1995. It also represented the largest example of a former NE contractor-operator deciding to operate independently of National but experiencing difficulty in marketing their services. They have now resumed working for National as a contractor. In the case of services between Yorkshire and London, a similar process has recently occurred. In respect of the formerly independent Birmingham and Yorkshire services, now run by National, a distinct branding and image was retained, distinguishing them from the NE network as a whole. However, such branding is now used to identify certain service types (such as “Shuttle”) rather than individual routes.

In some cases, independents are the main operators, with National operating only a very limited service or none at all (for example, the Gatwick-Heathrow-Stansted-Cambridge service of CCS). In addition to growth on long-distance services, substantial expansion has been seen in coach operation at the regional level, notably between London and Oxford on the M40 (where two operators run every 20 minutes, one increasing to a 10-minute headway at peak periods), and in Northern Ireland, where Ulsterbus has expanded its “Goldline” network. The Stagecoach Group, while pulling out of trunk express operations, has expanded its regional limited stop coach services, operated through local subsidiaries, in several regions of England and Scotland. Ridership on these services grew by 75 per cent in the half-year to October 1996, producing most of the net 1.5 per cent growth in passenger numbers on the Stagecoach bus and coach network as a whole. For example, within Scotland, such services carried more passengers in 1995-96 (2.7 million) than the Citylink network (2.2 million), albeit over shorter distances (MMC, 1997a).

Map 1. Independent express coach services daily, all-year-round, competing with National Express at May 1998



Map 2. Britain's coach network



## 5. THE NATIONAL EXPRESS GROUP

At coach deregulation in 1980, National Express was the trading name for the network of coach services offered by regional bus and coach companies within the National Bus Company (NBC). National Express was subsequently set up as a separate company and, as part of the NBC privatisation, it was privatised through a management buy-out in 1988. After a subsequent change of ownership, it was floated in 1992. National Express Group plc (NEG) is the holding company, of which National Express Ltd. (NEL) was the largest subsidiary, operating the express network (other coaching subsidiaries include: Citylink, running Scottish domestic express services; Speedlink Ltd., operating airport services; Eurolines, operating international scheduled coach services; and Polski Express, operating a network in Poland). The group has expanded into local bus operation through the takeover of Travel West Midlands (TWM) and some other local bus operations, both in Britain and North America. NEG is also involved in rail operations as holder of five franchises for privatised rail passenger services -- the largest number under any single ownership. It is also responsible, jointly with British Airways, for the British share of the "Eurostar" train services through the Channel Tunnel to Paris, Brussels, etc.

In 1998, National Express' total turnover was about £1 313 million, with an operating profit, after exceptional costs, of £84 million. Some £164 million of the turnover and £19 million of profit came from express coach operations, including Eurolines, Speedlink and Citylink (a margin of 6 per cent) but a much higher margin was contributed by TWM and other urban bus operations (22 per cent). Airports also displayed a better financial performance relative to their turnover (38 per cent) (National Express, 1999, pp. 26-27).

The takeover of TWM provided a better spread of activity, notably in reducing the dependence upon seasonal revenues associated with coach operation. The much lower margin on rail operations, of 1.8 per cent, is typical of franchised rail operations in Britain (White, 1998) -- however, the investment involved is very small, and most assets are leased (rolling stock) or covered through access charges (track). Nonetheless, a situation now exists in which the operator dominating the coach network now derives the greatest part of its turnover from rail operations.

NEL owns only about six vehicles as such, the vast majority of vehicles in its white livery being contracted-in from other operators, on a distance-based rate (now known as "partner operators"). From the passengers' point of view, a single network is offered. About 45 operators are contracted-in, running about 450-500 vehicles. Such vehicles are limited to a maximum age of seven years. During peak summer months, up to 900-1 000 coaches are contracted in from about sixty operators on Saturdays and Bank Holidays.

## 6. SCOTLAND

A somewhat different pattern has applied in Scotland. At the time of deregulation, the Scottish Bus Group (SBG) traditionally operated trunk routes between London and major Scottish cities, while other cities in England were connected by joint National Express/SBG routes. Very little development of express coach services within Scotland had occurred, despite substantial motorway construction. Independent operators took a greater role, both on the London trunk routes and in setting up new services within Scotland, notably on the Glasgow/Edinburgh-Perth-Dundee-Aberdeen and

Perth-Inverness corridors. SBG subsequently placed the trunk routes between London and Scotland, and within Scotland, under its “Citylink” company, which played a similar role to National Express in England and Wales. It was established as a separate organisation in 1982 and, like National Express, came to contract-in from a wider range of operators.

Competition between National and Citylink as such was negligible until 1989, when National purchased the long-distance express coach services of the Stagecoach Group, thus competing both within Scotland and on London trunk services. A period of intensive competition between the two major networks then followed. Citylink was privatised through a management and employee buy-out (MEBO) in 1990, under the “Saltire” company. However, the degree of competition proved unsustainable. In May 1993, Citylink was acquired by National and services rationalised. National thus exercised a remarkable dominance in a deregulated market.

Following the merger between the National Express Group and Saltire Holdings, an enquiry was carried out by the Monopolies and Mergers Commission (1994). This concluded that the main competition lay between coach and rail, notably in pricing, and that the merger had enabled both operators to escape a loss-making situation on the trunk London routes. The report also contains much other useful data on the express coach market, not otherwise made public.

Following the award of the Scotrail franchise to NEG from 1 April 1997, issues of competition policy were again raised, and an enquiry was subsequently conducted by the Monopolies and Mergers Commission (1997a). This indicated that no problems had arisen to date, but recommended that NEG divest itself of Citylink in order to avoid potential user disbenefits from reduced competition in the future. Accordingly, the business was sold in June 1988.

Extensive independent competition was experienced within Scotland in the early 1980s, as locally-based operators were quicker to seize the initiative in developing new links. However, this is now very limited, the principal independent scheduled express operator (Skye-ways) now being partly owned by Citylink.

## **7. COST STRUCTURES**

Little published data is available on total costs, or their composition. However, it is possible to make estimates from known input costs (such as drivers’ wages, fuel, vehicle purchase or leasing). The following typical input costs for the British case have been assumed:

- Vehicle capital cost £135 000 (standard specification) or £198 000 (high specification);
- Vehicle life 8 years (depreciated on straight line method, with one-third residual value assumed);
- Driver cost £7 per hour;
- Fuel consumption 5 kpl;
- Maintenance cost 8 pence/vehicle-km.

It can be shown that cost per vehicle-km (including depreciation and interest charges at 10 per cent) falls from about £1.25 to £1.60 (varying by vehicle specification) at a utilisation of 25 000 km per year, but then falls to £0.50 to £0.60 at 100 000 km per year and £0.45 to £0.50 at 150 000 km/year. In



comparison with local bus services, the driver cost element is much smaller (due to higher average speeds) but the capital element much higher (due to higher vehicle quality). In the case of other European countries, a similar pattern may be expected, although it is likely that labour costs will be higher.

Such a pattern suggests that securing higher utilisation is a major factor in lowering unit costs. While simple economies of scale may not exist (i.e. cost per vehicle-km falling with firm size *per se*), larger firms may have considerable advantages in securing such utilisation through extending the length of season in which tour and private hire is obtained, and running an interconnected network of long-distance services. The load factor may also be improved through better marketing, more sales outlets and provision of through-ticketing within a network.

Allowing for management overhead costs, a somewhat higher average than shown above would be expected, which may also be affected by costs due to overnight accommodation for crew on tours, or longer-distance scheduled services. An overall average of about 70 pence per km is reported by National Express, for example.

## 8. COACH/RAIL COMPETITION AND PRICE STRUCTURES

### 8.1. Current price structures

In terms of competing directly with rail on trunk routes to London, the express coach is always likely to occupy a “second best” role, offering a lower speed service at a lower price.

In 1996, the average revenue per passenger trip on National Express was about £10, compared with about £13 on the former BR InterCity network, but, as indicated above, the NE average trip length is likely to be greater, leading to a larger differential in revenue received per passenger-km. Typically, coach fares for equivalent journeys are about 30 per cent below those of BR. Indeed, this was acknowledged as an explicit target by NE in October 1993.

In both rail and coach modes, a similar pricing policy is now adopted, in which highest fares are generally charged for the busiest day(s) (Fridays and peak summer Saturdays or public holidays), while lower rates are charged at other times of the week. In the case of rail, there is also a marked business travel/commuting peak on Mondays to Fridays. For example, rail “Saver” fares generally apply throughout the week, except at peak periods on busier routes, while “Supersaver” fares are not available on Fridays (the latter category is not protected under rail privatisation and has been dropped by some franchisees).

Railways have recently extended their ticket ranges further, adopting some of the airline industry’s “yield management” techniques. “Apex” fares (pre-bookable capacity, of which a limited amount is offered) are now available on most main routes, often matching quite closely the lowest coach fares previously charged.

National Express adopts a similar policy: its standard fare is applicable all days, but the lower “economy” fare is not valid on Fridays or peak summer Saturdays. From November 1993, a common “advance” fare was introduced, offering substantial reductions on the normal fares, subject to a

pre-booking period of at least seven days. This was aimed at maintaining the typical 30 per cent fare differential with rail, following the latter's Apex expansion (above). A discount "coach card" gives reductions of about 30 per cent (except on advance fares) to those aged 50 upward or between 16 and 25, in a similar fashion to railcards.

## 8.2. Rail/coach price and journey time differences

A sample of return fares from London to selected major destinations<sup>1</sup> has been examined to identify price differentials with rail, and trends in real express coach fares. Comparisons were made between:

- a) The National Express period return (or equivalent full-price return in earlier years) and rail "Saver" returns;
- b) The NE economy return (not valid on Fridays) with the rail "Supersaver".

In June 1996, group (a) National Express fares were, on average, equal to 53 per cent of the rail figure, and for group (b) a very similar 57 per cent. Note that fares from provincial destinations *to* London are not necessarily the same as those *from* London, both in the coach and rail markets, for which different figures may apply.

The absolute difference in fare may then be compared with that in round trip journey time, to estimate the value at which a marginal user would switch between coach and rail (under the assumptions set out above). Taking the same sample of links to/from London, at June 1996 fares, an average value of £5.85 per hour was estimated, based on the Economy Return/Supersaver comparison. However, for the substantial proportion of users entitled to "Coachcard" reductions (who also obtain a similar reduction on rail), a correspondingly lower figure would be appropriate, i.e. one-third off the adult fares for groups such as students and pensioners. The marginal value would then become £3.92. There are few networks comparable with that in Britain, but a similar calculation on data for major links in the Irish Republic (see case study), at full adult January 1998 fares, gives a value of IR£4.30 (at current exchange rates, approximately £3.60).

With use of an appropriate value of time and allowance for interchange penalties, a simple generalised cost comparison may be employed. For example, in examining coach travel to Heathrow Airport, a comparison of use of direct coach services and the "Rail Air" link coach via Reading was made, on the basis of an earlier CAA study in 1984. Allowing for an interchange penalty at Reading, a generalised cost comparison between coach and rail matched well the modal split observed (Astill and White, 1989).

Returning to a value-of-time method, it is evident that other "quality" factors will tend to favour rail rather than coach for most users. For example, in the recent inquiry into competition between ScotRail and Citylink (MMC, 1997a, pp. 16, 25), it was observed that coach fares were generally 20 per cent to 60 per cent below rail, and even below rail on routes where coach was quicker. Rail carries three times as many passengers on the low-density Glasgow-Oban/Fort William routes, despite higher fares and similar journey times and frequencies.

