

# **EUROPEAN COMMISSION**

**Study of passenger transport by coach**

**Final Report**

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## 1. EXECUTIVE SUMMARY

### Introduction

- 1.1 The purpose of this study is to undertake a thorough review and analysis of the European coach industry, including domestic long distance, international regular services, special regular services and occasional transport. The main tasks which have been undertaken as part of the study are:
- Task 1 - Data collection and analysis in all Member States of the European Union, and a selection of surrounding countries, with a particular focus on eight case study countries.
  - Task 2 - Analysis of coach accident data with a particular objective of identifying evidence relating driver fatigue and accidents.
  - Task 3 – Analysis of the role terminal infrastructure plays in the coach market.
  - Task 4A - Case study of the 12-day rule.
  - Task 4B - Case study of cabotage
- 1.2 The use of bus and coach transport has increased in recent years Bus and coach travel combined accounted for 539 billion passenger kilometres in 2008, the highest share of any surface mode of public transport.<sup>1</sup> In particular, enlargement of the European Union has increased the relative importance of scheduled coach travel. Coach transport has a number of advantages over other modes of transport, particularly in terms of safety, environmental impact, and its flexibility and ability to respond to changing demand.
- 1.3 However, the sector is extremely fragmented in terms of the authorities in charge of its regulation, the size and type of market operators and the range of transport services, from scheduled long distance services, to school transport services, and shuttle services operated for tourists between airports and hotels. The importance of these different types of services varies significantly between Member States of the European Union. As a result, although some statistics are available for the total European bus and coach market, the overall availability and reliability of statistics is poor, and there are few statistics available for sub-sections of the market, such as long distance coach services.
- 1.4 In comparison to the rail and air transport sectors, there is little European legislation applying to the bus or coach sectors and as a result, there are significant differences in the regulatory environment within which the bus and coach sector operates in different Member States. One recent change to European legislation is Regulation 561/2006 - setting out certain rules on driving times, breaks and rest periods – which removed a derogation allowing drivers of international tourist coaches to work up to 12

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<sup>1</sup> EC statistical pocketbook 2009, Table 3.3.2

consecutive days. An amendment to this legislation is currently being adopted by the co-legislators in the framework of the road package.

### The European Coach Market

- 1.5 The objective of this part of the study was to collect as much data as possible relating to the coach market for all of the Member States of the European Union, and 13 other neighbouring States. However, most of this information is not readily accessible from public sources, and some of the information is not available at all. We therefore focussed our analysis primarily on eight case study countries, whilst still seeking to collect data from other EU Member States and 13 neighbouring States.
- 1.6 Common difficulties we encountered included the absence of any formal definition of a coach, as distinct from a bus. Many transport statistics (and languages) do not make such a distinction, and no set of rules consistently applies to all Member States. For example, although in most western European Member States standing passengers are not permitted on inter-urban bus/coach services and therefore this was one possible way of distinguishing these services, this is not the case in all Member States. Similarly, vehicles with a separate luggage compartment which might usually be considered ‘coaches’ are used on urban and rural bus services in some Member States.
- 1.7 Where possible we sought also to differentiate between types of coach service (listed below). This is based on the distinction drawn in Regulation 684/92. However, there are very few cases where the data is disaggregated in this way, and where it is, there are differences between Member States in how different services are classified.
- **Regular** (domestic and international) services operate at specified times on defined routes, with specific boarding and alighting points, and are open to all.
  - **Special regular** services operate on defined routes and at defined times, but provide for the carriage of specific types of passengers to the exclusion of others.
  - **Occasional** services are services which do not meet the definition of regular or special regular services, and which are characterized above all by the fact that they carry groups of passengers assembled on the initiative of the customer or the carrier itself.
- 1.8 An overview of the coach market in the eight case study Member States selected for this study is provided in Table 4.19, followed by a brief description of each.

TABLE 1.1 OVERVIEW OF CASE STUDY COUNTRIES

Member State	Coach passenger kilometres (million)	Regulatory arrangements for regular services
Germany	27,100	Prohibition of most services
Greece	10-12,000 (est.)	Prohibition of new entry
Italy	73,385 (est.)	Liberalised but with administrative barriers
Poland	12,400 (est.)	Partially liberalised
Romania	11,811	Concessions
Spain	23-30,000 (est.)	Concessions
Sweden	920 (est., incomplete)	Liberalised
UK	24,326	Liberalised

- **Germany** has a unique regulatory structure for coach services: in order to protect rail services from competition, routes that run parallel to an existing rail link are not licensed with some exceptions, mostly routes to/from Berlin, where licenses are issued for historical reasons. As a result regular services account for a very small proportion of the coach market, and of these most are international (a much less regulated market). In contrast, Germany has a strong market for occasional services, including own-account operations and tours.
- In contrast to Germany, the long distance rail network in **Greece** is limited, and so regular coach services are much more important. Licenses to operate regular domestic coach services held exclusively by KTEL, cooperatives of individual vehicles owners, one for each prefecture. The number of vehicles licensed is fixed by the government, and so the licenses carry a high value. There are also regulatory restrictions on companies able to operate special regular and occasional services.
- In **Italy** regular coach services predominantly link the regions of the country not adequately served by the rail network, and so are concentrated in the south. Whilst in theory the market for regular long-distance services was liberalised between 2005 and 2007, removing restriction on new entry on inter-regional and international regular services, in practise there have been few new operators in the market. Very little national statistics are available on long distance bus and coach services and in terms of both regulation and statistics, there is no distinction made between extra-urban services and local buses.
- The main operator of regular coach services in **Poland** is PPKS Warszawa, one of the companies formed following the break-up of the former national operator. There are no specific regulations relating to long-distance and international coach services, however there are practical barriers to introducing new services. Applications to operate services have to be approved by all local authorities through which a service operates, and must have approval to use terminal infrastructure much of which is owned by incumbent operators. With the exception of the authority in Warsaw, no transparent rules exist as to how such applications are considered.
- Coaches are an important part of the public transport sector in **Romania**, being responsible for more passenger-kilometres and journeys than the country's railways. Operators of regular coach services bid competitively for licences to

operate packages of regional routes, and individual interregional origin-destination pairs. These licenses are valid for a maximum of three years. For regional routes, the evaluation criteria include the fares offered, whilst on interregional services operators compete on fare for passengers.

- **Spain** has one of the largest bus and coach markets in Europe with 11.2% market share in terms of passenger-kilometres. This reflects the fact that the long distance rail network is less extensive in Spain than in many other European countries, and except where new high speed lines have been constructed, rail journey times tend to be uncompetitive. Scheduled services are organised on the basis of concessions let by national and regional governments. There is competition for these concessions, but in practise there are barriers to new entrants, in particular the tendency for concessions to run for long periods. International services are not operated on a concession basis.
- The geography of **Sweden** and the climate make the coach an attractive mode of transport. The Swedish road network is well maintained and while there is a substantial rail network, the size of the country and the relatively low population density means that rail cannot on its own provide an adequate service. Long distance services have been deregulated since 1998 and popular routes are served by more than one operator. Eurolines are the main operator of international services, from surrounding countries and also London.
- Coach services in the **United Kingdom** are fully deregulated. As a result, services are operated by a large number of different operators, and on some routes there is strong competition. National Express, the principal scheduled coach company, was the incumbent operator at the time of privatisation. There are also a number of smaller, regional operators.

1.9 As a result of the data limitations, in order to estimate the overall size of the European coach sector it was necessary to extrapolate from countries where good data was available. This was on the basis of a number of rates, such as coach’s share of the public transport market, average journey lengths, and annual mileages undertaken by each vehicle. A summary of these estimates is provided in the table below.

**TABLE 1.2 SUMMARY OF INDICATIVE EUROPEAN COACH MARKET STATISTICS**

<i>Coaches only</i>	<b>EU States</b>	<b>All 40 States</b>
Passenger-kilometres (millions)	262,983	540,512
Vehicle-kilometres (millions)	10,134	19,899
Passenger journeys (millions)	6,621	7,584
Fleet size	248,897	445,715
Employees (bus & coach)	1,546,955	2,255,445
Annual turnover (€m)	15,425	23,560

1.10 A detailed breakdown of the coach market by type of service was only available in France and Lithuania, although limited information was also available for Cyprus, Greece, Germany, Poland, Spain and Sweden. On the basis of this information, we have made indicative EU-wide estimates of the breakdown.

**TABLE 1.3 INDICATIVE ESTIMATE OF EU-WIDE COACH DEMAND BY CATEGORY**

	Journeys (millions)	Passenger-kilometres (millions)
Regular	2,912	81,226
Special Regular	2,226	52,572
Occasional	1,484	129,185

### Safety issues

- 1.11 As part of our study, the Vehicle Safety Research Centre (VSRC) at Loughborough University carried out an investigation into coach accidents in order to understand their main causes, particularly the role of fatigue. This work contained four elements:
- Review of existing literature
  - Review of accident databases
  - Review of detailed data from the database of the UK Department for Transport
  - Review of specific coach crashes
- 1.12 Existing literature highlights the difficulty of isolating fatigue as the cause of an accident, but identifies specific factors which increase the risk. Certain times of day (02.00, 06.00 and 16.00 hours) and certain road types (motorways and other monotonous inter-urban routes) are known to be associated with increased risk, but other factors which are important are lack of sleep, physical fitness, shift patterns and age. Estimates in the literature of the proportion of accidents caused by fatigue range from 1-4% in the lowest case, to 30% in the highest. Time on task is generally not considered to be a good indicator of accident risk.
- 1.13 Data on accidents in the CARE (Community Road Accident) database does not generally differentiate between buses and coaches and sometimes also includes other public service vehicles such as trams. However, it shows that accidents involving buses or coaches are responsible for only a small proportion of total road accident fatalities in Europe (2.5% in 2006). Nevertheless, these figures are significantly higher than those in the EC Statistical Pocketbook, which do not include fatalities of pedestrians or occupants of other vehicles in accidents which involve buses or coaches.
- 1.14 The published figures suggest that there is some evidence to support the findings of earlier studies looking at fatigue, in that an increase in fatal accidents in the early morning and towards the end of the working day can be observed. This increase is more noteworthy on motorways than other road types. However, none of these factors can be adequately linked to the fatigue that may be caused by trips over longer numbers of days.
- 1.15 Similar results were obtained when considering the national accident data for Great

Britain (STATS19). Whilst make and model data does provide some further means to identifying coaches, this was shown not to be reliable. Time of day was the only notable indicator of accident risk, consistent with the findings from the CARE analysis.

- 1.16 A review was completed of recent high profile coach accidents reported in the media. Of the 26 cases considered, 4 had fatigue reported as a contributory factor, and a further 10 had variables which are considered indicators of fatigue (such as time, road, or nature of the crash). Whilst this represents only a small sample, it does provide some indication that fatigue-related accidents may be more prevalent than the statistical data suggests.
- 1.17 In conclusion, the small number of coach accidents in Europe, practical difficulties in obtaining reliable data on causation, and a lack of detail in the data that does exist makes it difficult to draw any firm conclusions on the role fatigue plays in coach accidents. Furthermore, the causes of accidents are often complex and involve the interaction of a number of contributory factors. In particular, the data provides no reliable evidence regarding the impact of number of days worked.

#### **Coach terminals**

- 1.18 We have undertaken studies of coach terminals in each of the Member States selected as case studies. The purpose of this analysis is to identify if access to terminals directly or indirectly limits new entry to the coach market and determine whether the number of coach terminals and the facilities provided are sufficient and appropriate.
- 1.19 Access to coach terminals is primarily relevant as an issue for regular coach transport. Occasional coach transport is mostly carried out on the routes specified by the organisation or individual that procures the service, and special regular transport is based around the school or workplace concerned, so these do not usually require use of coach terminals.
- 1.20 In most cases, the availability of and access to terminal infrastructure did not appear to be a significant constraint to development of the regular coach market, although in two of the case studies (Germany and Greece), this was largely because other regulations prevented access to the market.
- 1.21 Of the Member States selected as case studies, the only example in which access to terminals did appear to be a significant issue was Poland, where virtually all terminals are owned and managed by the dominant bus operators, the PKS/PPKS companies, and there have been complaints of discriminatory treatment by other operators.
- 1.22 We identified one serious case in Spain of illegal abuse of a dominant position by a vertically integrated terminal operator. This had been properly investigated by the competition authority, and the sanction imposed on the terminal operator should be a significant deterrent to similar behaviour by other terminal operators in Spain in the

future. However, the amount of time required for this investigation (and probably any investigation under competition law) means that this may not be sufficient to guarantee equitable access for all operators.