One would therefore expect the actual trade-off value to lie somewhat below those estimated above, in the order of £2 to £3 per hour, and for the average user values to lie somewhat below (coach) or above (rail). This is similar to assumptions made in the Swedish studies described by Jansson at the Round Table.

The Midland Main Line (MML) study (Terzis *et al.*, 1997) examined modal choice through RP and SP methods. It was estimated that, along the corridor served by the MML (Sheffield-Derby/Nottingham-Leicester-London), rail took about 88 per cent of the public transport revenues and National Express coaches about 8 per cent. The coach share of volume was considerably greater due to lower average revenue per passenger (around 24 per cent, compared with 73 per cent for MML: see comment above).

Surveys were undertaken of both coach and rail passengers in the corridor. It was found that 40 per cent of MML passengers travelled for leisure purposes, compared to around 90 per cent of those on National Express coaches. From these studies it was possible to estimate fare elasticities. Assuming a rail own-mode elasticity of -1.3, a cross-elasticity of coach demand with respect to rail fare of 0.25 was estimated, but only 0.02 for rail with respect to coach (indicating a small effect on total rail demand from coach fare changes).

From the SP work, it was possible to derive a coach user value of time of 3 to 4 pence per minute for leisure travel (approximately 180 to 240 pence per hour), compared with about 8 pence per minute for rail (about 480 pence, or 4.80 per hour)<sup>2</sup>. The coach values are somewhat lower than the simple “trade-off” values estimated above earlier, but of similar magnitude.

In the case of the Apex rail fares, the ratio is slightly closer -- a sample of eleven London-based routes<sup>3</sup> in Summer 1994 gave an average value for the NE “Economy advance return” of 63 per cent of the rail fares.

Many NE services to London now offer “special” fares rather than standard scales for the distance concerned, in response to rail competition. Hence, a higher break-even load factor is required on such routes. The growth of book-ahead, low-price APEX rail fares is believed to be having a significant effect on the coach market, together with low-price airlines on the London-Scotland trunk routes.

### **8.3. Trends in National Express fare levels**

Taking an index of 100 for the Summer 1982 coach fares, the period return index (in real terms) was 132 in 1986, 175 in 1990, 250 in 1992 and 231 in 1996: this is consistent with the parallel increase in coach and rail fares in real terms from a very low point in the early 1980s observed in previous analysis (Robbins and White, 1986; Doganis and White, 1990), but the drop between 1992 and 1996 is noteworthy.

Analysis of National Express total coach revenue indicates that this grew to about £100 million (at 1996-1997 prices) by the late 1980s, but thereafter remained stable in a period in which average revenue per trip rose from about £8 to £10 by 1993 (parallel with the index for London-based routes quoted above). This would be consistent with a fairly high price elasticity, in the order of - 1.0. The subsequent recovery of traffic since 1993 is likewise associated with a reduction in real fares, average revenue per trip (at 1996-1997 prices), falling to about £9 in 1996. It is noteworthy that the substantial price increase by NEL did little to stimulate more competition from independent operators during this period, apart from the short-lived “Express Travel” network.

A more precise estimate of price elasticity has been made by Terzis, Copley and Bates (1997), arising from revealed preference and stated preference studies in the Midland Main Line corridor (London-Leicester-Nottingham-Derby-Sheffield) in conjunction with the MMC enquiry into this case. An “own mode” price elasticity for coach of -0.65 was estimated, somewhat smaller than the “own mode” price elasticity for rail. This seemingly surprising result could be explained by the “captive” nature of the low-income coach market which may have few alternative modes available.

It should be noted that the estimate in this case may be biased downwards, since the model specification did not include the option of not travelling at all -- a likely response given the optional nature of many coach trips -- but only of changing mode. Hence, a greater elasticity would be expected, in practice. Somewhat higher values were estimated in studies by the Institute for Transport Studies, University of Leeds, undertaken on behalf of the Monopolies and Mergers Commission in connection with the Midland Main Line enquiry (MMC, 1996, page 79). This suggested an overall own-mode price elasticity of - 1.1, rising to - 1.5 for students and the retired, and a coach cross-elasticity with respect to the rail fare of + 0.30.

## 9. DIRECT AIRPORT LINKS

However, there is one market sector in which coach can compete more successfully with rail, namely, airport access. Following deregulation in 1980, many services along the M4 corridor were diverted to serve Heathrow airport. Subsequently, direct links have been established to Heathrow and Gatwick from many parts of Britain, and similar links to other airports. Coach can offer the convenience of a through service, and is less affected by congestion than on routes into central London. By 1984, coach had already captured about 30 per cent of the land feeder market from the West Midlands and Wales to Heathrow, compared with about 5 per cent using the rail-air coach link via Reading (Astill and White, 1989). Increased emphasis has been placed on the airport market by National Express. Today, from Bristol and South Wales, a higher frequency is offered to Heathrow Airport than to Central London.

Higher-quality services have been developed for airport feeders, starting with the upgrading of the Bradford-Leeds-Sheffield-Heathrow-Gatwick service in 1994, using 32-seat coaches, with wider seat pitch and tables, together with air conditioning, and improved in-vehicle service. The upgraded service quality was extended to several other services to Heathrow and Gatwick from May 1995, initially branded under the “Airlink” name, with a different livery to that of the main NE network, and a price premium of about 20-25 per cent on conventional NE services. However, the much lower seating density initially adopted on the first service has been replaced by a standard configuration. The improvements to airport services are being supported by BAA as part of its policy to increase public transport’s share of travel to Heathrow (Duff, 1996). Following the takeover of Flightlink, this brand name has been used for airport services, subsuming “Airlink”.

Table 1 shows the shares by coach (all service types) and rail for the British domestic market and trips to/from Heathrow. The left-hand side shows trips to/from the South-East region in 1992-1996, for coach and rail, derived from the NTS. These represent journeys by UK residents interviewed in the NTS home sample, whose origins and destinations were wholly within mainland Britain, or who were making journeys up to a point at which an international journey commenced (e.g. a person using a coach from

the North-West region to London would appear in this column, whether destined for Central London, or Heathrow). The right-hand columns show data from the 1991 CAA passenger surveys (including non-residents), for passengers travelling through Heathrow.

It can be seen that, for wholly domestic travel, the coach share is lower than that for rail (8 per cent versus 14 per cent). However, for travel to/from Heathrow the pattern is reversed, with coach having a bigger share, at 22 per cent (versus 20 per cent), and exceeding rail for several regions, notably West Midlands, South Wales and the South-West, for which coach offers good direct motorway access. The overall public transport share to/from Heathrow is higher than that for domestic travel, due to the much higher public transport share displayed by non-residents.

In 1995, 10 per cent of all NE's passengers were travelling to or from Heathrow (BAA, 1996) and this market probably represents a still larger share of revenues. Over 170 coach departures per day (all operators) are offered and about 2 million passengers per year carried on the Flightlink services.

User responses to improved services by National Express to Heathrow were examined by Simon Jay (1995) and Andrew Jenkins (1995). An on-vehicle survey was undertaken of 313 passengers, with a follow-up survey following upgrading of selected routes to the "Airlink" standard. Interviews were also conducted with coach users from a wider range of routes at Heathrow. The great majority of passengers were using the services to connect with flights, although a significant share (around 15 per cent) were interchanging with other modes at Heathrow. Leisure was the dominant journey purpose, although around 10 per cent of users on employers' business were also identified. In general, a wider mix of users (including more working-age passengers) was found than for coach travel in general. Alternative modes considered by respondents for the same journey were divided equally between car and rail. Scope was identified for improvements to terminal facilities at Heathrow (on which a £2 million construction redevelopment programme has been carried out).

Opening of the "Heathrow Express" rail service in 1998 is unlikely to have had much effect on the coach traffic, since it only offers a non-stop service from central London at a premium fare, making the generalised cost unattractive to most users compared with direct coach services.

However, a critical threshold level may be needed in order to justify a useful range of services. Stansted does not as yet justify significant direct coach links from other regions.

## **10. COACH STATIONS**

Although the quality of vehicles has improved substantially, this has not been matched by the quality of terminal facilities. Even the largest operator, National Express, has limited resources available for investment, and controls directly only three stations (Digbeth at Birmingham, Liverpool and Manchester).

Competition in the period immediately after the 1980 Act was constrained by the difficulty faced by independents in getting access to Victoria Coach Station, the principal London terminal. This was resolved through sale of the station from NBC to London Transport in 1988, and introduction of a tariff which gives less preference to large operators. The coach station has been substantially refurbished to provide passenger lounges separated from the areas used by the vehicles themselves (although,

ironically, the additional space has become available only from a reduction in total movements, as mentioned above). However, some operators still prefer to use on-street terminals, either because of lower costs, or to avoid congestion in travelling to/from Victoria (one, Berry's, uses the LT interchange at Hammersmith in inner West London, rather than entering the central area as such).

After an earlier decline in the use of Victoria (see above), some recovery has occurred and London Transport now envisages stable demand over the next three years. However, its location is not ideal, since some 68 per cent of coaches operate to/from areas north and/or west of London (Hillman, 1994), for which a site in the Paddington/Marylebone area would be more logical (as proposed on several occasions in the 1980s).

New coach stations were opened in Liverpool in 1994 and in Leeds in 1996, offering greatly improved passenger facilities. In Birmingham, it is hoped to replace the present station with one of higher quality, better located in the city centre.

## 11. INTERNATIONAL SERVICES

Although liberalisation of the regulatory regime for international services has taken place very slowly, substantial growth has occurred in recent years. This has been associated with rapid growth in roll-on/roll-off ferry services, notably concentrated on Dover-Calais and other short sea routes. Competition between ferry operators has widened the choice (although one major operator, Olau Line from Sheerness to Vlissingen, ceased operations in March 1994). The Channel Tunnel itself has widened the scope still further, and has affected the offer by ferry companies through price competition. The coach shuttle service commenced in June 1995, and by May 1998 had a 40 per cent share of the cross-Channel coach market.

Studies on behalf of Eurotunnel indicate that, between 1986 and 1993, the compound annual growth in coach passenger movements was 4.1 per cent (very close to that for all cross-Channel passenger movement at 4.0 per cent), but slightly higher on the French Straits routes, at 5.2 per cent. These represented 6.4 million of the estimated total of 8.1 million in 1994. This figure in turn formed 11.3 per cent of the total cross-Channel passenger market (including air) (Eurotunnel, 1994). The 1994 total was thus not far short of NEL's annual domestic volume, then about 10 million. The data are, of course, not strictly comparable, since all types of trip (including tours, excursions and private hire) are included, in contrast to only the scheduled services of NEL. Nonetheless, the contrast is a striking one, especially when anticipated growth is borne in mind.

Growth of through services from eastern Europe (Poland, for example) has been particularly rapid in the last few years. Komornicki (1996) indicates that, by August 1993, some 19 routes were operating between Poland and Britain, with an average of 1.5 round trips per route per week (see also his paper presented at the Round Table).

The International Passenger Survey (IPS) for 1996 estimates 2.44 million visits to the United Kingdom by overseas residents, using coach services via the Tunnel or roll-on/roll-off ferry, and a very similar volume of 2.53 million visits by UK residents. Doubling these totals to give one-way trips produces almost 10 million trips, close to the Eurotunnel projections (the IPS figures also include estimates for the Irish Republic). Of the overseas visitors to Britain by coach, the largest category was

that of inclusive tour holidays (45 per cent), followed by “independent holidays” (30 per cent). For UK residents, the corresponding proportions were 49 per cent and 29 per cent respectively (derived from tabulations in *Transport Statistics Great Britain 1997*, Tables 1.9 and 1.11). The 1995 IPS indicates a very marked coach share in travel to Britain by residents of eastern Europe, of around 80 per cent. The opening up since 1989 has created a desire for more extensive travel, but lower real income levels favour low-cost modes such as coach.

Further analysis of the IPS by the British Tourist Authority indicates that coach users represented 11 per cent of all visitors to the UK, the main components of the coach market being France (32 per cent), Germany (21 per cent), Belgium/Luxembourg (16 per cent), Netherlands (7 per cent), Czech and Slovak Republics (7 per cent) and Poland (5 per cent). The duration of visits varies by journey length, as might be expected, ranging from 2-5 days for the closer countries, but 15 days for Poland.

## **12. DEVELOPMENTS ELSEWHERE IN EUROPE**

### **12.1. Overall trends**

Most bus and coach service operation is over short distances, and in many cases an “interurban” element cannot be easily distinguished from available statistics. The definition of “interurban” also varies between States, dependent partly on licensing rules (which in some cases effectively prevent scheduled, public, long-distance services competing with rail).

In terms of overall bus and coach provision and use (all journey lengths included), the bus and coach fleet in the “EU15” States (European Commission, 1997) rose from 327 000 in 1970 (0.96 per 1 000 population) to 485 000 (1.30 per 1 000 population) in 1995. The volume of passenger-kms rose from 261 700 million (770 per head) in 1970 to about 360 000 million in 1990, and then remained stable at this level (970 per head). These increases have occurred despite car ownership rising from 0.18 per head in 1970 to 0.43 per head in 1995.

In some cases, a relatively low level of provision and use was found in some countries at the start of this period, from which increases have taken place since. In others, such as Britain, a high level of use at the start of the period has now fallen below the average (from 1 080 km per head in 1970 to 733 km in 1995). It is likely that growth in interurban travel has offset some of the loss of short-distance rural and urban bus trips due to rising car ownership. Growth in education-based travel may also have offset the decline in travel by working-age adults.

### **12.2. Examples within other countries**

A widely-varying pattern exists within Europe, which is best illustrated by a series of brief case studies. These include:

**GERMANY.** Existing regulation largely restricts scheduled public services to those which do not compete directly with railways. However, a large tour market is served by coach, and it appears that the share of all holiday travel by coach (by national residents, to both domestic and international destinations) may be slightly higher than in Britain (around 11 per cent compared with 9 per cent) (Schiefelbusch, 1997).

**NORWAY.** Although licensing rules tend to protect rail, a franchised express coach network has been built up by “NOR-WAY Bussekspress”, now carrying almost 2 million passengers per year, aiming at the tourist and foreign visitor markets.

**DENMARK.** A limited range of domestic express services, but most interurban operation is relatively short-distance, complementing rail.

**THE NETHERLANDS.** Very little interurban service provision, expect for the “Interliner” service, complementing the rail network.

**THE IRISH REPUBLIC.** Within the state-owned holding company, CIE, the rural and regional bus company (Bus Eireann) has developed an extensive coach network, “Expressway”, now carrying about 5 million passengers per year. This both complements the rail network, and competes directly on major routes (together with competition for a number of semi-legal, independent express services). A similar journey time/price differential with rail to that in Britain applies (see above).

**SPAIN.** About 6 million passengers per year are carried by the network of ENATCAR, a state-owned company operating in association with some smaller private companies. Routes are provided between major cities, competing with rail, with international links as part of the “Eurolines” network.

### **13. STRUCTURE OF THE COACH NETWORK AND FUTURE DEVELOPMENT IN BRITAIN**

Following the impact of the 1980 Transport Act, as described above, the network has been reoriented to provide fast, high-frequency services (typically, every two hours or better) between London and the main centres, together with major cross-country services. “Hub” interchanges are provided at London Victoria, Bristol, Leeds, Birmingham and other centres.

Improvements in the road network have also been of benefit to coach services. In recent years, the M25 orbital motorway around London has probably been of greatest significance, especially for the services to Heathrow and Gatwick airports. A bus/coach priority lane has been provided on its spur to Heathrow Airport since October 1997, and the Highways Agency is considering similar priorities on the M4 itself and other trunk road sections. Opening of new links on the East-West A14 cross-country route enabled a 30-minute saving on Cambridge-Birmingham services in 1994.

New coach interchanges (“coachways”) have been developed by NEL adjacent to motorway interchanges, enabling coaches to provide fast links to certain areas, while imposing only a small time penalty on through journeys. The most important example is at Milton Keynes, adjacent to Junction 14 on the M1. Others include Calcot on the M4 (Reading) and Medway on the M2 (North Kent).



Further scope for express service improvement is curtailed by increasingly restrictive regulation on speed (although the safety rationale for this is unclear). Under ECE R66 regulations, specifying improved roof strength to reduce “rollover” accident casualties, such new vehicles are limited to 100 km/h. The British Government has also introduced a prohibition on coaches from the “third” (fastest) lane on motorways since January 1996, nominally for a two-year experimental period, but at the time of writing (June 1998) still in force. Together with the effects of road congestion, the overall average speed of express coach services (and their reliability) is thus likely to diminish, reducing the competitive advantage *vis-à-vis* rail.

A somewhat negative view of express coaches is often found, in which they are seen as part of the problem of traffic congestion, rather than an element within the public transport system. This is evident in attitudes taken by local councillors in central London, although in fact coaches represent only about 1 to 1.5 per cent of all vehicles on major road links in the area, even in a sample including roads around Victoria Coach Station (source: as for Table 3). The physical size and colourful liveries of the vehicles themselves may perhaps aid the impression that they constitute a larger proportion of traffic movement than is, in fact, the case.

A negative attitude toward coaches was also adopted in the past by BAA in respect of space taken at airports such as Heathrow, although a much more positive awareness of their role as a major feeder mode (see above) is now evident.

Taking a pcu value of 2.5, and an average load of about 20, a coach carries about 8 occupants per pcu, compared with 2 (or less) for cars in interurban travel. They also offer significantly lower energy use and pollution per passenger-kilometre.

An example of a more positive view may be found in the report of the Royal Commission on Environmental Pollution (RCEP, 1994), whose recommendations 74 and 75 read:

*We recommend that transport and land-use planning recognise the role of express coach services and provide full facilities for them in traffic management schemes and at transport interchanges. We recommend that, in considering where high vehicle-occupancy lanes should be designated on interurban roads, highway authorities place considerable weight on the potential benefits to express coach services.*

As part of its National Road Traffic Forecast (NRTF), the Government has made projections of bus and coach vehicle-km up to the year 2031. Bus and coach traffic as a whole is expected to increase by 33 per cent on a base of 1996 (central estimate), compared with 52 per cent for all motor traffic. However, very different trends are expected for local buses and for coaches, the former declining gradually as car ownership rises (-0.5 per cent per annum), the latter increasing in line with GDP, based on experience since 1970 (DETR, 1998, Section 3). Note that the definition of “coach” used here would be closer to that of “other” bus and coach services, and to that used in roadside surveys (as in Section 2.8. of this report) rather than the scheduled express sector as such.

## **14. FUTURE DEVELOPMENT IN WESTERN EUROPE**

### **14.1. Issues of interoperability and future developments**

In contrast to the railways, for example, technical issues of interoperability appear relatively minor. Even the use of both right-hand and left-hand drive position coaches on through services between Britain and continental Europe appears to cause few operational or safety problems. The main discrepancy in standards relates to permission for 15-metre rigid vehicles -- which has been granted in some countries (such as Sweden) but not others (e.g. Britain) -- and in gross weight.

The main constraints appear to lie in the regulatory system which effectively prevents national networks of scheduled coach services competing with rail in several countries, or results in semi-legal operation (for example, in Italy).

Interoperability between different operators may be limited by lack of through-ticketing, or use of common terminals where interchange could be made. In some cases, this may result from a major operator being unwilling to admit competing operators to its own network. Interconnection with local and regional public transport services may also display difficulties, where terminals are poorly sited.

### **14.2. Implications from British experience for policy in other countries**

It is likely that shifts toward a more competitive interurban transport framework within the EU could result in liberalisation not only of international services, but also within domestic markets. As yet, few express coach networks of the British form exist -- the closest parallel is probably with the Irish Republic, in which an extensive and growing scheduled network is operated by the state-owned operator CIE, plus independent services. For example, scheduled express operation is almost unknown within France. In Germany, a major tourist market (of similar form to that in Britain) is handled by the coach industry, but here also there is virtually no scheduled express competition with rail.

The British experience suggests that rail's position may remain fairly strong. The initial major impact of coach competition in the early 1980s was largely reversed. Elsewhere in Europe, where much higher rail speeds are offered on trunk routes, rail's time advantage may be even greater. However, a wider range of fares is likely to develop, in response to price competition, especially for leisure travellers. Specific growth market sectors, such as direct links to major airports, may also offer opportunities to coach operators, where the rail network does not provide such connections.

In some cases, British operators have extended their express coach expertise directly into other countries. In 1994, NEL launched their "Polski Express" network, offering domestic services between Warsaw and other major cities, using local operators as contractors in the same fashion as in Britain. However, profitability has been poor, due to strong local competition. Following its acquisition of the Swebus operations (bus and coach services of the Swedish Railways) in 1997, Stagecoach has rapidly expanded express operation in that country, increasing the degree of direct competition with the rail system.

## 15. ACKNOWLEDGEMENTS

The work presented in this report is drawn from a continuing interest in the express coach field over a number of years, in which earlier studies have been updated and expanded. In particular, material is drawn from inputs by the author and others to the “SORT-IT” study (Strategic Organisation and Regulation in Transport - Interurban Travel), a “Framework IV” study funded by the European Union. Particular thanks are due to Alistair Dick (formerly of National Express), John Wilson (Commercial Director, National Express), John Lamb (Public Transport Development Manager, BAA), Spencer Broadley (responsible for special tabulations from the NTS at DETR), Kurt Jansson (Policy Manager, British Tourist Authority) and Jerrick Gro Jensen (Anders Nyvig Consultancy, Denmark). All conclusions drawn and statements made in this report are the author’s sole responsibility.

## NOTES

1. The sample from which coach fares from 1982 in real terms were estimated comprised London to/from : Bath, Birmingham, Bristol, Cardiff, Coventry, Exeter, Leeds, Liverpool, Manchester, Newcastle, Nottingham, Plymouth and Sheffield. The sample from which coach:rail fare comparisons were made comprised these destinations plus Glasgow, Norwich and Preston.
2. From response to a question raised in the presentation of this paper at the European Transport Forum, September 1997.
3. The sample comprised: Cardiff, Edinburgh, Liverpool, Manchester, Norwich, Nottingham, Plymouth, Sheffield, York, Bournemouth and Weymouth.