- 1.23 It is important that, where there is vertical integration between terminal and coach operators, systems and regulations are in place to ensure that other operators are able to access terminals on an equitable basis. This should include fully independent management of the terminal company.
- 1.24 Given the resources available for this study, our analysis of this issue was limited to the States selected as case studies. However, we were informed by coach operators that access to terminals has been a significant issue for the operation of international regular services to/from some other Member States including France and Austria.

#### **Case study of the 12 day rule**

- 1.25 Regulation 561/2006 introduced a number of changes to the rules regarding rest periods for coach drivers. The most significant of these was to abolish the derogation by which drivers of international non-regular services (coach tours) were able to work for 12 consecutive days without a rest day. A detailed study was commissioned on behalf of the European Parliament into the abolition of the derogation, and on 5 June 2008, the European Parliament voted an ‘initiative report’ to reinstate the rule. The Commission asked us to undertake a critical review of the detailed study and make adjustments to build on this work where appropriate.
- 1.26 The study, undertaken by PricewaterhouseCoopers (PwC), reviews the economic, social and safety implications of the abolition of the 12 day derogation. In summary, it argues that the abolition of the derogation would have strongly negative economic impacts, without having significant positive safety or social benefits. It therefore recommends reintroduction of the derogation, although possibly with some measures to safeguard the limited social and safety benefits achieved through the abolition of the derogation.
- 1.27 On the basis of the review that we have undertaken, we believe that the PwC study may have significantly overestimated the economic impact of the abolition of the derogation, and also possibly underestimated the social impacts. The analysis that has been commissioned as part of this study shows that it is not possible to quantify the safety impact of the withdrawal of the derogation.
- 1.28 PwC’s conclusions may partly reflect the approach that they adopted, which was a combination of statistical analysis and review of other published reports, supplemented with surveys of coach operators, but without apparently any evidence of equivalent surveys of drivers or their representatives (it is not clear from the report who was consulted).

- 1.29 We have estimated that the economic impact of the derogation is likely to be around €81 million. We initially sought to estimate the monetary value of the safety benefit in order to compare it to our lower estimate of the economic impact, but on the basis of the research undertaken for this study, we have concluded that this cannot be quantified on the basis of the information available. However, we agree with the conclusion of the PwC study that the impact is probably small, as coach is already a relatively safe form of transport (although, as discussed in section 5 below, some of the data cited by PwC overstates how safe coach travel is).

#### **Case study of cabotage**

- 1.30 Regulation 12/98 permits coach operators that hold a Community license to **temporarily** operate certain services within other Member States without being required to have a registered office in that State (cabotage services).
- 1.31 We have undertaken an analysis of the experience of operation of cabotage services and identified issues that have arisen with these services. Analysis of cabotage services has been undertaken in the eight Member States selected as case studies. In most of the Member States analysed, the volume of cabotage services was very low, and these have not had a significant impact on the transport market. The main exceptions to this are Greece and to a lesser extent Sweden.
- 1.32 As discussed above, the domestic coach market in Greece is subject to a unique system of regulation, which affects both regular and occasional services and significantly limit the potential for competition between coach operators registered in Greece. The particular circumstances of the Greek transport market and the regulations applied to it mean that cabotage services potentially have a significant cost advantage and hence a significant impact on local operators. Although in part this reflects lower wages in the origin Member States, it also reflects the significant costs of obtaining a license to provide coach services in Greece, which the cabotage services avoid.
- 1.33 Greek tourist agencies are the main objectors to these services. This is on the basis that they are not able to compete with the KTEL (local cooperatives of coach owners), who are protected against cabotage services through national regulations and have exclusive rights to operate domestic regular services, and have also been given the right to operate special regular and occasional services. Hence, the tourist coach operators have to compete for a relatively small proportion of the Greek coach market with KTEL and coach operators registered in other EU countries, while they are not allowed to compete with KTEL on the domestic regular market.
- 1.34 The other Member State in which a number of cabotage services have been identified is Sweden. Swedish coach operators tend to view the cabotage regulations in a much more positive light than the Greek operators, themselves offering cabotage services in other Member States. However, there has been a particular issue with Russian operators providing cabotage services in Sweden. As Russia is not an EU Member State, Russian operators are not permitted to do this.

- 1.35 Almost no international regular services carry domestic passengers within Member States (regular cabotage). Operators informed us that this was partly because a number of Member States in practice prohibited all regular cabotage operations.
- 1.36 Regulation of regular cabotage services cannot be considered in isolation from the domestic regulatory arrangements. It would not make sense to fully liberalise cabotage services without also liberalising the domestic regular market – regulated markets such as Germany and Greece would otherwise be discriminating against their domestic operators. It is therefore necessary to consider the potential advantages and disadvantages of liberalisation of the coach market.
- 1.37 Liberalisation would have a number of potential benefits, including reduced costs arising from increased competition, greater potential for operators to launch innovative new services, and greater ability for operators to meet consumer demand. However, these impacts need to be weighed against potential consumer benefits which it might be difficult or impossible to achieve without regulation, such as the ability to co-ordinate schedules between operators and with other modes of transport, and the ability to offer integrated ticketing. Overall, there may be benefits in regulating the regular coach sector, provided this is undertaken on a non-discriminatory basis and there is competition for the market if not within the market.
- 1.38 In contrast, in the case of the occasional coach market, none of the potential benefits of regulation identified above apply. The main impact of regulation in this sector is likely to be to increase prices and limit consumer choice, without any offsetting benefits. An opening of the occasional market to fully liberalised cabotage operations should therefore be considered. We note that the Commission has taken measures to open a wide variety of other market sectors to competition and we suggest that it should in the future evaluate the potential impacts of undertaking similar measures in the coach sector, particularly with regard to occasional services.



## 2. INTRODUCTION

### Background

- 2.1 The use of bus and coach transport has increased in recent years, and bus and coach travel combined accounts for more passenger kilometres than any other mode of surface public transport in the European Union. In particular, enlargement of the European Union has increased the relative importance of scheduled coach travel, which tends to account for a higher proportion of inter-city passenger transport by surface modes in the new Member States.
- 2.2 Coach transport has a number of advantages over other modes of transport. It is one of the best performing modes in terms of both safety and environmental impact. In comparison to rail transport, for which service changes tend to require a long period of advance planning and routes are inevitably restricted by the availability of infrastructure, the sector has the potential to be highly demand-responsive and flexible. Subject to regulatory limits existing in some Member States, it is able to respond quickly to changing patterns of demand.
- 2.3 However, the sector is extremely fragmented in terms of both the authorities in charge of its regulation (varying from city councils to national transport ministries), and the size and type of market operators (multinational private groups, public transport operators, railway companies and smaller independent operators). It also includes a very wide range of different types of transport services, from scheduled long distance services operating with similar timetable and reservation systems to railways, to school transport services, and shuttle services operated for tourists between airports and hotels. The importance of these different types of services varies significantly between Member States of the European Union. For example, there are almost no scheduled long distance coach services in Germany or Austria, but this is the main mode of long distance public transport in Greece and Poland.
- 2.4 As a result, although some statistics are available for the total European bus and coach market, the overall availability and reliability of statistics is poor, and there are few statistics available for sub-sections of the market, such as long distance coach services. As a result of this lack of information, it is difficult to evaluate the impact that policy measures for the sector have had, or assess the impact of potential regulatory changes. It may also be difficult for market participants to make informed business decisions, particularly if they are considering entering the market in another Member State.

### Existing legislation applying to the coach sector

- 2.5 In comparison to the rail and air transport sectors, there is little European legislation applying to the bus or coach sectors.
- 2.6 Some requirements regarding international carriage of passengers by bus and coach in the European Union are set out in Regulation 684/92, as amended by Regulation

11/98, and by Regulation 12/98 with respect to cabotage services. These Regulations define various types of services:

- Regular services, carrying passengers at specified intervals along specified routes, passengers being picked up and set down at predetermined stopping points;
- Special regular services, whose access is reserved to certain categories of passengers, such as workers, students or soldiers;
- Occasional services, which do not meet the definition of regular or special regular services; and
- Own-account transport operations, carried out for non-commercial and non-profit-making purposes, under restrictive conditions set out by the Regulation.

2.7 In addition, Regulation 561/2006 sets out certain rules on driving times, breaks and rest periods. This legislation is designed to harmonise competition between modes and to improve working conditions and road safety. One of the most significant changes in the Regulation is that there is no longer a derogation allowing drivers of international tourist coaches to work up to 12 consecutive days. A legislative amendment to reintroduce this derogation has recently been passed by the European Parliament and is due to be considered by the Council of Transport Ministers.

2.8 The lack of any other European legislation affecting the sector has resulted in significant differences in the regulatory environment within which the bus and coach sector operates in different Member States. The variation in regulation is particularly significant for regular long distance coach services. As discussed in more detail below, the regulatory environment varies from:

- liberalisation, as in the UK, in which there are no restrictions on operation of new services and therefore there can be on-road competition between operators;
- a concession system, as in Spain, where operators bid for the right to operate individual routes, but there is no 'on-road' competition;
- other forms of licensing restrictions, as in Greece; and
- prohibition on operations, as in Germany, where regular domestic coach services are (with some exceptions) not permitted.

### **This study**

2.9 The purpose of this study is to undertake a thorough review and analysis of the European coach industry, including domestic long distance, international regular services, special regular services and occasional transport. The main tasks which have been undertaken as part of the study are:

- **Task 1 - Data collection and analysis:** Data regarding the coach sector has been collected and analysed in all Member States of the European Union, and a selection of surrounding countries. This includes data (or estimates of data) on performance indicators, enterprise statistics, fleet statistics, fuel consumption, safety performance, and service quality indicators. Due to the limited time and resources available for the study, particular effort has been focussed on eight case

study Member States. This is used as the basis of an overview of the coach sector, set out in section 4 below.

- **Task 2 - Analysis of coach accident data:** An analysis has been commissioned of coach accident data, with a particular objective of identifying evidence relating driver fatigue and accidents.
- **Task 3 – Analysis of terminals:** We have undertaken an assessment of the role terminal infrastructure plays in the coach market, including whether the availability of terminals and their accessibility affects competition and the development of services.
- **Task 4A - Case study of the 12-day rule:** We have analysed the safety, commercial and operational impacts of a potential reinstatement of a derogation from driver rest time regulations, which would allow drivers of international tourist coaches to work for 12 consecutive days without a full rest day.
- **Task 4B - Case study of cabotage:** We have undertaken an investigation into the role cabotage plays in domestic coach transport in Europe, focussing on countries where there are known issues.

2.10 In addition, a stakeholder workshop will be undertaken.

2.11 This study has been led by Steer Davies Gleave's London office, supported by staff in our offices in Bologna and Madrid. We have also been assisted in our research by Helios Technology Ltd, Factum OHG, and the Loughborough University Vehicle Safety Research Centre (VSRC).

#### **This report**

2.12 This is the Final Report for the study. It takes into account comments received from the European Commission and comments from stakeholders at a workshop undertaken in April 2009.

#### **Structure of this document**

2.13 The remainder of this document is structured as follows:

- Section 3 provides more detail on the methodology that has been adopted for this study;
- Section 4 provides a summary of data collected on the European coach market (task 1);
- Section 5 summarises the conclusions of the work relating to safety (task 2);
- Section 6 sets out our analysis of coach terminals (task 3);
- Section 7 is our case study of the 12 day rule;
- Section 8 provides our analysis of the impact of cabotage; and
- Section 9 summarises the stakeholder workshop.

2.14 The following information is provided as appendices:

- Appendix A provides the detailed reports on the coach market in the eight Member States selected as case studies;
- Appendix B provides the reports on the coach market in the other Member States and in a selection of neighbouring states;
- Appendix C provides the case studies of coach terminals;
- Appendix D is the full report on coach safety issues (which is summarised in section 4); and
- Appendix E is the minutes of the stakeholder workshop undertaken in April 2009.

2.15 Due to the volume of information, the appendices are provided as separate documents.

### 3. OVERVIEW OF OUR APPROACH

#### Scope of work

3.1 As described in section 1, the objective of the study was to undertake a detailed analysis of the European coach market. The initial objective was to undertake the following tasks:

- **Task 1 - Data collection and analysis:** To collect and analyse data regarding the coach sector in all Member States of the European Union, and a selection of surrounding countries. This includes data (or estimates of data) on performance indicators, enterprise statistics, fleet statistics and service quality indicators.
- **Task 2 - Analysis of coach accident data:** An analysis of coach accident data, with a particular objective of identifying evidence relating driver fatigue and accidents.
- **Task 3 – Analysis of terminals:** An assessment of the role terminal infrastructure plays in the coach market, including whether the availability of terminals and their accessibility affects competition and the development of services.
- **Task 4 - Case study of the 12-day rule:** Analysis of the safety, commercial and operational impacts of a potential reinstatement of a derogation from driver rest time regulations, which would allow drivers of international tourist coaches to work for 12 consecutive days without a full rest day.
- **Task 5 – Stakeholder workshop**

3.2 There were a number of developments between the issue of the Invitation to Tender and the start of work for this study. On 29 November 2007 the European Parliament voted to reinstate the 12 day rule, and at the start of work for this study it appeared possible that, by the time the study was completed, the rule would have been reinstated, as this proposal enjoyed wide support. A detailed study had been commissioned from PricewaterhouseCoopers (PwC) on behalf of the Parliament into the abolition of the derogation. In addition, the Commission had identified that there was a significant issue in at least one Member States with cabotage services.

3.3 Therefore, in order to avoid duplication to effort and to use the resources available for the study as efficiently as possible, the Commission asked us to undertake a critical review of the PwC study and make adjustments to build on this work where appropriate. It was agreed to use the resources released by doing this to undertake an analysis of the cabotage services operated and whether this presented difficulties. Therefore, the tasks actually carried out are as follows:

- Task 1: Coach market data collection and analysis
- Task 2: Analysis of accident data
- Task 3: Analysis of terminals
- Task 4A: Case study of the 12 day rule

- Task 4B: Case study of cabotage
- Task 5: Stakeholder workshop

#### **Approach to data collection and analysis**

3.4 The Commission requested that we collect as much data as possible relating to the coach market for all of the Member States of the European Union, and 13 other neighbouring States. In terms of the amount of resources required, this was the most important element of this study. In particular, the objective was to collect:

- transport performance indicators, such as number of passenger journeys and passenger kilometres
- enterprise statistics, such as number of companies and coaches operated;
- fleet statistics, such as age of vehicle and fuel type;
- fuel consumption;
- safety performance; and
- service quality indicators.

3.5 Unfortunately, most of this information is not readily accessible from public sources, and some of the information is not available at all. Given the amount of time that would be required to collect the data, it was not practical to do this in all of the States within the resources available for the study. It was therefore agreed to focus the analysis on eight case studies, although also to collect data from the other States in order to provide a thorough overview of the European coach market, and take advantage of other data sources where these were readily accessible. Case studies were selected in order to cover a wide range of different market characteristics, in terms of volumes of coach services operated, income levels, regulatory regimes, and other market and competitive factors.

3.6 The following Member States were selected for the case studies:

- Germany, a high income State with a developed tourist coach sector but with few regular services
- Greece, a State where particular issues had been identified with the regulation of the coach market and with cabotage occasional services
- Italy, another State which was understood to restrict the operation of regular coach services
- Poland, a new Member State with an extensive but not heavily used rail network
- Romania, a further new Member State with relatively low income levels and a relatively underdeveloped rail network
- Spain, due to the large volume of regular coach services operated
- Sweden, to cover a low population density but high income State
- UK, due to the large volume of regular coach services operated and the deregulated environment

- 3.7 Data collection was also undertaken in all of the remaining Member States and in 12 neighbouring States, many of which are current or possible candidates for membership. This was undertaken within a much more limited resources budget. Nonetheless, we found that in a few of the other States (for example France) extensive data was available and the amount of data it was possible to collect actually exceeded that which was possible for some of the case study States. Reports on the coach sector in each State are provided in appendix A (for the case studies) and appendix B (for the other States).
- 3.8 Note that the original terms of reference for the study required Liechtenstein also to be considered, but it was agreed with the Commission that it need not be included due to the small size of any potential coach market.

### Definitions

- 3.9 The objective of this study is to investigate the European coach market, but a key issue has been the lack of any formal definition of coach services which applies consistently across Europe. Many transport statistics do not make any distinction between buses and coaches, and in some languages no such distinction exists. Previous statistical reports published by the European Commission, including the annual energy and transport statistical pocketbook published by DG TREN, also do not make any distinction between bus and coach services.
- 3.10 However, some States do make a formal legal distinction between bus and coach services. For example, in the UK, any service with a distance of less than 15 miles (24km) between scheduled stops is classified as a local bus service over that section of the route only. This leads to the interesting situation where a single service can be both classified as a local bus service and as a coach service.
- 3.11 Local bus services have a number of legal benefits not available for coach services, such as “free” travel (paid for by the government) for senior citizens, rebates on fuel tax, and permission to use dedicated bus lanes. However, local buses are also subject to more regulation than long distance coaches, for example, the operator has to give 60 days’ notice to alter the service and also the services are subject to oversight by the Traffic Commissioner who has the power to impose fines on a company if the service regularly fails to run according to its schedule. In practice, coach operators prefer not to be subjected to these regulations and therefore tend to avoid scheduling stops within 24 km of each other.
- 3.12 We have considered a number of definitions, such as:
- minimum distances between stops or minimum journey length;
  - distinctions based on the type of vehicle used, for example, that luggage travels in a separate compartment from passengers; and
  - distinctions based on how the vehicles are used in practice, for example, whether standing passengers are permitted.

- 3.13 However, none of these definitions is appropriate. For example, although in most western European Member States standing passengers are not permitted on inter-urban bus/coach services, this is not the case in all Member States. Similarly, vehicles with a separate luggage compartment which might usually be considered ‘coaches’ are used on urban and rural bus services in some Member States.
- 3.14 In addition, given the paucity of statistics available for coach services in most Member States, it is not practical for a study such as this to impose any definition that is distinct from that used by the agencies compiling the individual statistics. In the vast majority of cases, the statistics available in Member States are not detailed or disaggregated enough for us to chose the definition that we consider most appropriate.
- 3.15 Where data sources do provide us with flexibility to decide which types of services to include, we have considered coach services to include the services listed in Table 3.1 below. This is based on the distinction drawn in Regulation 684/92. However, it should be emphasised that this definition has only been used for guidance and in the very small number of cases where the statistics available are sufficiently disaggregated to allow some choice as to how to define coach services.

**TABLE 3.1 DEFINITION OF COACH SERVICES**

	Type	Explanation
Services considered as coach services	Regular services	Regular services operate at specified times on defined routes, with specific boarding and alighting points, and are open to all, subject where appropriate to advance reservation.  We consider as coach services those services which operate between different urban areas within the same region making limited stops, plus services which operate between different regions
	International regular services	All regular services crossing national boundaries are considered coaches, except where these are within cross-border urban areas (eg. Basel)
	Special regular services	Special regular services operate on defined routes and at defined times, but provide for the carriage of specific types of passengers to the exclusion of others. The main categories of special regular services are school and employee transport services.  All special regular services are considered coach services, regardless of the nature of the route operated or vehicle used
	Occasional services	Occasional services are services which do not meet the definition of regular or special regular services, and which are characterized above all by the fact that they carry groups of passengers assembled on the initiative of the customer or the carrier itself. These include privately hired services such as tourist services.  All occasional services are considered coach services, regardless of the nature of the route

	operated or vehicle used	
Services not considered as coach services	Urban regular services	Regular services operating mostly or entirely within the same city or other urban area are not considered to be coach services
	Local/rural services	Regular services in rural areas, or between rural areas and towns/cities, which make frequent stops, are not considered to be coach services

- 3.16 As a result of the lack of data available, in most cases within this document the definition of bus/coach used is the definition that is used within the specific Member State. However, throughout this document and the reports on the market in individual States, we note cases where variations in definition of the market appear to have a significant impact on the results.
  
- 3.17 The distinction between bus and coach services is particularly problematic for services other than regular services. In many Member States, all occasional and special regular services are considered coach services, but in some cases these may cover short distances and have characteristics that are otherwise more similar to bus services. In particular, since school transport accounts for a very large proportion of journeys in certain Member States (such as Sweden), whether this is included has a large impact on the statistics, and we have identified this wherever possible. Overall, in our view, it is not particularly helpful to make a distinction between bus and coach services for services other than regular services for which this does add value given the differences in the markets served and the nature of the regulatory regimes that may apply.



## 4. THE EUROPEAN COACH MARKET

### Summary of European coach market statistics

As discussed below, there are significant limitations to the data available on the European coach sector. In the course of this chapter we describe a number of estimates we have made of the overall market size and characteristics, and these are summarised below. However, many of these estimates are indicative only, rely on a large number of assumptions, and so have significant uncertainty surrounding them. This is described in more detail in the body of this chapter.

<i>Coaches only</i>	<b>Total EU</b>	<b>All States</b>
Passenger-kilometres (millions)	262,983	540,512
Vehicle-kilometres (millions)	10,134	19,899
Passenger journeys (millions)	6,621	7,584
Fleet size	248,897	445,715
Employees (bus & coach)	1,546,955	2,255,445
Annual turnover (€m)	15,425	23,560

### Introduction

4.1 A primary objective for this study is to collect and analysis data on the European coach sector. This chapter provides an overview of our research; individual reports on each State studied are contained in Appendix A (for the 8 Member States selected as case studies) and Appendix B (the other States).

4.2 This chapter sets out:

- an overview of data issues and limitations;
- statistical analysis of the coach market, in terms of passenger volumes, fleet and enterprise data, and revenue data;
- information on the profile of coach passengers and the type of journeys typically made by coach;
- information on service quality; and
- regulatory issues which impact on the development of the market in different Member States.

### Data overview

4.3 The scope, quality, and availability of data varies widely across the countries considered but is in general very poor compared to other transport sectors. In a number of Member States little data is available, and in other cases, data is incomplete, inconsistent between sources, and sometimes even inconsistent between different sources produced by the same organisation. There is no consistency in data

between Member States and therefore it is difficult to make definitive comparisons between States on the basis of the data available.

4.4 Given the lack of data, where possible we have included estimates for figures, however there remain a large number of gaps. In order to carry out a meaningful analysis, it has therefore been necessary to develop a system for categorising the data we have collected. Therefore, we have developed a ‘traffic light’ system for classifying the data. This is described in Table 4.1. Results are only presented within this section where we have data which we have classified as ‘green’ or ‘yellow’. The reports on the individual States provided in appendices A and B

**TABLE 4.1 DATA CLASSIFICATION**

Category	Expected to be accurate within	Example
Green	10% or better	<ul style="list-style-type: none"> <li>Official statistic which we believe appears reliable; or</li> <li>Calculation based on good data (for example, a calculation of seat kilometres, where figures are available for vehicle kilometres and average seats per vehicle)</li> </ul>
Yellow	10-25%	<ul style="list-style-type: none"> <li>Official statistic about which we have some concerns (for example, because it is more than 5 years old)</li> <li>Estimate based on relatively good data (for example, extrapolation from figures provided by a trade association which already covers most services)</li> </ul>
Red	Worse than 25%	<ul style="list-style-type: none"> <li>Official statistic but which is believed to be unreliable or inconsistent, or which exclude a significant proportion of data (for example, where a figure is provided for passenger kilometres but this does not include occasional services)</li> <li>Estimate based on limited data</li> </ul>
Other	N/A	<ul style="list-style-type: none"> <li>Data so limited that it is not possible to make an estimate</li> </ul>

4.5 A particular issue is that there is no consistent definition of coach transport (see section 3 above). We have sought to collect data for the coach market where this is possible, but in many cases it is necessary to present data for the combined bus/coach market. We identify below, and in the reports on the coach market in each of the States, where data relates to coach and where it relates to the combined bus/coach market.