## BIBLIOGRAPHY

- Astill, D. and P.R. White (1989), "Express coach as an access mode to major airports", PTRC Summer Annual Meeting, September, Seminar D, pp. 13-20.
- British Airports Authority (BAA) (1996), *Heathrow Airport Transportation Policy*, Winter 1996/97 edition, pp. 14-16, 22.
- Department of Transport, Environment and the Regions (DETR) (1997), *Transport Statistics Report: Bus and Coach Statistics Great Britain 1996/97*, The Stationery Office, London, October 1997.
- Dick, A. (1994), Director of Group Planning, National Express, unpublished estimate of NE's passenger-km.
- Department of Transport (1987), *Transport Statistics Great Britain 1986*, HMSO, London, September, Table 2.33 (b).
- Department of Transport (1989), *National Road Traffic Forecasts*, HMSO.
- Department of the Environment, Transport and the Regions (DETR) (1998), *National Road Traffic Forecasts (Great Britain)*, Working Paper 3, "Non-car traffic: modelling and forecasting".
- DETR (1999), *Statistics Bulletin (99) 23, A Bulletin of Public Transport Statistics Great Britain 1999*, November, p. 7 and Table 6.
- Doganis, R. and P. White (1990), "Long-distance travel within Britain", Discussion Paper No.17 in Rees Jeffreys' Road Fund *Transport and Society* Series, Transport Studies Unit, University of Oxford, April, Section 3.
- Duff, A. (1995), "Planning and implementing bus and coach service improvements for Heathrow", Proceedings of Seminar D "Public Transport Planning and Operations", 23rd European Transport Forum, PTRC, September 1995, University of Warwick, pp. 239-252, PTRC, London.
- Eurotunnel PLC (1994), Rights Issue Document, May, pp. 22 and 23.  
See also document to shareholders of June 1990, pp. 11,13, 14.
- Higginson, M. (1996) ,"The impact of changes in value added tax on public transport", *Public Transport International* (UITP, Brussels), 1996/5, pp. 79-82.
- Hillman, W., Managing Director of Victoria Coach Station (1994), Talk to the Omnibus Society, London, September (unpublished) and subsequent communication.

- Jay, S. (1995), "Express coach access to major airports", research project forming part of MSc Transport Planning & Management Degree, University of Westminster (unpublished).
- Jenkins, A.J. (1995), "Express coach services to major airports: an analysis of 'Airlink' services operated by National Express", research project forming part of MSc Transport Planning & Management, University of Westminster (unpublished).
- Komornicki, T. (1996), "Bus connections between Poland and other European countries", *Transport Reviews*, Vol. 16, No. 2, pp. 99-108.
- London Research Centre (1994), unpublished data from passenger survey at Victoria Coach Station, forming part of the London Area Transport Survey, 1991.
- London Transport (1998), *Business Plan for 1998/99*, May.
- Monopolies and Mergers Commission (1994), *National Express Group plc and Saltire Holdings Ltd: A report on the merger situation*, Cm 2468, HMSO, London, February.
- Monopolies and Mergers Commission (1996), *National Express Group plc and Midland Main Line Limited: A report on the merger situation*, Cm 3495, London, December.
- Monopolies and Mergers Commission (1997a), *National Express Group PLC and ScotRail Railways Limited: A report on the merger situation*, Cm3773, TSO, London, December.
- Monopolies and Mergers Commission (MMC) (1997b), *National Express Group PLC and Central Trains Limited: A report on the merger situation*, Cmnd 3774, The Stationery Office, London, December.
- National Audit Office (1993), Report 884, *Sale of the Scottish Bus Group*, HMSO, August.
- National Express Group (1999), *Annual Report for 1998*, p. 26.
- National Travel Survey 1994/96* (1997), The Stationery Office, London, October (and earlier editions, published annually).
- Office for National Statistics (1996), *Travel Trends: a report on the 1995 International Passenger Survey*, TSO, London, 1996.
- Robbins, D.K. and P.R. White (1986), "The experience of express coach deregulation in Great Britain", *Transportation*, Vol. 13 (4), pp. 339-364.
- Royal Commission on Environmental Pollution (1994), *Transport and the Environment*, Cm 2674, HMSO, October.
- Schiefelbusch, M. (1997), "The coach in the leisure travel market: a comparison between Britain and Germany", research dissertation, MSc Transport Planning and Management, University of Westminster, London, September (unpublished).

- Terzis, G., G. Copley (MVA Consultancy) and J.J. Bates (1997), "Rail and Coach Competition: Midland Main Line Study", PTRC European Transport Forum, Rail Seminar (H), University of Brunel, London, September.
- Thompson, D. and A. Whitfield (1995), "Express Coaching: Privatisation, Incumbent Advantage and the Competitive Process", Chapter 1 in: M. Bishop, J. Kay and C. Mayer (eds.), *The Regulatory Challenge*, Oxford University Press, Oxford.
- (1995), "Why Nat Ex needs WMT", *Transit* (supplement to *Coach & Bus Week*), 1 April 1995, pp. 8-10.
- White, Peter (1998), "Outcomes of Rail Privatisation in Britain", paper presented at the World Conference on Transport Research, Session H3, Antwerp, July.

SWEDEN

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# COACH DEREGULATION IN SWEDEN

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## 1. INTRODUCTION

Coach services are subject to restrictions in most European countries, mainly motivated by protection of the railways. Great Britain is the major exception, where coach services were fully deregulated in 1980. The effect of the British deregulation is mainly cheaper long-distance services, since British Rail also responded by cutting its fares. The lower prices in turn led to increased demand, so that the railways lost very little demand.

During the last five years, a number of new policy measures have influenced Swedish passenger transport. In 1989, the Swedish national state-owned railway operator, SJ, was separated into a national state-owned, welfare-oriented track authority (Banverket, BV) and a state-owned, commercially oriented operator, SJ. The Swedish air industry was fully deregulated on 1st January 1992. On 1st January 1993, the Swedish coach industry was partially deregulated. These policy changes led to increased competition between long-distance public transport modes. However, the Swedish Railways, SJ, still has a monopoly for long-distance rail passenger transport. The consequence of the Swedish partial deregulation of the coach industry has been a small increase in coach service supply which has mainly benefited the less affluent travellers without affecting the railways significantly.

Between 1995 and 1997, a Swedish Parliamentary Transport and Communications Committee worked on a new transport policy. Partly based on this work, the Swedish Government, in March 1998, presented a bill which through the Swedish Parliament became an Act. This Act comprises full deregulation with respect to coach services, combined with an increase in annual taxes for heavy vehicles, buses and coaches and with reduced track charges for the State railway, SJ. The tax increase was mainly motivated by internalisation of external effects and the reduced track charges by second-best pricing, since diesel charges were not considered possible to increase due to the European competitive situation.

This report mainly deals with analyses of historic and future Swedish coach deregulation schemes by use of computer simulations, but will commence with a general discussion.

The simulation work presented here has been carried out at the Swedish Institute for Transport and Communications Analysis (SIKA), within the EC DGVII research project SORT-IT and at the Stockholm public transport authority, SL. The author of this paper has been involved in all of these studies.

Section 2 includes a brief principal discussion of arguments for political intervention in the passenger transport sector. Section 3 describes the general prerequisites and assumptions for the simulation work. Section 4 analyses the effects of the partial coach deregulation in Sweden in 1993. Section 5 presents the results of possible outcomes of full deregulation according to the new Swedish Act. Conclusions are presented in Section 6.

## 2. DISCUSSION OF POLITICAL INTERVENTION IN PASSENGER TRANSPORT

Before we go into the simulation studies, we will briefly discuss possible reasons for regulations in the transport sector. Most economic activities in market economies have relatively few regulations, apart from health control, anti-trust laws, etc. However, transport and especially collective passenger transport, has a long tradition of regulation, in terms of authority ownership, subsidies or protection against competition. We will therefore, as a background to the simulation study, discuss a few market-failure arguments for such political interventions.

### 2.1. The second-best argument for public intervention

The most common argument for public intervention, and probably the most commonly understood argument among politicians, is the "second-best argument". For the simple case with cross-elasticities between mode A and mode B but with no cross-elasticities between time periods [see e.g. Glaister (1974) and K. Jansson (1991) for comprehensive analyses], we have that:

$$(1) \quad p_A - m_A = - (p_B - m_B) \frac{X^B \varepsilon^{BA}}{X^A \varepsilon^{AA}}$$

where  $m_A$  and  $m_B$  are marginal social costs,  $X^A$  and  $X^B$  are the demands,  $\varepsilon^{BA}$  is the price cross-elasticity between the modes and  $\varepsilon^{AA}$  is the own-price elasticity for mode A.

This argument thus concerns public intervention in terms of financial support, but not necessarily in terms of public planning and operation. The government could simply pay the firm A part of the cost per passenger. The alternative solution would be, if possible, to force mode B to charge a price equal to marginal cost. Public intervention is, however, needed in one way or another for an efficient solution.

### 2.2. The economies-of-scale argument for public intervention

Mohring (1974) observed economies of scale in consumption of public transport, which gives rise to a positive external effect. Each additional passenger will benefit the already existing passengers through a higher optimal service frequency or a more dense network. We will here briefly demonstrate this effect where price, frequency, vehicle size and number of train carriages are simultaneously optimised. For the purpose in this context it suffices to show the optimal price,  $p^*$ , which results from the first-order condition with respect to frequency (using the definition of frequency delay, D):

$$(2) \quad p^* = \frac{F \cdot C}{X} + \frac{1}{F} \cdot \frac{\partial D}{\partial F} = \frac{F \cdot C}{X} - \frac{\varphi}{F}$$

According to (2) the optimal price equals the increase in operators' cost minus the passenger benefit in terms of less frequency delay due to a one-unit increase in frequency,  $\partial D / \partial F$ . This is thus an argument for public intervention through partial government financing.

Since empirical studies indicate that the value of frequency delay is higher for local and regional transport than for long-distance transport, the argument for intervention is smaller for long-distance than for short-distance transport.

### 2.3. The intra-marginal demand argument

We know already from the objective functions for the welfare-maximising and profit-maximising firms, that the profit-maximising firm ignores the consumers' surplus. The additional argument under this heading follows from the assumption made here that there are several sub-markets (for example, two services in a simple case) with different demand levels and different elasticities with respect to generalised cost. Figure 1 illustrates this case.

Figure 1. Illustration of gains for a welfare-maximising and a profit-maximising firm

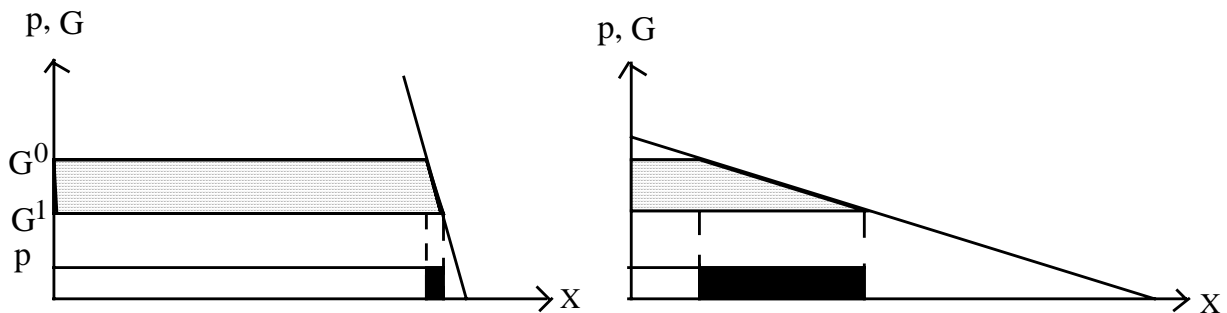


Figure 1 shows two sub-markets (routes) where demand is a function of generalised cost,  $G$ . Assume, for simplicity, that  $G$  originally is  $G^0$  on both routes. Assume that a welfare-maximising and a profit-maximising body both have the opportunity to reduce generalised cost to  $G^1$ , at a fixed cost on both routes. The welfare-maximising body would choose to improve the route to the left, where consumers' surplus (horizontally lined area) plus producer's surplus (black area) is the largest. The profit-maximising body would choose to improve the route to the right, where producer's surplus is the largest, i.e. the profit-maximising firm invests on the route which would yield the lower social net benefit.

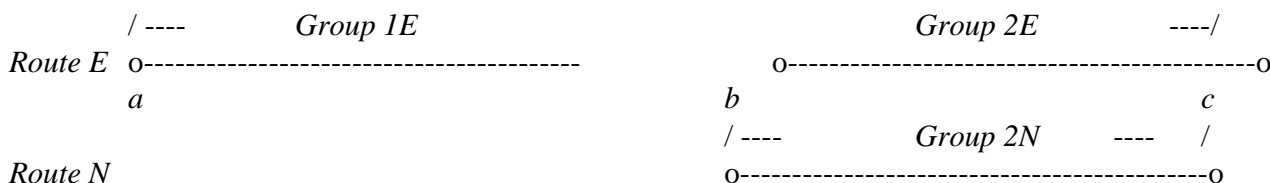
Unlike the earlier two arguments for intervention, this intra-marginal demand argument favours public authority intervention in terms of planning of routes and investment.

### 2.4. The network argument for public intervention

As an example, we take a very simple network. We assume that there is originally an existing route,  $E$ , (which may belong to a network). The question is whether it may be worthwhile to introduce a new route,  $N$ . This route is partly "parallel" with route  $E$ , thereby attracting some passengers to switch from route  $E$  to route  $N$ . We may think of routes  $E$  and  $N$  as two routes of any kind, such as train, coach, air, etc., belonging to separate companies. Route  $E$  operates between points  $a$  and  $c$ , via

point *b*. Route *N* operates on the section between points *b* and *c*. Some of the passengers, *2E*, who travel on the section between point *b* and *c*, are attracted by the new route. The figure below may help to explain the basic idea.

Figure 2. **Two competing routes**



The cost per departure for each section is assumed to be constant, *C*, the same for both routes. The cost per round trip of the two routes are thus assumed to be  $2FC$  for route *E* and  $FC$  for route *N*, where *F* denotes the number of departures over a specific period of time. We ignore the boarding time and that generalised cost is dependent on demand. These simplifications will substantially decrease the complexity of the calculations presented below without affecting the basic analysis and results.

Model calculations have been made for four policies:

- I Welfare maximisation of the existing service with no budget constraint;
- II Welfare maximisation of the existing service with a budget constraint;
- III Profit maximisation of the existing service;
- IV Profit maximisation with introduction of a competing service.

For calculations of the consumer surplus and demand, *X*, we have assumed a simple exponential function:

$$X = \exp(a-bG) \equiv \exp[a-b(p + T + \Phi/F)]$$

where *G* is generalised cost, *p* is price, *T* is travel time, *F* is service frequency,  $\Phi$  is monetary value of the interval  $1/F$ , and where *a* and *b* are parameters.

The elasticities with respect to price and frequency are thus:

$$\varepsilon_p = -bp, \varepsilon_F = b\Phi/F$$

Parameter values chosen for the example are:  $a=7.3$ ,  $b=0.1$ ,  $T=10$ ,  $p = 20$ , cost  $C= 200$ .

For profit-maximising firms, optimal price is  $P = 1/b$ , implying a price elasticity equal to  $-1$ .

As shown in Table 1, there is clearly a descending order from policy I to policy IV in terms of consumer surplus, net social benefit (NSB) and frequency, while the order is the opposite in terms of price. Note, however, that the magnitudes of differences depend on the specific parameters which have been chosen.

The differences in outcome between policies I and II reflect the "excess burden" of the budget constraint, due to price being set above marginal social cost. One should, though, be aware that alternative financing through some kind of tax will also cause an "excess burden".

Table 1. **Calculated results**

<b>Policy</b>	<b>Price</b>	<b>Frequency</b>	<b>Demand</b>	<b>Consumer surplus</b>	<b>Profit</b>	<b>Net social benefit</b>
Policy I	0	6.3	792	7 920	2 520	5 400
Policy II	4	4.9	486	4 860	0	4 860
Policy III	10	3.3	218	2 180	860	3 040
Policy IV, service E	10	2.6	158		460	-
Policy IV, service N	10	2.3	50		50	-
Policy IV, aggregate	10		208	2 002	510	2 512

The differences in outcome between policies II and III reflect the social cost of a commercial policy as compared to a welfare-orientated policy.

The differences in outcome between policies III and IV reflect the social cost of commercial competition. The difference in net social benefit may be said to be due to a combined externality stemming from both consumption and production; the operator decides to operate the service and the passengers, becoming attracted by this service, in turn cause a reduced ridership and frequency on the existing service, disbenefiting the original passengers.

Note that a welfare loss from policy IV may very well appear even if the same profit-maximising monopoly operated both services, that is, the aggregate profit may increase when the new route is introduced, at the same time as the passengers' disbenefits are greater than the increase in profits.

## **2.5. Principal conclusions**

From a theoretical point of view, there seem to be relevant arguments for political intervention in the passenger transport sector. The arguments seem, however, less strong for long-distant transport than for local transport, especially with respect to the points raised in Section 2.2. concerning economies of scale. In the simulation work presented in Chapters 4 and 5, some of the above arguments will be tested for Swedish real-world transport networks.

### 3. PREREQUISITES AND ASSUMPTIONS FOR SIMULATIONS

#### 3.1. Basic analytical method

Basically, we regard all passenger transport as a system where passengers can choose among lines and operators and where a single journey may involve several lines and operators. The method used is simulation, employing a computerized route-network-analysis package, VIPS, both for the historic partial deregulation in 1993 and for hypothetical outcomes of the new Act on full deregulation.

For the hypothetical case, there are two studies to be presented. In Study 1, we have assumed that the railways respond by reducing the prices of second-class tickets. In Study 2, on the other hand, we have not assumed any reactions from the rail and air operators. Study 2 would thus reflect the first-round effect of coach deregulation.

In the analyses we assume that:

- Operators compete independently, without regarding modes as being complementary;
- Passengers regard the modes as alternatives, but also as being complementary;
- Passengers are not homogeneous, but have different preferences and face different prices.

The travel standard is expressed in terms of generalised cost per journey, that is, price plus weighted travel time converted into monetary units.

#### 3.2. Network and simulation software

The network we have used for the simulations is comprised of the Swedish air, rail, regional bus, ferry and coach lines, plus the national road network.

The simulation program needs information about times and distances between all nodes (stops or other points) plus current travel demand between all zones in the country. The 668 zones used are each represented by a "centroid", from which travellers have access to the lines and the national road network by walk links. The demand matrix stems from a combination of three sources: one synthetic, computer-calculated matrix, the Swedish National Transport Survey (limited sample size, but use of several years) and the Swedish Transport and Tourist Data Base (limited sample size, but use of several years). As a matter of course, the uncertainty of these travel demand estimations may be the largest source of error in the simulations.

The simulation program calculates expected use of mode and route, according to minimum of generalised cost (price plus monetarised travel time components) and all the travel time components plus price for all origin-destination pairs as well as for the whole network.



### 3.3. User categories and time values

We take into account that various passenger categories have separate valuations of travel time and comfort. These differences are reflected in separate monetary values of time per category. In the tables below, the weights for ride (in-vehicle) time, wait time, transfer time and walk time are related to ride time for InterCity train, normalised to unity. Tables 2 and 3 show the values used in the analyses for Studies 1 and 2 respectively.

Table 2. Assumed time values and weights for the national network, Study 1

	Share trips	Ride time value (train) SEK/hour	Weight for		Ride time weight			
			Wait time	Transfer and walk time	IC-train	X2000 (fast train)	Coach	Air
<b>Private journeys:</b>								
Working, high value	0.20	105	0.7	2.0	1.0	0.9	1.50	1.1
Working, low value	0.50	80	0.7	2.0	1.0	0.9	1.50	1.1
Students	0.15	30	0.4	2.0	1.0	0.9	1.50	1.1
Elderly	0.15	30	0.4	2.0	1.0	0.9	1.50	1.1
<100 km journeys		20	0.8	2.0	1.0	0.9	1.50	-
<b>Business journeys</b>	1.00	220	1.1	2.0	1.0	0.9	2.50	1.1-2.5

Table 3. Assumed time values and weights for the national network, Study 2

	Share trips	Ride time value (train) SEK/hour	Weight for		Ride time weight				
			Wait time	Transfer and walk time	IC train	X2000	Coach	Air	Car
<b>Private journeys</b>									
Private, 90	0.20	90	0.6	2.0	1.0	0.9	1.50	1.2-2.0	1.6
Private, 70	0.50	70	0.6	2.0	1.0	0.9	1.50	1.2-2.0	1.6
Students	0.15	25	0.5	2.0	1.0	0.9	1.20	1.2-2.0	1.6
Senior citizens	0.15	25	0.5	2.0	1.0	0.9	1.50	1.2-2.0	1.8
<100 km journeys		20	0.5	2.0	1.0	0.9	1.50	-	1.7
<b>Business journeys</b>	1.00	220	1.2	2.0	1.0	0.9	1.50	1.2-2.0	1.6

The lower values of ride time in Study 2 are a reflection of the calibration of the model with respect to the explicit inclusion of the car mode among the alternatives. The higher weight, 2.0 for air, refers to propeller aircrafts. Note that the car time weight reflects both that car drivers and passengers usually take breaks during the journey and that car driving may be perceived as less comfortable

compared to train. The time values and the weights are derived from a Swedish stated preference study and from the calibration work. It should also be mentioned that the value of time for business trips applied for the welfare calculus is lower, SEK 140/hour.

### 3.4. Prices

For prices, it is important to employ the real prices that each passenger group meets. General discounts were assumed for all passenger groups. It was also assumed that business travellers do not pay VAT and that 30 per cent of the remaining price was withdrawn according to Swedish taxation regulations. However, this 30 per cent was to the benefit of operators. For private travellers, we have tried, in co-operation with the State Railway, SJ, to estimate the average discount (comprising several ticket types) for various groups. Prices and costs are here expressed in Swedish currency, SEK, where 1 SEK equals approximately 0.12 Ecu.

Table 4 shows assumed prices, shown as shares of full price including VAT, for each travel category.

**Table 4. Assumed prices. For public transport, expressed in terms of percentage of full fare and, for car, expressed in SEK per km**

<b>Travel Category</b>	<b>Train %</b>	<b>X2000 %</b>	<b>Air %</b>	<b>Coaches %</b>	<b>Car SEK/km</b>
Business travellers	80	84	85	100	0.81
Private, 90 SEK	40	40	40	100	0.66
Private, 70 SEK	40	40	40	100	0.89
Senior citizens	40	40	35	Variable	0.84
Students	27	27	35	Variable	0.79
<100 km journeys	100	100	-	100	1.00

## 4. COACH DEREGULATION 1992-1996

On 1st January 1993, the Swedish coach industry was partially deregulated. This means that the “burden of proof” concerning “damage to the railways” has been reversed. Since then, SJ and the regional bus authorities must, in principle, prove that a new coach line will seriously harm profits for the railways and regional buses. Both the former and the new types of proof are clearly difficult to acquire in practice. Due to deregulation, supply in terms of coach-km increased by some 39 per cent between 1992 and 1996.

Below we present calculations of the impact of coach deregulation at national level, between the years 1992 and 1996. We do this by comparing the performance of the air, rail and coach systems in 1996 with the air system in 1996, the rail system in 1996 and the coach system in 1992.

#### 4.1. Modal split

The modal split for the situation in 1996 was modelled and calibrated. The modal split for coach in 1992 and rail and air in 1996 is modelled. According to the model analysis, the choice of mode seems to have changed very little, *ceteris paribus*, following the partial deregulation of the coach industry.