4.6 The reports on each State provide detailed information on the sources used for each item of data.

**Overview of the coach market**

4.7 This section provides an overview of the coach market. It draws on the data which we believe is of reasonable quality (that classified ‘green’ and ‘yellow’ using the traffic

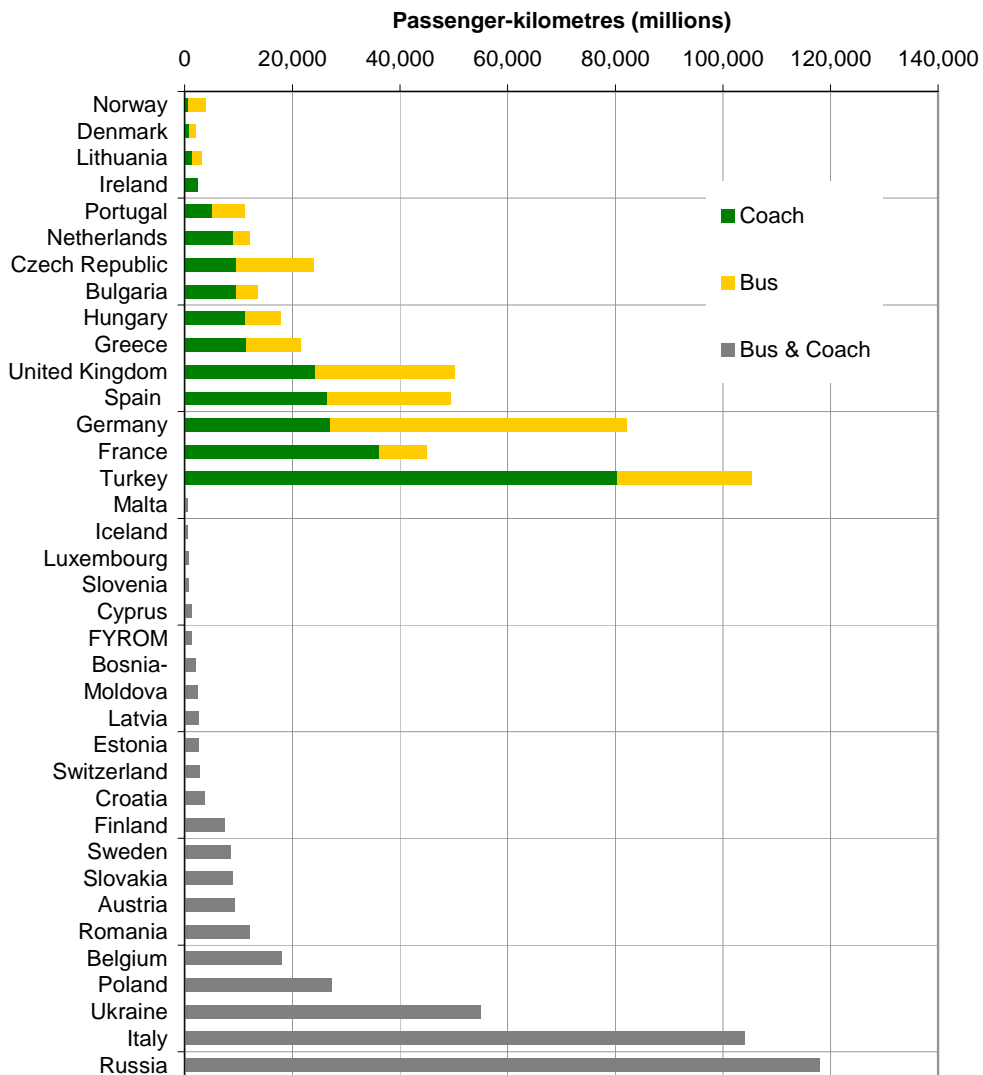
light system described in Table 4.1 above).

*Comparison of different Member States*

4.8 Some of the largest coach markets in Europe are, as one would expect, in the most populous States. Figure 4.1 summarises the market size, measured in terms of passenger kilometres. Where the data allows a reliable distinction to be made between bus travel and coach travel, the graph shows separate bus/coach figures; for the other States, a combined bus/coach figure is provided.

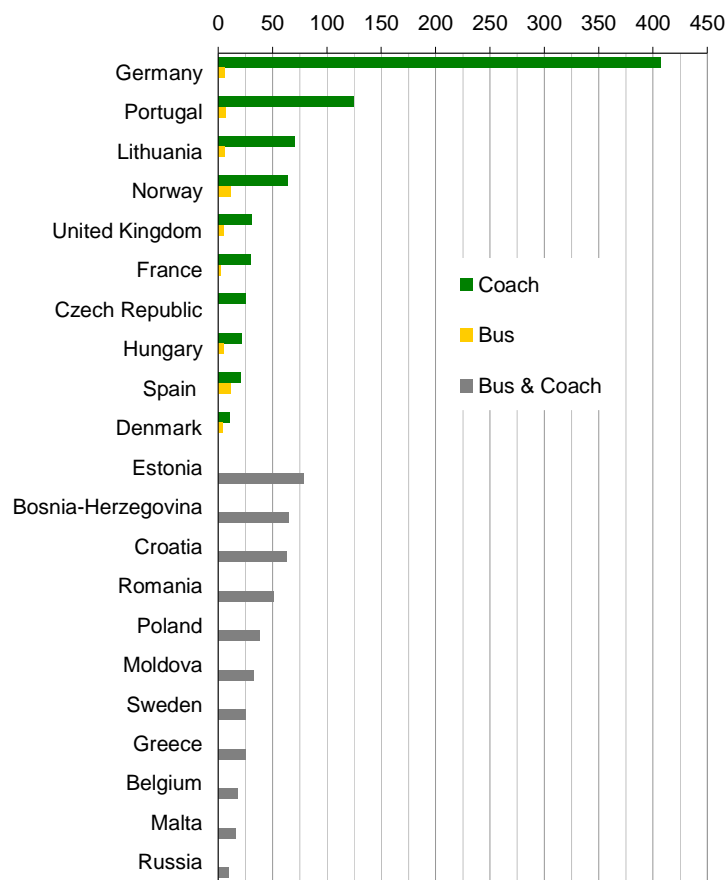
4.9 The largest number of passenger kilometres classified as coach are in Turkey, followed by France. The States with the highest number of total bus and coach passenger kilometres are Russia, Turkey, Italy and Germany.

**FIGURE 4.1 PASSENGER KILOMETRES BY STATE**



- 4.10 At least part of the difference in the volumes of total ‘coach’ travel reflect differences in the classification of ‘bus’ and ‘coach’. The volume of coach passenger kilometres is high in France but this reflects the fact that, in France, coach is defined to include both school transport and also a significant volumes of regional transport which would be considered ‘bus’ in the UK or Spain.
- 4.11 These differences are reflected in Figure 4.2 below. Journeys classified as ‘coach’ in Germany are, on average, very long, because there is a large market for long distance coach tours, whereas there is almost no regular coach market and special regular transport, which will have low average journey lengths, is classified as bus.

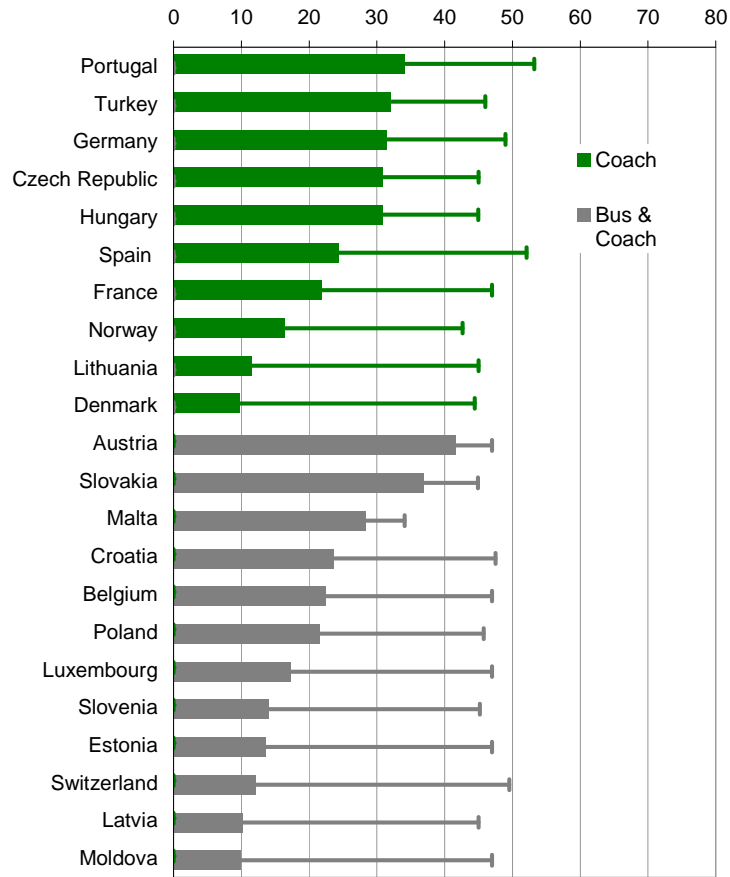
**FIGURE 4.2 AVERAGE JOURNEY LENGTH (KILOMETRES)**



- 4.12 The data for average seats and passengers per vehicle also reflect this difference (Figure 4.3 below). The number of seats per vehicle is fairly consistent across states, reflecting similar vehicle types being used, but the number of passengers per vehicle varies significantly. Load factors tend to be higher in those States where the coach market is dominated by occasional travel, such as Germany, than in States with significant regular coach markets. Where we do have figures for different types of services, this difference is shown even more clearly: in France, regular coach services have on average 25 passengers per vehicle, but day tours have 39 and tours of more than one day have 42.

4.13 There are some issues with this data, for example, the load factor implied by the data for Austria and Slovakia is very high, however in Austria this may be due to the fact that a greater proportion of journeys are international tours, which tend to have a higher load factor.

**FIGURE 4.3 AVERAGE PASSENGERS AND SEATS PER VEHICLE**

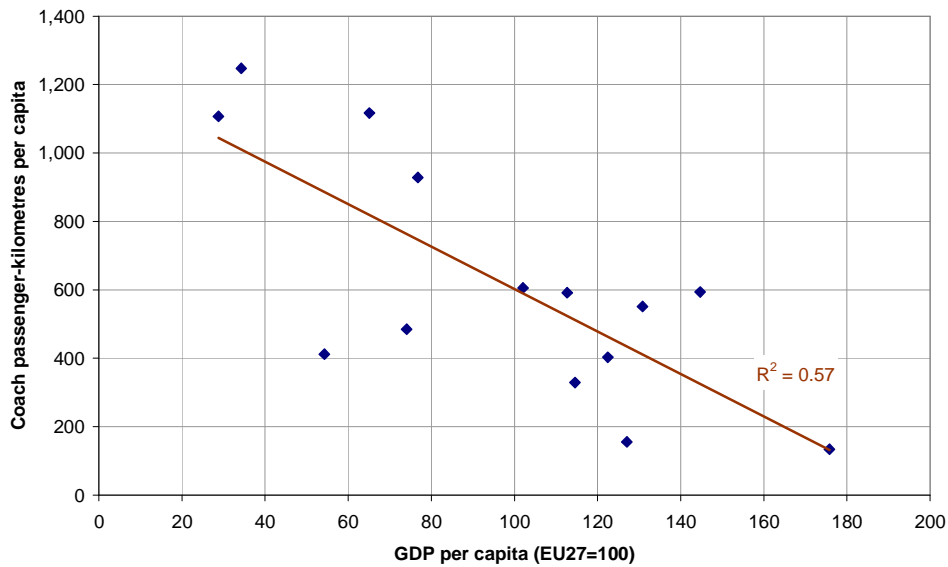


Note: Figures for Spain shown in this graph are regular inter-regional services only. No equivalent figures available for other services.

*Relationship between coach transport and GDP*

4.14 Most transport demand is positively correlated with GDP. However, for coach, there is some evidence that the reverse is the case. In States with GDP per head that is below the European average, the propensity to travel by coach tends to be higher than in States with above-average GDP per head. Increases in GDP can actually lead to reductions in coach demand, and our research showed some evidence of this in central/eastern European Member States, where we were informed that rapidly rising incomes were prompting higher car ownership which was leading to a reduction in coach demand.

FIGURE 4.4 PROPENSITY TO TRAVEL BY COACH RELATIVE TO GDP



4.15 This is, however, not the case in all Member States. In most States, the poor quality of data availability meant that it was not possible to determine the trend in coach travel. However, for the western European Member States where it was possible to obtain a good time series of data (France, UK and in Spain for inter-regional regular services only), coach travel was growing, albeit slower than GDP. The growth rates in France and Spain were comparable to those achieved by the railways, implying that coach travel is not losing market share in these States.

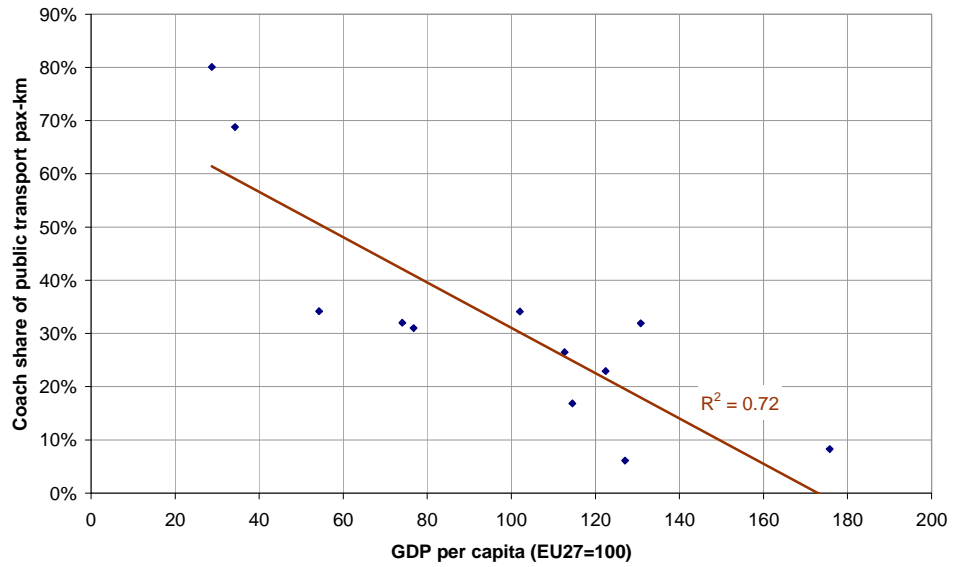
4.16 This indicates that:

- coach travel is high in the lowest income States, as many people do not own cars and cannot afford air travel, and hence have limited choice about their mode of transport;
- increased incomes over time in these States will lead to greater car ownership and possibly also investment in improved rail infrastructure, reducing the market share and potentially the absolute volume of coach transport; and
- in higher income States, the market is more mature, and increases in incomes will lead to increased propensity to travel by all modes, increasing the volume of coach travel but probably not its market share.

4.17 In part, differences in the level of coach travel reflects differences in the quality and utilisation of the rail network. Higher-income western European States tend to have relatively good rail systems, which reduces the demand for coach travel. However, there are wide differences in the importance of the coach sector in different western European States, as discussed below.

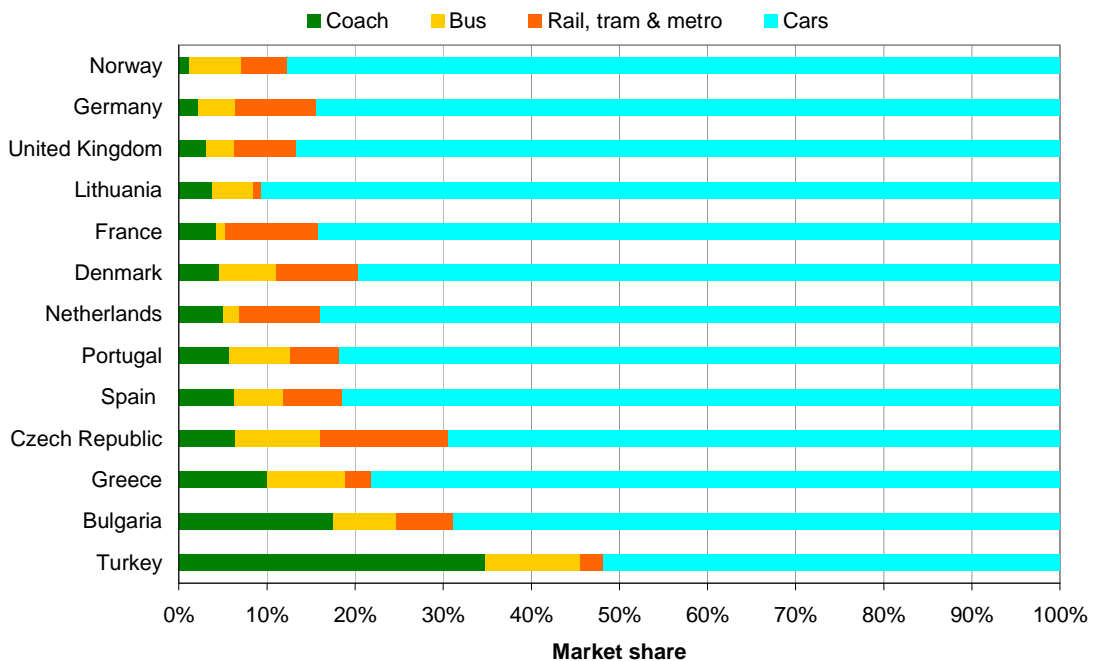
4.18 The coach *share* of public transport is more clearly inversely correlated with GDP than the overall volume of coach travel (Figure 4.5).

**FIGURE 4.5 COACH SHARE OF PUBLIC TRANSPORT MARKET RELATIVE TO GDP**



4.19 Figure 4.6 below shows the market share of coach, bus, rail and car transport in the Member States for which reliable data appeared to be available. In some States, such as Turkey and Bulgaria, high levels of bus and coach travel reflect low levels of car use. In others, such as Germany and France, the relatively high proportion of passenger kilometres undertaken by rail also impacts on the coach market. In France, the relatively high proportion of coach demand reflects a low level of bus demand and therefore primarily indicates how journeys are classified.

**FIGURE 4.6 COACH SHARE OF TOTAL PASSENGER KILOMETRES (ALL MODES)**



4.20 There is particularly large variation in the market share of the regular coach sector, partly due to differences in quality of the rail network but also due to differences in regulation (discussed below). For example:

- in Greece, regular long distance coach services are estimated to have an 85% share of the regular long distance public transport market
- in Spain, the inter-regional regular coach operators convey approximately the same number of passenger kilometres as high speed or long distance trains (7.85 billion compared to 8.48 billion in 2006)<sup>2</sup>.
- in the UK, overall long distance rail carries significantly more passengers than long distance regular coach, but on some corridors coach is the main mode of transport, for example between London and Oxford there are two operators each providing services every 10-15 minutes at peak times.
- in Germany, almost all long distance public transport is by rail or air, with only 0.6 million regular domestic coach journeys per year.

*The total size of the European coach market*

4.21 In order to estimate the total size of the EU passenger coach market, it is necessary to make some further estimates to extrapolate data from the States for which sufficient data is available to cover the remainder. We have done this based on the States for which we do have data, following two approaches:

- i. Using global averages from all States, and applying these to missing data points; and
- ii. Calculating averages for groups of States which share similar characteristics, and applying averages to missing data points within these groups.

4.22 In order to group the 39 States within the sample for this study, we first considered the demand and supply of rail services (measured by rail passenger kilometres and route-kilometres per capita respectively). This gave rise to the following categories:

**TABLE 4.2 COUNTRY SECTORS**

	Low supply	High supply
<b>Low demand</b>	<b>I:</b> In countries with low levels of rail demand and supply we might expect coach services to dominate	<b>II:</b> A high presence of rail infrastructure, but low levels of use, could indicate underdeveloped services or significant freight usage. Similar to <b>I</b> , but with the potential to develop into <b>III</b>

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<sup>2</sup> Source: RENFE annual report 2006

<b>High demand</b>	<b>IV:</b> High levels of demand on a relatively small network, likely to be found in more densely populated countries, where coach services may supplement the rail network	<b>III:</b> Where rail services have high levels of service and patronage, we would expect the coach market to be limited
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4.23 Coach transport (particularly international travel) is also closely related to levels of migration and tourism in a country, which in turn relates to its GDP per capita. We therefore further split categories I-III into high and low income categories. Table 4.3 shows the 39 countries by group.

**TABLE 4.3 STATE GROUPINGS**

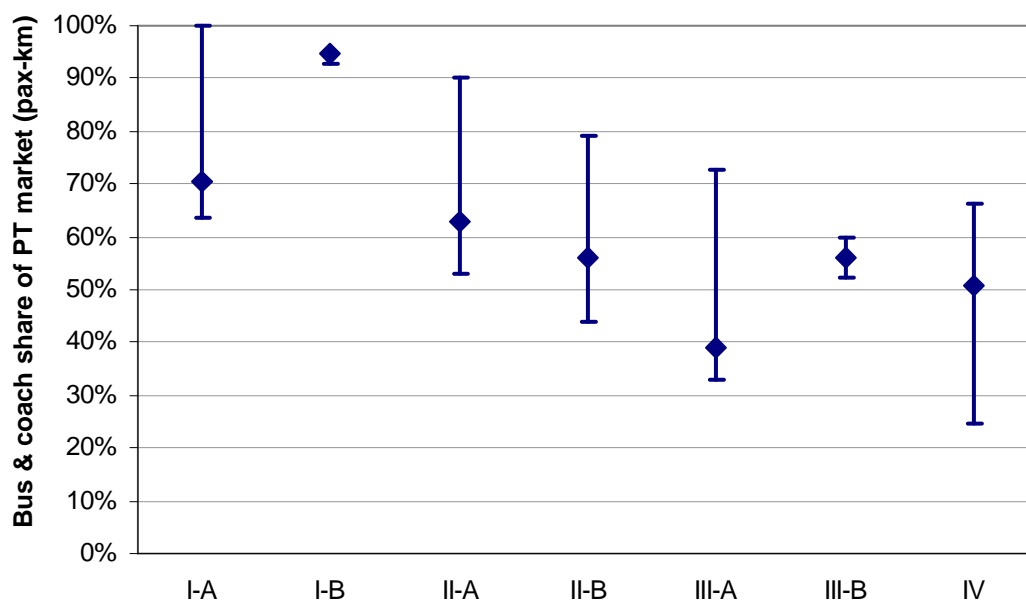
Sector I-A	Sector II-A	Sector III-A	Sector IV
Spain	Slovenia	Sweden	Netherlands
Portugal	Croatia	Finland	Belgium
Republic of Ireland	Slovakia	Denmark	Switzerland
Iceland	Poland	Norway	Italy
Malta	Latvia	France	United Kingdom
Cyprus	Lithuania	Austria	Germany
Greece	Estonia	Luxembourg	
Sector I-B	Sector II-B	Sector III-B	
Turkey	Bulgaria	Hungary	
Morocco	Romania	Czech Republic	
Albania		Russia	
Bosnia-Herzegovina		Ukraine	
Moldova			
FYROM			

4.24 Within each sector, where we have data, there is some level of consistency with expectations regarding the public transport market shares of coach and bus. This suggests that extrapolating within groups to countries where we do not have data could have some value in improving the accuracy of our estimates. In particular the result described above that GDP is a significant indicator of coach travel is reinforced. However, there are also limitations with this country grouping approach:

- The regulatory environment in a State is also a significant factor in determining the size and characteristics of its coach market. For example, this results in the UK having a much larger regular coach market than Germany (although this is in part re-balanced by Germany's large occasional market). This is despite both being in group IV for having highly developed rail sectors.
- The distinction between bus and coach travel varies widely between States, as discussed in section 3. This makes the sector approach less reliable for determining coaches' share of the bus and coach market; however for estimating the total bus and coach market size it is more reliable. This is illustrated by Figure 4.7, showing the average and the range of market shares for each

grouping.