Table 5. Calculated modal split (in passenger-km and shares), due to the development of coach operation

	Coach 1992; rail, air 1996 Million. pass. km	Share %	Air, rail, coach 1996 Million. pass. km	Share %
X2000 (fast train)	577	6.9	573	6.8
Night train	1 105	13.2	1 103	13.1
IC train	3 669	43.7	3 605	42.8
SAS	1 992	23.7	1 987	23.6
Other air	887	10.6	881	10.5
Coach	170	2.0	278	3.3
Total	8 400	100.0	8 429	100.0

#### 4.2. Passengers

The dominating effect is that low-value-of-time (low-income) travellers have gained, since the gain in price is larger than the loss in terms of travel time. Note that a positive sign indicates improvement.

**Table 6. Calculated change in generalised cost and consumer surplus per category, due to the development of coach operation 1992-1996**

	<b>Business 140 SEK/h</b>	<b>Private 105 SEK/h</b>	<b>Private 80 SEK/h</b>	<b>Private 30 SEK/h</b>	<b>Total</b>
Generalised cost/trip, SEK	0.5	1.8	2.3	2.6	
Generalised cost/trip, %	0.0	0.1	0.2	0.5	
Consumer surplus, MSEK	3.5	5.5	17.8	12.2	39.0
of which fare	3.7	4.7	18.9	22.1	49.4
of which time	- 0.2	0.8	- 1.0	- 9.9	- 10.4

### **4.3. Welfare**

The net benefit, a change in consumer and producer surplus, was found to be close to zero, which means that the dominating effect is redistributive.

### **4.4. Conclusions**

The effects of the Swedish partial deregulation seem promising. The low-price alternative has attracted low-income travellers, while the Swedish Railways have lost patronage to a limited extent. For those who place importance on equity in terms of possibility to travel, the deregulation can be regarded as successful.

However, one should also bear in mind that increased coach competition may, in certain cases, lead to the closure of rail services which, in turn, may cause losses for former rail passengers which exceed the benefits to bus passengers.

## **5. FUTURE COACH SERVICE DEREGULATION**

The new Act is supposed to lead to an increased supply of coach services in Sweden. We assume that the coach service supply may increase through a few new services and a substantial increase in service frequency, in particular that weekend services become daily services. We have assumed a two- to threefold increase in coach frequency in both studies, 1 and 2, plus a few more routes in Study 2, according to 1998 applications from the coach operators.

### **5.1. Results of Study 1 -- Nationwide**

In Study 1, we have assumed that the railways respond to the increased supply of coach services by reducing their second-class fares. In this study, we employed an elasticity model for the total public transport demand.

### *Mode choice*

The demand for coach services is calculated to increase by some 50 per cent. The losses in demand for air, rail and car would seem to be fairly small. Neither would regional buses lose much, being administered and financed by the local and regional authorities (mostly operated after competitive tendering).

Table 7. **Modal split, in millions of passenger-km and shares**

	<b>1996 Base</b>	<b>%</b>	<b>Deregulation</b>	<b>%</b>
X2000 (fast train)	894	6.3	992	6.8
Night train	848	5.9	804	5.5
Other trains	5 079	35.6	5 082	34.9
SAS	2 101	14.7	2 040	14.0
Other airlines	1 078	7.5	1 041	7.1
Coach	715	5.0	1 132	7.8
Regional bus	3 564	25.0	3 476	23.9
Total collective	14 279	100.0	14 568	100.0
Car	74 820	84.0	74 618	83.7

### *Passengers*

Passengers with low values of time gain more than passengers with high values of time. Private travellers would gain both in terms of time and money. Note that most of the gains in terms of fares are due to the assumed reduction of second-class rail fares.

Table 8. **Change in generalised cost in SEK per trip and consumer surplus in MSEK per year. Different values of time**

	<b>Business</b>	<b>Working</b>	<b>Working</b>	<b>Pensioners &amp; students</b>	<b>Short trips</b>	<b>Total</b>
	<b>140 SEK/h</b>	<b>105 SEK/h</b>	<b>80 SEK/h</b>	<b>30 SEK/h</b>	<b>20 SEK/h</b>	
General cost per trip, SEK	7.0	29.2	25.1	17.9	0.5	
General cost per trip, (%)	0.5	2.2	2.3	3.3	0.5	
Consumer surplus	52	95	202	87	114	550
of which fare	86	72	181	78	21	439
of which time	- 34	22	21	9	93	111

If we assume the same average value of time for all passenger groups, the consumer surplus would be over SEK 800 million. The reason is that it is the groups with relatively low values of time that would benefit most.

**Operators**

The coach operators would gain. The railways are calculated to lose some SEK 155 million and the airlines and regional buses some SEK 50 million each. We have also assumed that the airlines would reduce supply to some extent but not the railways. The total effect for all operators is a loss of profit. The losses for rail, air and regional bus are, however, relatively small; the loss in terms of passenger-km is no more than about 2 per cent. Part of the regional bus services could also be purchased from the coach operators. Note also that all possible adjustments of supply have not been taken into account. The railways in particular could probably reduce frequencies on some of their loss-making routes. It should be noted that reduced costs are given a positive sign and increased costs a negative sign in the table below.

**Table 9. Calculated change in revenues and costs for the operators, million SEK/year**

<b>Operator</b>	<b>Business</b>	<b>Revenues Private</b>	<b>Total</b>	<b>Costs</b>	<b>Profit change</b>
SJ Railway	- 61	- 94	- 155	0	- 155
of which X2000	- 24	64	40	0	40
of which night train	- 5	- 27	- 31	0	- 31
of which other train	- 33	- 131	- 164	0	- 164
Air	- 33	- 144	- 177	133	- 36
of which SAS	- 5	- 87	- 92	72	- 16
of which other lines	- 27	- 57	- 85	61	- 20
Coach	42	218	260	- 174	73
Regional bus	- 3	- 51	- 54	2	- 49
Total	- 55	- 71	- 125	- 39	- 166

**External effects and taxes**

There is improvement in terms of less external costs (positive sign), while the State would lose tax revenues due to less car traffic. The external costs would decrease by some SEK 37 million per year, based on the Swedish official monetary valuations of air pollution, climate gases and accidents. Tax revenues would decrease by some SEK 45 million per year.

## ***Welfare***

In the socioeconomic result, we have also taken into account the State's net revenues and the excess burden of taxation. We have assumed separate values of time in each group and the same (average) value. The losses for the State and the air- and rail operators is by far outweighed by the gains for the passengers. The net benefit is fairly substantial.

Table 10. Summary of welfare result

	<b>Different time values MSEK/year</b>	<b>Same time values MSEK/year</b>
Consumer surplus	550	803
of which fare	439	439
of which time	111	364
Producer surplus	- 116	- 116
Net state revenues	- 119	- 121
Excess burden	- 36	- 36
External effects	37	37
<b>Total:</b>	316	566

### **5.2. Results of Study 1 -- One corridor**

The corridor between the cities of Karlstad and Gothenburg (about 240 km) was chosen for a detailed study due to the fact that the level of competition has changed several times. We have studied three actual situations and three hypothetical ones.

#### ***Actual cases:***

1. Before September 1995:  
The State Railways, SJ, price SEK 208;  
Coach operator Swebus, price SEK 143.
2. September 1995 - March 1996:  
The State Railways, SJ, price SEK 208;  
Coach operator Swebus, price SEK 95;  
Coach operator Säfte Rese Service, price SEK 100.
3. From April 1996:  
The State Railways, SJ, price SEK 135;  
Coach operator Swebus, price SEK 95;  
Coach operator Säfte Rese Service, price SEK 100.

All six cases are described in the table below.

Table 11. Cases Gothenburg -- Karlstad

Cases		Round trips/ weekday	Fares (SEK) 2nd class
<b>Actual cases:</b>			
1) 6 trains/day, 3 coaches/day (before 9/95)	SJ	6	208
	Swebus	3	185
2) 6 trains/day, 5 low-price coaches/day (9/95 - 3/96)	SJ	6	208
	Swebus	3	95
	Säffle	2	100
3) 6 low-price trains/day, 5 low-price coaches/day (from 4/96)	SJ	6	135
	Swebus	3	95
	Säffle	2	100
<b>Hypothetical cases:</b>			
4) 4 low-price trains/day, 8 low-price coaches/day	SJ	4	135
	Swebus	5	95
	Säffle	3	100
5) 20 low-price coaches/day	Swebus	10	95
	Säffle	10	100
6) 6 low-price trains/day	SJ	6	135

**Demand changes**

The calculated demand changes below coincided very well with the actual ones recorded by the operators.

Table 12. Calculated number of trips per year (thousands)

Cases	Calculated number of trips per year
1) 6 trains/day, 3 coaches/day (before 9/95)	10 188
2) 6 trains/day, 5 low-price coaches/day (9/95 - 3/96)	10 480
3) 6 low-price trains/day, 5 low-price coaches/day (from 4/96)	13 224
4) 4 low-price trains/day, 8 low-price coaches/day	13 139
5) 20 low-price coaches/day	11 097
6) 6 low-price trains/day	13 114



The arrival of a new coach operator, Säftebuss (case 2), increased demand by some 3 per cent. Even if the number of coach departures was nearly doubled, the total share of coach was still only around 9 per cent. The large demand increase, 24 per cent, occurred when SJ reduced its fares.

If only coaches were operating (case 5), demand would fall back almost to the original levels. If all coach services were abolished, through regulation for example, and if SJ still applied the low prices (case 6), demand would be almost the same as in the current case 3.

### **Passengers**

We have segmented the passengers into the following groups: business travellers, working people, students and senior citizens, since they have encountered different prices and since their gains differ from the changes. Working people and students have gained most from the increased competition.

In the table below, the standard has been expressed in generalised cost terms, that is, price plus travel time converted into money units by use of the values of time.

**Table 13. Calculated generalised cost for passengers between Gothenburg and Karlstad (SEK per journey)**

	<b>Business Travellers</b>	<b>Working people</b>	<b>Students</b>	<b>Senior citizens</b>
1) 6 trains/day, 3 coaches/day (before 9/95)	996	515	251	252
2) 6 trains/day, 5 low-price coaches/day	995	514	250	240
3) 6 low-price trains/day, 5 low-price coaches/day	954	447	203	238
4) 4 low-price trains/day, 8 low-price coaches/day	1 031	458	205	233
5) 20 low-price coaches/day	1 127	511	244	226
6) 6 low-price trains/day	953	447	203	244

For senior citizens, the best case would be that where only coaches were operated (case 5). For students, all alternatives with low-priced trains are best. For working people, the current situation (case 3) and the one with only low-priced trains (case 6) are the most favourable. For business travellers, any reduction in train services makes the situation worse.

The table below describes the outcomes in terms of consumer surplus. Cases 1, 2, 4, 5 and 6 are compared with the current situation (3). Negative figures denote worsenings.

Table 14. **Consumer surplus differences (SEK per year)**

<b>Compared with the current situation (3)</b>	<b>Business travellers</b>	<b>Working people</b>	<b>Students</b>	<b>Senior citizens</b>	<b>Total</b>
1) 6 trains/day, 3 coaches/day (before 9/95)	- 2.3	- 3.3	- 0.8	- 1.8	- 8.2
2) 6 trains/day, 5 low-price coaches/day	- 1.8	- 2.6	- 0.7	- 0.3	- 5.3
4) 4 low-price trains/day, 8 low-price coaches/day	- 7.6	- 2.3	0.1	- 0.1	- 9.9
5) 20 low-price coaches/day	- 12.1	- 7.7	- 0.5	- 0.1	- 20.4
6) 6 low-price trains/day	-0.4	- 0.5	- 0.7	- 0.5	- 2.1

The table above shows that the current situation, with a mix of train and coach services, is the best one from the passengers' point of view. Second best is the situation with only six low-price trains (case 6). The worst situation is the one where only coaches were operated (case 5). In particular, business travellers and working people with a relatively higher valuation of time would lose.