**FIGURE 4.7 BUS AND COACH SHARE OF PUBLIC TRANSPORT BY STATE GROUPING**



4.25 Despite these limitations, these groupings still capture some of the key national characteristics which will influence the scale and nature of the coach market. We therefore present estimates for the overall market size of the coach market based on both the cluster approach, and global averages. In order to ensure that consistent sets of statistics from each State are added together (for example, which year data is from) ‘bottom-up’ coach market shares from our data collection are applied to Eurostat data on total passenger transport figures. Our estimates are summarised in Table 4.4.

**TABLE 4.4 OVERALL MARKET SIZE**

<i>Passenger kilometres (million)</i>	Estimate based on global averages			Estimate based on groupings of States		
	Total public transport	Bus and Coach	Coach	Total public transport	Bus and coach	Coach
EU15	812,600	416,900	207,381	812,600	416,900	224,809
EU12	178,000	105,600	55,602	178,000	105,600	59,524
<b>Total EU</b>	<b>990,600</b>	<b>522,500</b>	<b>262,983</b>	<b>990,600</b>	<b>522,500</b>	<b>284,333</b>
Other States	761,651	481,440	277,529	589,116	362,795	223,079
<b>Total sample</b>	<b>1,752,251</b>	<b>1,003,940</b>	<b>540,512</b>	<b>1,579,716</b>	<b>885,295</b>	<b>507,412</b>

4.26 We have sought also to make indicative estimates of the overall market size as

measured by vehicle-kilometres and passenger journeys. However, reliable data on these metrics was available for only a small number of countries, and as a result the extrapolations to the remaining countries will have significant uncertainty surrounding them. The data available is such that our estimates are restricted to coach data only.

- 4.27 In order to estimate total vehicle-miles we have considered average passengers per vehicle (shown in Figure 4.3 above) and applied this to our passenger-kilometre estimates. For countries where we have reliable data on vehicle-kilometres this has been used. We have also used this data to calculate an average passenger per vehicle figure of 28. This global average was then used to calculate vehicle-kilometre estimates for the remaining (majority) of countries. Our results are summarised in Table 4.5.
- 4.28 A similar methodology using average journey length has been followed in order to estimate total passenger journeys. Here, however, a simple global average journey length cannot be justified – clearly the length of journeys will be affected by the size and geography of the country. Instead, we have considered the relationship between journey length and the size of a country<sup>3</sup>. Applying this relationship allows us to estimate journey lengths for each country and apply it to passenger-kilometres, thus giving an indicative view of passenger journey totals. This is summarised in Table 4.5.

**TABLE 4.5 FURTHER INDICATIVE ESTIMATES OF TOTAL COACH MARKET SIZE**

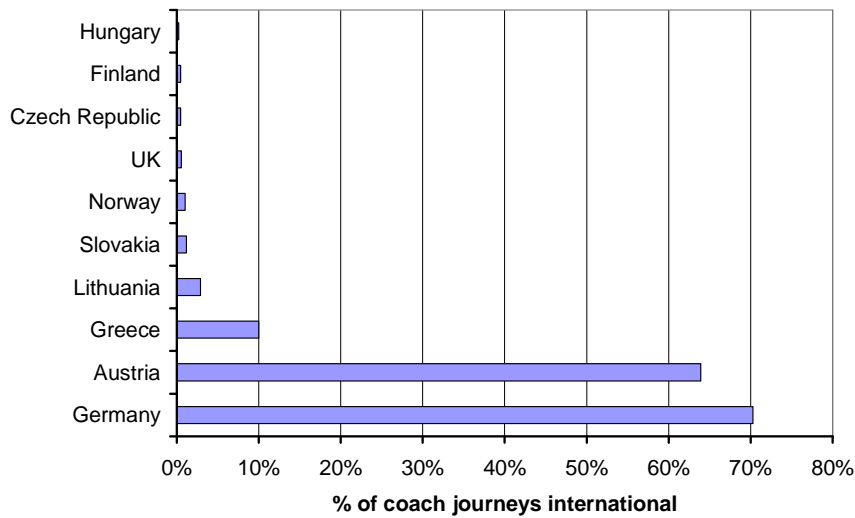
<i>Millions per annum</i>	<b>Coach vehicle-kms</b>	<b>Coach passenger journeys</b>
EU15	8,055	4,895
EU12	2,079	1,726
<b>Total EU</b>	<b>10,134</b>	<b>6,621</b>
Other States	9,765	963
<b>Total sample</b>	<b>19,899</b>	<b>7,584</b>

*International travel*

- 4.29 In most Member States, the vast majority of coach journeys are domestic. The main exceptions to this are Germany and Austria, which have very large markets for outbound international coach tours and have almost no domestic regular coach market (Figure 4.8 below).

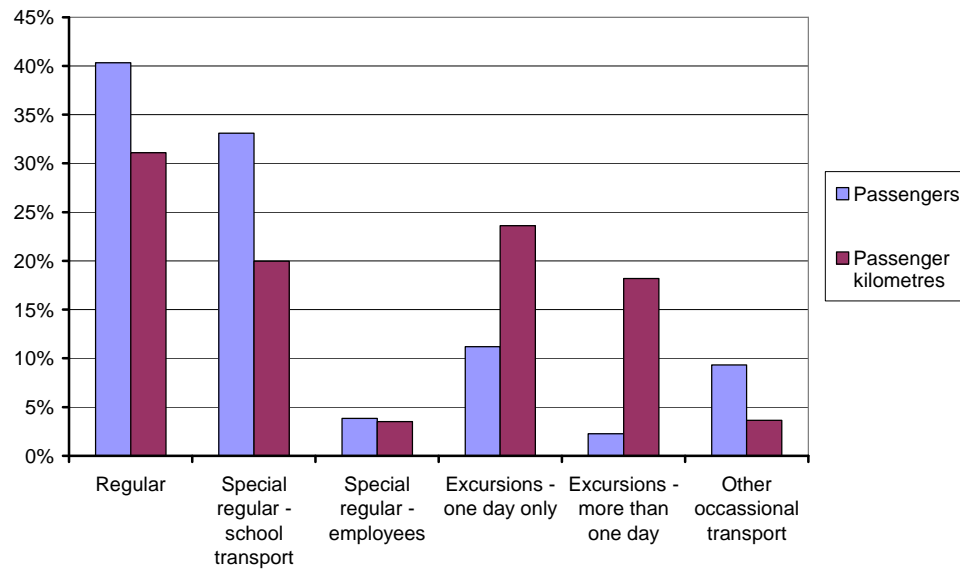
<sup>3</sup> We have made the simplifying assumption that each country can be approximated by a circle of equivalent area, and then related the radius of this circle to average journey length. This implied that the average coach journey is about 40% of a country's "radius".

**FIGURE 4.8 PROPORTION OF COACH JOURNEYS INTERNATIONAL**



*Demand for different types of services*

- 4.30 We have sought to identify the proportion of bus and coach demand that is accounted for by each of the categories of transport (regular, occasional, special regular etc). Although some limited data on this is available in a number of Member States, it is not complete in any State except Lithuania.
  
- 4.31 Of the larger Member States, the only one for which comparably detailed data is available is France (Figure 4.7). The data indicates that occasional transport accounts for the largest proportion of coach passenger kilometres (45%) although only 23% of passenger journeys, because average journey lengths are much longer for this type of journey than for other types of coach transport.

**FIGURE 4.9 SHARE OF TYPES OF COACH TRANSPORT, FRANCE**

Source: Ministère des Transports, de l'Équipement du Tourisme et de la Mer, Les transports par autocars en 2005; SDG analysis

4.32 Unfortunately the data for France does not show local bus trips in a consistent format, and different sources show different data for passenger kilometres (as discussed in more detail in the report for France in appendix B). The data which is available indicates that the proportion of passenger kilometres made up by local bus trips is low (less than 20%), which reflects that:

- the definition of coach transport used in France includes many trips which would be categorised as bus trips in other Member States; and
- many French cities have extensive tram and metro systems, reducing the demand for local bus travel.

4.33 Key characteristics of the different types of coach journeys in France are shown in Table 4.6. The average number of passengers per vehicle, and average journey lengths, are much greater for occasional transport than for regular or special regular transport. This not surprising given the characteristics of these trips – operators of occasional transport can achieve higher load factors because their demand is inherently more predictable, and they do not have to operate services if demand is insufficient.

**TABLE 4.6 CHARACTERISTICS OF COACH JOURNEYS - FRANCE**

Type of coach transport	Passengers per vehicle	Average journey length (km)
Regular	27	27
Special regular	School transport	21
	Employees	32
Excursions	One day only	73
	More than one day	282
Other occasional transport	27	14
<b>Total</b>	<b>33</b>	<b>35</b>

4.34 As discussed above, the only Member State for which complete data for all sectors of bus and coach transport was available was Lithuania (Table 4.7 below). In most respects, however, the data for Lithuania is reasonably consistent with the partial data available elsewhere, with the exception of average number of passengers per vehicle, which is very low in Lithuania, and implies that some services must be operated with relatively small vehicles.

**TABLE 4.7 DETAILED BUS AND COACH PASSENGER DATA - LITHUANIA**

	Passenger kilometres (millions)	Passenger journeys (millions)	Vehicle kilometres (millions)	Average journey length (km)	Passengers per vehicle
Regular long distance domestic	712	13.1	75.3	54	9.5
Regular international	138	0.58	9.49	238	14.5
Special regular services	115	4.17	11.6	28	9.9
Occasional services	436	2.44	24.3	179	17.9
<b>Total coach services</b>	<b>1,401</b>	<b>20</b>	<b>121</b>	<b>70</b>	<b>11.6</b>
Local bus (suburban)	545	38.3	71.0	14	7.7
Local bus (urban)	1225	260	132	5	9.3
<b>Total bus and coach services</b>	<b>3,171</b>	<b>318</b>	<b>323</b>	<b>10</b>	<b>9.8</b>
Total regular services (bus+coach)	2,620	311	287	8	9.1

4.35 Some limited data is also available on different sections of the market in the other States. This data is summarised below.

**TABLE 4.8 SHARE OF EACH MARKET SECTOR IN OTHER STATES**

	Special regular	Occasional
Cyprus	Not available	Based on turnover, estimated to be around 60% of coach passenger KMs and 40% of total bus/coach passenger KMs
Greece	Not included in estimate for coach transport	Based on number of vehicles, estimated to be around 50% of coach passenger KMs and 25% of total bus/coach passenger KMs
Germany	Employee transport included in occasional; school transport treated as local bus	95% of coach passenger KMs and 96% of coach passenger journeys 31% of total bus/coach passenger KMs
Poland	7.3% of total bus/coach passenger KMs and 9.5% of journeys (no total coach figures)	15.5% of total bus/coach passenger KMs and 5.7% of journeys (no total coach figures)
Spain	26% of coach passenger journeys 10% of total bus/coach passenger journeys	17% of coach passenger journeys 7% of total bus/coach passenger journeys
Sweden	No figures for passenger KMs Not included in coach figures	No figures for passenger KMs Approximately 50% of coach journeys

4.36 However, we have reservations about even these figures. For example, Spain maintains a significant package holiday sector which uses coaches extensively to transport visitors between airports and hotels. These trips should be classified as occasional coach services but the proportion of journeys classified in this way is so low that we doubt whether these trips are actually included.

4.37 Nevertheless, on the basis of the limited data available we have sought to make some indicative estimates on overall split between regular, special regular, and occasional coach transport across Europe. These estimates are based on weighted averages of the data presented above, but with a reduced weighting assigned to Germany given its unusual regulatory structure. This gives rise to the approximate figures provided in Table 4.9 below.

**TABLE 4.9 INDICATIVE ESTIMATE OF EU-WIDE COACH DEMAND BY CATEGORY**

	Journeys (millions)	Passenger-kilometres (millions)
Regular	2,912	81,226
Special Regular	2,226	52,572
Occasional	1,484	129,185

#### *School transport*

4.38 Contracted school buses fall under the definition of special regular services. Some

Member States offer free transport to school for most students, others offer support only to those living above a specified threshold distance from the educational establishment. Within this range of support for transport to school, national governments and the responsible local authorities also diverge on how the transport is provided, for example, by offering special regular services or only offering travel passes on local public transport.

4.39 These differences are significant for the study since the statistics provided on passenger journeys will vary significantly according to the approach taken to school transport by the different Member States and local authorities. Other statistics are affected, although less significantly. Our research indicates that Belgium, Netherlands, Denmark, and Germany do not have a culture of special regular services to school, and students walk, cycle or take local public transport to school. The UK, France, Spain, Sweden and Ireland all have established contracted special regular services. This is illustrated below in Table 4.10.

**TABLE 4.10 SCHOOL TRANSPORT PASSENGER JOURNEYS**

State	UK	France	Spain	Sweden	Ireland
Numbers of school students (millions)	8	10	5.4	1.5	0.7
Students travelling via special regular service (millions)	0.6	1.0	0.5-1 (estimate)	0.195	0.139
Estimated journeys per annum (millions)	180	400	238	58.5	41.7
% of total coach passenger journeys	23%	33%	18%	-	-
% of total bus / coach passenger journeys	3.1%	6.9%	7.2%	16.7%	12.9%

Sources: UNICEF; OECD / ECMT data; School Transportation News; UK School Transport Survey, Department for Transport, 2003; CERTU, Anateep, 2004; Sweden source, Official Statistics of Sweden, SIKI Institute, 2005-6; Bus Eirann, 2007

**The impact of school transport on coach statistics**

Coach transport statistics will be significantly impacted by whether school transport is classified as coach. School transport could be:

- considered to be a coach service, in which case, it is likely to account for a very high proportion of journeys;
- considered to be a bus service, in which case, the number of coach journeys will be lower;
- considered to be either a bus or a coach service depending on factors such as journey length; or
- not provided through special regular services – for example, in some States there are regular bus services that are primarily used as school transport

In a case where a citizen travels to school every day by coach, it is likely that they will have completed the vast majority of coach trips that they make during their lifetimes by the time that they leave school.

This further illustrates the difficulty in analysing the coach market, for which there is no clear definition applying in all of the Member States. It would significantly facilitate future analysis of this sector if a clear and consistent approach to categorisation of bus/coach journeys could be used throughout the European Union.

### **Fares**

4.40 In the case study States, we found that:

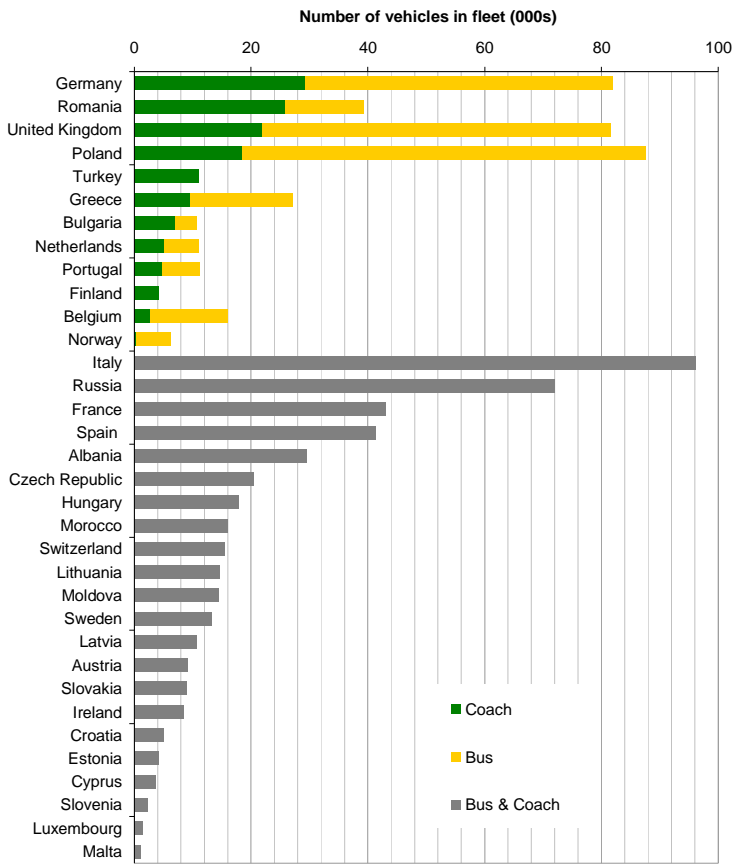
- in the UK and Sweden, and on those routes in Germany where regular coach services are permitted, coach fares are significantly lower than rail fares (by approximately 50%);
- in Romania, coach fares are also generally lower than rail fares;
- in Italy, Greece and Poland, coach fares are similar to rail fares;
- in Spain, fares are significantly lower than rail fares on routes where high speed trains are operated, but comparable to the rail fares charged on other routes.

### **Fleet data**

#### *Number of vehicles*

4.41 Figure 4.10 shows the number of vehicles in the fleet, for those States for which the data was available. This data was available for most States, as vehicle registrations are usually recorded, although it was not always possible to distinguish between buses and coaches.

**FIGURE 4.10 NUMBER OF VEHICLES IN FLEET**



4.42 We have used this data, and extrapolation for the other States, to make estimates of the total number of vehicles in the European coach and bus/coach fleet. Missing data was estimated based on global averages – the sector approach described above is applicable to the markets, and not to the operational environments, of the countries concerned. These estimates are included in Table 4.14. We estimate that within the EU27 States, there are nearly 700,000 buses and coaches in operation, of which just over one third are coaches.

**TABLE 4.11 ESTIMATE OF EUROPEAN BUS & COACH FLEET SIZE**

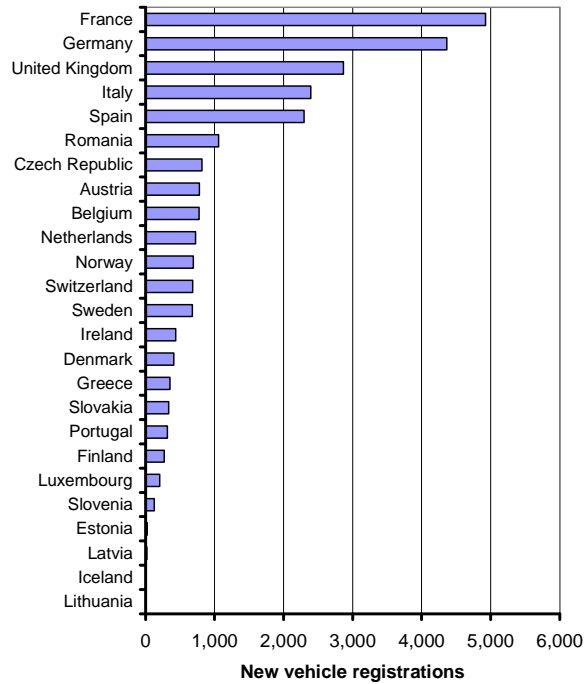
	Coach only	Bus and coach
EU15	180,185	457,352
EU12	68,694	221,714
<b>EU total</b>	<b>248,879</b>	<b>679,066</b>
Other	196,836	341,254
<b>Total</b>	<b>445,715</b>	<b>1,020,319</b>

4.43 Data from the European Automobile Manufacturers’ Association shows that the total size of the bus/coach fleet has not changed significantly since 2004.

*Turnover of vehicle fleet*

- 4.44 Figure 4.11 illustrates the total number of registrations of new passenger vehicles over 16 tonnes in EU and EFTA States for 2008. There are no separate figures available for buses and coaches, and therefore this does not exactly represent coaches. However, most buses are less than 16 tonnes, and most coaches are more than 16 tonnes (partly because coaches are designed for higher speeds).

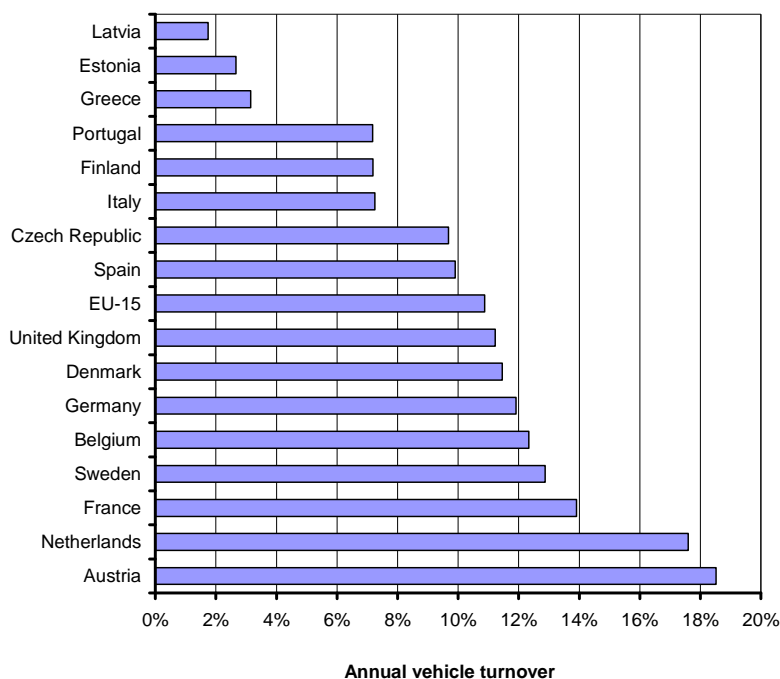
**FIGURE 4.11 NEW PASSENGER VEHICLE REGISTRATIONS OVER 16 TONNES, 2008**



Source: European Automobile Manufacturers' Association

- 4.45 Figure 4.12 below shows vehicle turnover (new registrations divided by total vehicle fleet). This figure covers all passenger vehicles over 3.5 tonnes, which equates to all vehicles larger than a minibus, as consistent figures for the vehicle fleet over 16 tonnes were not available. This shows that in many of the EU15 States, vehicle turnover is over 10% per year, which implies that most vehicles in service will be less than 10 years old; in contrast, vehicle turnover in Latvia and Greece is less than 4%. This data is only available for a proportion of States.

**FIGURE 4.12 VEHICLE TURNOVER**



Source: European Automobile Manufacturers' Association

*Age of vehicles*

4.46 There are significant differences in the ages of vehicles in different Member States. This is provided for the case study States in Table 4.12. Of these States, the vehicles were typically oldest in Poland and newest in Germany. The average ages for vehicles imply a typical maximum operating life of around 20 years, which is slightly less than that for rail vehicles (for which 30 years is common and 40+ years occasionally achieved).