### ***Producers***

Please note that the calculated levels of profit may not be true in absolute terms. For example, we note that it seems as if Säftebuss makes a loss by entering the market. This may not be true since the demand estimation for Säftebuss may be too low. What matters is rather the comparison of the profit levels of each operator between the different situations.

The current situation seems to be the worst from the operators' point of view. One interpretation is that the total supply is too large. There is thus a risk that supply will decrease, to the expense of the passengers. Especially if SJ were to leave the market, the passengers would lose out substantially. This is thus an illustration of the network effect described in Section 2.4. of this paper. One should note though that SJ actually makes a loss even in the current situation and in the previous situation (Case 1). The best situation from the operators' point of view is the one before the new bus operator, Säftebuss, entered (Case 1). The second-best situation is the one where only trains are operated (Case 6).

Table 15. **Calculation of revenues minus costs for the operators (million SEK per year)**

<b>Cases: compared with the current situation (3)</b>	<b>SJ</b>	<b>Swebus</b>	<b>Säfte</b>	<b>Total</b>
1) 6 trains/day, 3 coaches/day (before 9/95)	5.3	- 0.3	0.4	5.4
2) 6 trains/day, 5 low-price coaches/day	0.2	0.8	1.1	2.1
4) 4 low-price trains/day, 8 low-price coaches/day	5.6	- 1.4	- 0.5	3.9
5) 20 low-price coaches/day	6.1	- 3.9	- 0.1	2.5
6) 6 low-price trains/day	3.3	1.8	0.3	5.2

## *Welfare*

The table below summarises the socioeconomic calculations, including external effects and tax revenues. The situation where only coaches were operated is the worst one (case 5). The best is the one where only trains were operated (case 6). This result might be interpreted as if coach deregulation is not a good idea, due to the fact that the competition may make SJ abolish their train operations. On the other hand, the best situation would probably not come true, since without competition SJ would never charge the low prices they do under competitive conditions.

Table 16. **Welfare result (million SEK per year)**

<b>Cases, compared with the current situation (3)</b>	<b>Passengers</b>	<b>Producers</b>	<b>External effects</b>	<b>Taxes</b>	<b>Total</b>
1) 6 trains/day, 3 coaches/day (before 9/95)	- 8.2	5.4	0.3	1.1	- 1.4
2) 6 trains/day, 5 low-price coaches/day	- 5.3	2.1	- 0.9	1.4	- 2.7
4) 4-low price trains/day, 8 low-price coaches/day	- 9.9	3.9	1.3	- 0.4	- 5.1
5) 20 low-price coaches/day	- 20.4	2.5	- 0.3	1.6	- 16.6
6) 6 low-price trains/day	- 2.1	5.2	1.4	- 0.5	4.0

### **5.3. Results of Study 2**

Since Study 2 included no concern for reduction in railway prices or reduction in rail and air service supply, the effects, especially fare effects, are substantially smaller than those of Study 1.

#### *Passengers*

It is almost exclusively senior citizens and students who gain from coach deregulation (see Table 17 below). If all passenger groups were given the same (average) value of time, the total benefit is larger (see Table 18) since the average value is higher than the value of senior citizens and students. For long-distance trips, this average value is SEK 60/hour (average for long distance trips) and for short trips SEK 35/hour (average of short public transport and car users).

Table 17. Calculated change in average generalised cost and total consumer surplus (MSEK per year) by travel category. Different values of time

	Business	Working	Working	Senior citizens	Students	Short trips	Total
	140 SEK/h	90 SEK/h	70 SEK/h	25 SEK/h	25 SEK/h	20 SEK/h	
Consumer surplus	9	9	25	29	11	26	109
of which fare	17	7	23	40	14	4	105
of which time	- 8	2	2	- 11	- 3	22	4

Table 18. Calculated change in average generalised cost and total consumer surplus (MSEK per year) by travel category. Same value of time

	Business	Working	Working	Senior citizens	Students	Short trips	Total
	140 SEK/h	90 SEK/h	70 SEK/h	25 SEK/h	25 SEK/h	20 SEK/h	
Consumer surplus	4	6	22	65	26	46	169
of which fare	17	7	23	40	14	4	105
of which time	- 13	- 1	- 1	25	12	42	64

### *Producers*

For the figures shown in the table below, it should be noted that no account has been taken of the possibilities for SJ and the airlines to modify their level of output or prices. The Swedish Railways operate a number of lines which are already unprofitable. Coach deregulation could then be the whip that makes the railways reduce frequencies on unprofitable lines. Coach services may also make a small profit, which is not taken into account.

**Table 19. Calculated change in producer surpluses per vehicle categories and operators (in million SEK per year)**

	<b>After tax producer surplus</b>
SJ	- 116
of which X2000	- 6
of which night trains	- 6
of which other trains	- 94
Air	- 5
of which SAS	0
of which other airlines	- 5
Long-distance coaches	0
Regional buses	0
Total	- 99

***External effects and fuel taxes***

The increase in coach service supply and the reduction of car use mean that the external effects in total are reduced to some extent. However, the current low level of taxation of heavy vehicles also means that the total tax revenues would be reduced. This thus illustrates that external costs of heavy vehicles and coaches are not internalised.

**Table 20. Calculated change in vehicle km, external costs and tax revenues**

	<b>Change in vehicle-km/year</b>	<b>External costs MSEK/year</b>	<b>Tax vehicle-km MSEK/year</b>
SJ	0	0	0
of which X2000	0	0	0
of which night train	0	0	0
of which other trains	0	0	0
Air	0	0	0
of which SAS	0	0	0
of which other airlines	0	0	0
Coaches	+ 31	- 62	+ 24
Regional buses	0	0	0
Car	- 221	+ 69	- 77

***State finances and excess burden***

For the state finances we here ignore the minor effects of revenues from VAT, corporation taxes, etc., thus only taking into account the larger changes in fuel taxes and the consequent shift of excess burden.

Table 21. **Calculated change in producer surpluses per vehicle category and operator (in million SEK per year)**

	<b>MSEK/year</b>
Fuel taxes	- 53
Excess burden (0.3x tax change)	- 16

### *Welfare*

Here we sum consumer surplus, producer surplus, government surplus, excess burden and external effects. For producer surplus we have also assumed a zero change. It is evident that the total change for welfare is fairly small. The most plausible interpretation seems to be that coach deregulation is neutral from a welfare point of view when no rail price reductions or other adaptations have been taken into account. The main effect is then that low-value-of-time (low-income) travellers gain, while rail and air operators and the tax payers may lose to some extent.

The small welfare effects compared to the case where rail and air responses were assumed (Study 1) also illustrate the welfare-improving dynamics of competition. It is also clear from these results that internalisation of external effects through pricing of heavy road vehicles would, in particular, place rail in a better competitive position, thus reducing the negative effects on rail services and improving government finances.

Table 22. **Welfare effects (MSEK/year)**

	<b>MSEK/year Different values</b>	<b>MSEK/year Same values</b>
Consumer surplus	+ 109	+ 169
of which fare	105	105
of which travel time	4	64
Producer surplus	- 99	- 99
Government surplus	- 53	- 53
Excess burden	- 16	- 16
External effects	7	7
<b>Net social benefit</b>	- 52	8

### *Co-ordination of services*

One issue is whether independent, non-co-operating suppliers will provide the best service from the passengers' point of view. Co-ordination may be of various kinds.

Here we will only demonstrate the effects of improved co-ordination of transport supply, in terms of co-ordination of departures. We then assumed that the transfer time between coach and rail is 20 minutes at four stations in Sweden. We have analysed this for three passenger groups. Table 23 shows the positive, although small, values. Since we only look at three groups and four stations, these results will of course only indicate the potential of co-ordination, which could be much more comprehensive and yield substantially higher benefits.

Table 23. **Change in consumer surplus (1 000 SEK)**

<b>Category</b>	<b>Change in consumer surplus (SEK)</b>
Private 90	28
Short distance	99
Business	76
Total	203

## **6. CONCLUSIONS**

The partial coach deregulation in Sweden in 1993 seems to have been successful, especially for the travel standards of low-income passengers.

With respect to hypothetical full coach deregulation, assuming that the railways respond by reducing their second-class fares, the benefits are substantial, especially for low-value-of-time passengers while, at the same time, the profit losses for the railways, the airlines and regional buses are small, a few per cent only.

Where we have not assumed any response from the rail operator, the results indicate that the social net benefit is much smaller or even slightly negative. This thus underlines the necessity of adaptation from other operators. Contrasting the two studies, assuming adaptation and no adaptation respectively, illustrates the favourable dynamic effects of competition.

In general, it seems that deregulation of coach services is beneficial but that one might, at the same time, consider internalisation of negative external effects, so that bus and air operators would have to pay higher taxes relative to rail operators, something which in turn would benefit the competing railways. This would reduce the risk of closing down railway lines, an action which would disadvantage certain classes of passenger, especially business travellers. If such internalisation does not occur, one should consider second-best pricing of rail transport, according to the discussion in

Section 2.1. The Swedish Government has taken one step in this direction by reducing the rail track access charges. Another idea to consider is subsidising each rail ticket sold, something which gives the rail operator a stronger incentive to reduce prices than would reducing track access charges.

Co-ordination of long-distance services in order to enhance intermodality is beneficial from the passengers' point of view, although the cost of such co-ordination is difficult to calculate.

Finally, one should not forget that increased coach competition in certain cases may lead to the closure of rail services, which in turn may cause losses for the former rail passengers which exceed the benefits to the coach passengers. This last remark calls for specific, individual studies to be undertaken in order to consider local circumstances before deregulation is introduced.



## **SUMMARY OF DISCUSSIONS**



## SUMMARY

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## INTRODUCTION

Although deregulation is well underway in the transport sector, regular coach services are still largely regulated. On the whole, it is true that the coach service industry does not have a great deal of economic freedom. Perceived as competing with rail transport, still largely protected by governments, interurban coach services are regarded as a threat to the latter. However, it appears that where coach services have been deregulated, the results have been positive for all but local services (this was the case in the United Kingdom).

The Round Table began with a review of these issues and of regular interurban coach services, in particular on the basis of some factual observations, drawn chiefly from experience with deregulation. It went on to examine desirable trends that could influence the sector and closed by outlining measures that governments could implement.

### 1. SOME FACTUAL OBSERVATIONS

Firstly, it should be noted that line services by coach and urban bus have very different cost and operating structures. The operating speeds of line coaches are far greater than those of urban bus services, while labour costs are lower. The cost in terms of vehicle-kilometre for a line coach amounts to around 1.2 Euros. The advantage to coaches as a mode of transport is that the unit capacity of vehicles is low, while the networks they service can be highly dense and services can be provided at higher frequencies. Coach services are therefore a highly efficient mode of transport in sparsely populated countries.

The impact of the **deregulation** of long-distance coach operations has been **beneficial** in those countries where it has been introduced, i.e. primarily the United Kingdom and Sweden. In the United Kingdom, coaches account for 8 per cent of passenger trips of over 80 kilometres. The type of services offered are similar to those provided by rail, but fares are 30 per cent cheaper. This has allowed a category of low-income users to make trips that would otherwise have been far more expensive. It is for this reason that the users of line coach services are primarily young people and pensioners, two of the least-advantaged age categories in the population. The impact on rail has been marginal, given that coaches are mostly used by a different category of the population, and rail's loss of passenger traffic amounts to no more than 1 or 2 per cent. Results obtained in Sweden confirm the estimates obtained from models designed to predict this type of effect. In Sweden, the transfer to coach transport has mainly been from private cars and not from rail (as in Norway), since there may be marked differences between the rail and coach transport markets.

Passengers who use coach services are **highly sensitive to the price** of such services. Price is a major factor in the decision to travel by coach, followed by frequency of services and scope for door-to-door transport. In terms of the potential shared customer base, rail has been forced to adapt and review its fare structures, which has been of great benefit to consumers. On the whole, the liberalisation of scheduled coach services has yielded substantial benefits for passengers in terms of both prices and the range of services offered. It would be fair to say that deregulation is beneficial with regard to medium and long-distance trips, which exhibit high price elasticities, whereas it has proved to be somewhat of a failure in the case of local services where prices have risen and the frequency of services has fallen. Mention should nonetheless be made of the possibilities afforded by coach services with regard to airport access, particularly in cases where airports are located outside towns, or as an integral part of air transport services, especially for short-distance links using air waybills.

**The development of international coach services** is closely linked to the migration of populations. In response to political, economic or social events, European populations migrate from one country to another while maintaining links with their home country. In most cases, these migrant populations are in the low-income bracket and return to their home country at regular intervals by means of scheduled international coach services offering a wide range of destinations. In addition, following the collapse of the Berlin Wall, there has also been increased demand from the tourist sector, which rail has been unable to meet. On routes between the central and eastern European countries and western Europe, rail is now as expensive as air transport. It is for this reason that international coach services are growing at a rate of 4 to 5 per cent a year. However, the market catering to migratory flows, which has grown strongly until now, may ultimately not prove less buoyant. It would be preferable to develop markets catering to other categories of the population, notably young people and senior citizens. However, it is difficult to operate coaches affording access to severely handicapped people in that low floors are not practicable in coaches, unlike the situation with regard to buses.

It is the **density of the lines** offered by international coach transport services, or the density of the domestic transport network in the case of countries that have liberalised this type of service, which explains the success of coach services, hence the importance of creating structured networks offering uniform services with a satisfactory degree of interoperability. A common ticketing system is needed if international services are really to be developed and perceived as a genuinely integrated network. Customers are also sensitive to the frequency of the services proposed. The existence of coach stations where passengers can change to other lines is another factor in the success of coach transport. In addition, there is the development and, above all, satisfactory integration of the European motorway network, which allows rapid services to be offered to a large part of the European continent. By comparison, the rail networks are often poorly integrated and suffer from non-interoperability. In contrast, the emergence of low-cost airline companies has significantly added to the competitive pressures on international coach services, while in the CEECs there is strong competition from illegal minibuses (even though it is now decreasing) due to problems involved in policing the sector.

On the whole, line coach services cannot compete with high-speed trains and therefore address another type of customer who is sensitive above all to the low prices and variety of routes proposed. The customer base primarily consists in new passengers and is therefore primarily induced traffic. It should also be noted that the main competitor to the coach is not so much rail as the private car. As a result, the experts at the Round Table felt that the risks taken in liberalising interurban coach services were relatively minor compared with the benefits they offered to low-income populations.

## 2. DESIRABLE TRENDS

Analysis of the relatively youthful customer base for line coach services suggests that **marketing structures should be strengthened** through the use of sophisticated resources such as the Internet. Since it targets a fairly specific customer base, any action aimed at making use of leading-edge technologies would be of benefit to the coach transport sector. Electronic payment would therefore be one means of marketing services. In this respect, line coach services are one step ahead of the rail networks. At all events, it is clear that in many cases traditional rail services are simply not competitive, except on a number of specific routes where rail can offset higher fares by high-speed services.

**Coach stations should preferably be located in city centres**, where access to other modes of transport is easiest. At most, coaches account for merely 1 per cent of the traffic in city centres and are wrongly accused of causing congestion.

Coach transport makes use of the intermodality of interchange platforms. All long-distance services must be **centralised in the same terminal**. This is the necessary condition for the creation of healthy competition. Independent operators from the major groups must therefore be installed in these terminals to ensure fair competition. The operators present must be clearly identified. Even though some participants at the Round Table felt that public ownership of terminals ensured a better guarantee of free competition, most felt that ownership was of little importance and that what mattered was equal access to terminals for operators. To this end, a clear distinction must be made at the accounting level between management of a terminal and the operation of coach services in cases where the terminal is owned by a service operator.

While it is not always possible to site platforms in the centre of cities, it is generally out of a concern to protect the railways that planners avoid siting intermodal exchange centres near to railway stations. This is unfortunate. **Attempting to protect the railways is a rearguard action** for which there is absolutely no justification in terms of possible transfers of customers, as recent experiences with liberalisation have shown. It is the railways which have to adapt and assert their presence in market niches where they are genuinely competitive (examples that come to mind are high-speed trains, suburban services in highly built-up areas and certain regional links).

Line coach services are one of the rare modes of public transport to have seen an increase in the number of users. This means that the **quality of services** and their competitiveness have continued to improve. The on-board comfort of coach passengers has increased in terms of both ergonomics (space between seats) and technology (e.g. air conditioning). This trend is set to continue and it is worth noting that the countries of eastern Europe are eager to be given criteria for quality of service which they can apply to their coach services. The profession should give even more thought to competition between private car use and coaches, on the basis of quality of service, since coach transport offers genuine scope for opening up new markets, once the possibility of offering door-to-door services is taken into account. It should therefore consider the possibility of introducing group fares as a matter of course so that coach transport would be genuinely competitive with car transport.

**Safety** is also of paramount importance. In the past, illegal operators have managed to enter the international transport market but, after a few accidents which were widely reported in the press, customers have become sensitive to the reputation of the operators they use. A network such as the

one operated by Eurolines, which was presented at the Round Table, attaches great importance to compliance with safety regulations. It is clear from this that coach transport is an activity that has come of age in the transport sector. The safety record of coach transport in terms of the number of accidents is comparable to that of air transport and rail, namely 22 times safer than transport by private car. To ensure that this trend is maintained, the authorities must ensure that regulations are complied with, particularly when they have an impact on safety.

Liberalisation of the market has been accompanied by a dramatic fall in the number of operators, as firms have combined to form **conglomerates**. This might raise fears about abuses of dominant positions in certain markets. In practice, however, the markets have remained highly contestable, i.e. the threat of new entrants or competition from another mode of transport is always present, rendering baseless concern over manipulation of the competitive process. It needs to be borne in mind that the danger of a dilution of competition is made all the more remote by the fact that competition from private car use still remains as fierce as ever. Furthermore, demand from users and the range of services offered to the latter remain a regulating factor. The coach transport sector will always have to keep prices below those of its competitors if it wishes to prosper in the future. Moreover, in many cases, small companies manage to survive by acting as subcontractors to larger groups. Liberalisation has therefore not led to the elimination of large numbers of firms.

In contrast, it would be advisable not to allow the same company to operate several modes of transport concurrently (e.g. coach and rail). The minimum requirement would be for separate accounts and a great degree of managerial autonomy.

### 3. ACTION EXPECTED FROM GOVERNMENT

Given the clear benefits to users, particularly those with low incomes, there are no grounds for slowing down the development of line coach services. The conditions of competition must be fair, however, and consideration will primarily be given to **taxation**. There is no reason why different VAT rates should apply to different modes of passenger transport. Some modes, for example aviation, pay very little tax on fuel despite the fact that energy consumption per seat for this mode is ten times higher than in other modes. To the extent that services are more or less in competition, it would be inadvisable to seek to promote one mode at the expense of another. In this respect, the VAT applicable to coaches, which is far too complicated and varies substantially from one country to another, needs to be simplified and harmonized.

The legislation in several countries should remove provisions that tend to give coach transport an advantage over minibus transport, given that the latter is capable of catering to specific needs in sparsely populated areas.

The **conditions under which licences are issued** for scheduled international lines need to be harmonized. Practices vary widely from one country to another in this area and there is no genuinely multilateral approach to the issue, which is dealt with solely at the national level. It is also necessary to adopt a standard approach to EC regulations on coaches. These rules leave Member States far too much latitude in their interpretation, particularly with regard to the definition of services.



Compared with its potential competitors, namely, the private car and air transport, the coach transport sector has a positive balance in terms of external effects. According to some estimates, internalising costs should only increase the total cost of coach transport by 6 per cent, which proves how attractive it is in environmental terms. There are, therefore, good grounds for ensuring that the conditions of competition are harmonized, provided that each mode covers all its costs in their entirety. If a genuine effort were to be made to promote public transport by road, consideration might be given to creating priority lanes on congested roads for public transport. In addition, by **harmonizing the length** of vehicles authorised to use road networks (the maximum permissible length currently varies from 12 to 15 metres), the operation of services could be streamlined and, at the same time, operators could be allowed to make productivity gains.

**Border crossings** can reveal some very real problems. For example, waiting times at the external frontiers of countries which have implemented the Schengen Agreement may be very lengthy, even though some favourable trends for public transport appear to be emerging. One very effective measure, for example, is to install special lanes for coaches or time windows for crossings by coaches. Governments should pay greater attention to these problems, whose solution could help promote, once again, the use of public transport. If the Schengen Agreement leads to serious delays for coaches crossing the borders of this area, it should be noted that scheduled buses tend to be inspected more often than coach trips during which passengers can neither embark nor disembark.

A particularly circumspect approach should be adopted towards the **issuing of visas to drivers**, an area where competencies are spread far too widely. Moreover, the provisions relating to the responsibility of operators who transport illegal immigrants into the Schengen area have attracted widespread criticism.

When **awarding subsidies** to operators in order to meet public service obligations, governments think first in terms of the railways. It is unfortunate that systematic comparisons are not made of the cost of alternative solutions based on the use of coach services. In many cases, coach transport is markedly cheaper and offers comparable quality of service. Similarly, when the authorities compensate for the reduced fares granted to certain segments of the population, they must think about doing so for all the modes which provide similar services; many students and senior citizens travel by coach and must be allowed to benefit from the same advantages they would enjoy if travelling by train.

With regard to **working conditions**, a set of regulations relating specifically to coaches, as opposed to lorries, is required. Greater latitude is needed in the time spent on duty, but not necessarily longer driving times. The Round Table strongly emphasizes the need for stringent controls in this area.

The legislation that will be adopted with regard to **cabotage**, an area which until now has been highly regulated despite several recent breakthroughs, is of paramount importance for the future of scheduled services since they will provide the blueprint for greater integration of domestic and international services.

Lastly, the lack of research into the coach transport sector is regrettable because it is a sector that is rich in potential.

## CONCLUSION

There is a price to pay for protecting the railways by refusing to deregulate interurban coach transport services. People on the lowest incomes could benefit from deregulation and it is they who are penalised by strict regulation of the scope of services. Experience with the deregulation of regular interurban services shows the range of quite substantial advantages it can bring and a liberalisation policy would see each mode focusing on the sector in which it had the most advantages.

Coach transport competes with transport by private car and has distinct benefits in safety and environmental terms. Indeed, the case for liberalisation of regular urban coach services is strong. There is no risk of excessive concentration in the sector or, at any rate, of distortion of the competitive process since the interurban passenger transport sector is such a highly contestable market.

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