**TABLE 4.12 AVERAGE AGE OF VEHICLES**

State	Average vehicle age (years)	Notes
Austria	6.5	Includes buses
Finland	11.9	Includes buses
Germany	6.3	
Greece	> 10 years	Refers to tourist coaches only. KTEL (regular) coaches are newer.
Italy	10	Includes buses
Poland	17	Includes buses
Portugal	12	Includes buses
Romania	Median 5-10 years	

Spain	11	Vehicles on long distance regular concessions newer (average 5.7 years)
Sweden	8.8	Includes buses. Average for coach slightly higher.
UK	8.1	Includes buses

#### Fuel

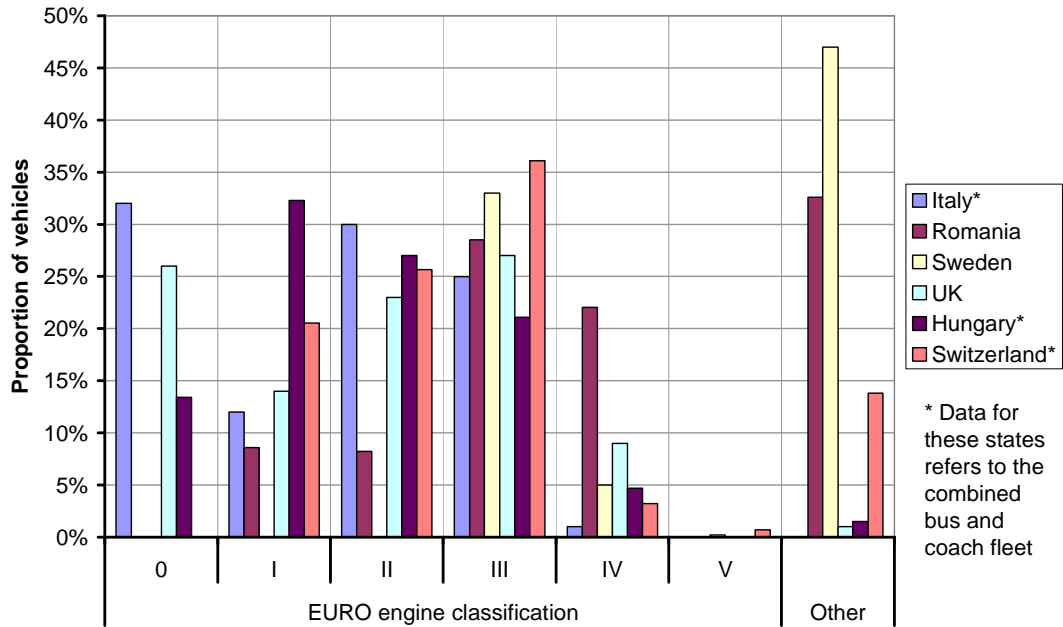
- 4.47 Virtually all coaches operate on diesel. Although the figures collected in some Member States include some non-diesel vehicles, these vehicles appeared to be buses rather than coaches.

**TABLE 4.13 ENGINE TYPE**

State	Proportion diesel	Notes
Germany	100%	-
Greece	100%	-
Italy	100%	Includes buses
Poland	89.5%	Includes buses. 5.3% petrol, 0.9% LPG, 4.3% unknown.
Romania	n/a	-
Spain	98%	Remainder petrol.
Sweden	86.6%	Includes buses. Ethanol 5.3%; bio gas 4.4%; natural gas 3.7%. Non-diesel vehicles are all buses not coaches.
UK	All diesel	Includes buses

- 4.48 Figure 4.13 shows the emissions categories, where we have been able to collect this data. In most States, the largest proportion of the fleet were category III. In Romania and Sweden, we were informed that a significant proportion of the fleet were of other non-standard categories.

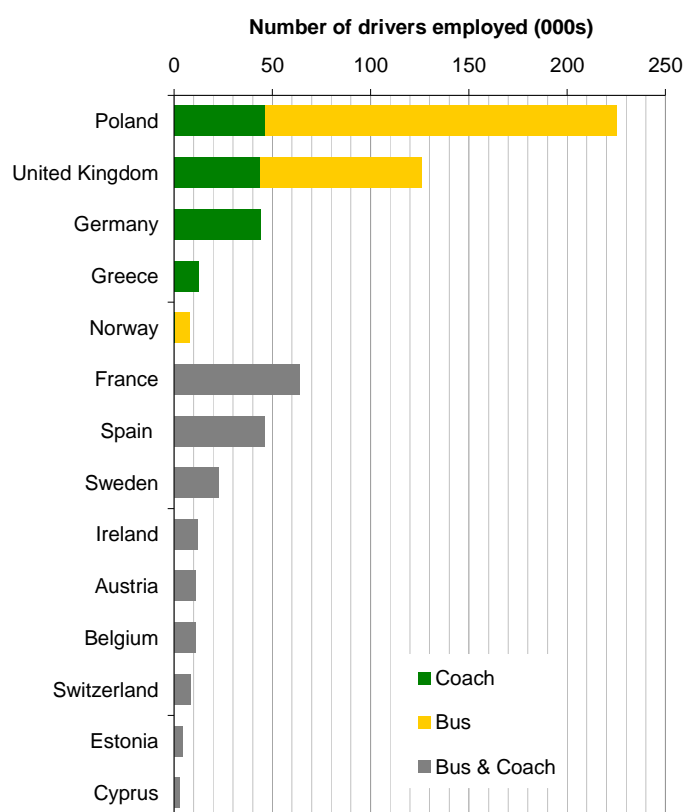
FIGURE 4.13 ENGINE EMISSIONS CATEGORY



**Enterprise data**

*Employment*

4.49 Figure 4.14 shows the number of drivers employed, for those States for which this data was available. As explained in more detail below, we have significant reservations about much of this data.

**FIGURE 4.14 NUMBER OF DRIVERS EMPLOYED**

4.50 Our estimates for the total number of drivers and other employees are provided in Table 4.14. We estimate that over 1.5 million people work in the EU bus/coach sector of whom the majority (1.1 million) are drivers. The proportion of employees that are drivers varies from 53% in Spain to 88% in Germany.

**TABLE 4.14 ESTIMATE OF EUROPEAN BUS AND COACH SECTOR EMPLOYEES**

	Drivers	Total employees
EU15	681,623	955,057
EU12	422,437	591,898
<b>EU total</b>	<b>1,104,060</b>	<b>1,546,955</b>
Other	505,649	708,490
<b>Total</b>	<b>1,609,709</b>	<b>2,255,445</b>

4.51 However, we have significant reservations about much of the data that has been collected in this area. As a result, these estimates are subject to significant uncertainty and have been estimated for the total bus and coach market only due to the limitations of the data. Some of these were based on estimates from trade associations or other sources, and even where these were based on official statistics, some of these did not appear credible. For example, Italian official statistics show fewer people employed within the bus/coach sector (including the drivers) than there are buses and coaches in service, which seems very unlikely. The figure for France is in particular an

underestimate because it excludes employees of the Paris transport authority (RATP).

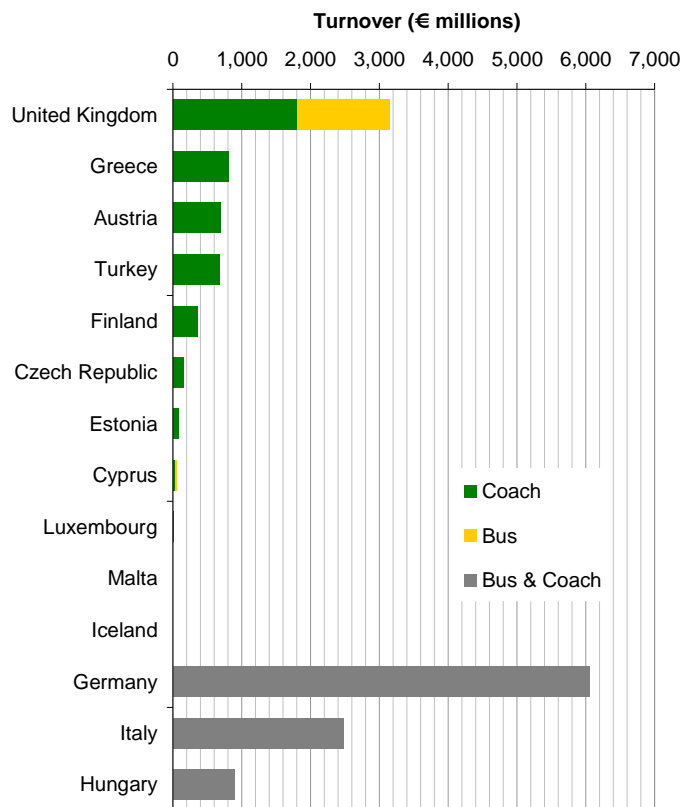
4.52 Employment statistics could also be distorted by differences in how part time or agency staff are handled. We have not used figures which were obviously unrealistic in the calculation of total employees above.

4.53 In order to produce a rough estimate the number of employees of the coach sector only, we can allocate the total employees for the bus/coach sector between bus and coach on the basis of the number of vehicles. We believe that this approach should produce a reasonable estimate for total employment, because most employees are drivers. This indicates that the EU coach sector might employ around 550,000 people.

*Turnover*

4.54 Figure 4.15 shows the turnover of the coach or bus sector, for those States for which it has been possible to obtain figures. Again, these figures were available in very few States.

**FIGURE 4.15 TURNOVER OF COACH SECTOR**



4.55 In order to estimate total turnover of the coach sector, we have extrapolated this on the basis of the number of vehicles to cover the remaining States. Turnover is best extrapolated on a per-vehicle basis as vehicles are, with drivers, the main cost that the

coach companies will need to recover. Unfortunately, because we can only calculate turnover per vehicle where *both* accurate figures for vehicles *and* reliable figures for turnover are available, this calculation can only be made for four States (Finland, UK, Greece and Turkey). However, the results for three of these States - Finland, UK and Greece - are strikingly similar (around €84,000 per year per vehicle). The figure for Turkey is slightly less (€62,000).

- 4.56 We have used this data to estimate the total turnover of coach and bus/coach companies in the sample States. Overall we estimate that the turnover of the coach sector in the EU is around €15 billion per year, and the turnover of the combined bus and coach sector is around €29 billion.

**TABLE 4.15 TURNOVER (€ MILLIONS)**

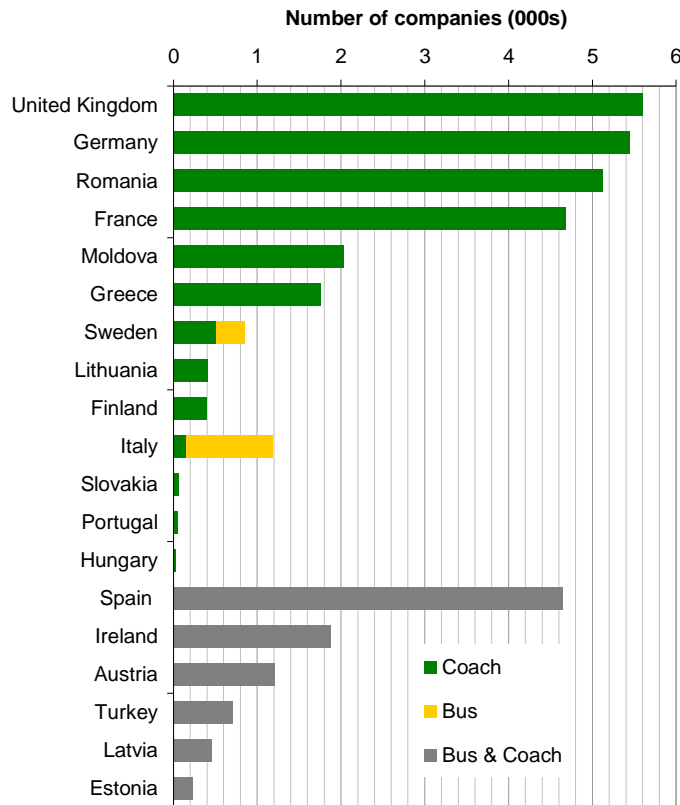
	<b>Coach</b>	<b>Bus and coach</b>
EU15	11,027	19,710
EU12	4,398	9,070
<b>Total EU</b>	<b>15,425</b>	<b>28,780</b>
Other	8,135	13,848
<b>Total all States</b>	<b>23,560</b>	<b>42,628</b>

- 4.57 It should be emphasised that these results have been extrapolated from relatively limited base data and therefore there is significant uncertainty about these conclusions.

#### *Number of companies*

- 4.58 There are a number of very large coach operators in the EU (such as Alsa in Spain, which has 2,300 coaches in its fleet). However, the average size of companies are small. On the basis of the data available (summarised in Figure 4.16), we estimate that the average coach operator has only 16 vehicles in its fleet. In some Member States, the figure is lower; for example, in the UK we identified that 5,610 companies were advertising coach services, and the total coach fleet is only around 21,900 vehicles; this indicates that there are less than 4 vehicles per company in the UK on average.

**FIGURE 4.16 NUMBER OF COMPANIES**



4.59 We have used this data to estimate the total turnover of coach companies in the sample States. Overall we estimate that there are over 29,000 coach companies in the EU27 and 43,000 bus and coach companies.

**TABLE 4.16 NUMBER OF COACH COMPANIES**

	Coach	Bus and coach
EU15	21,842	29,818
EU12	7,379	13,400
<b>Total EU</b>	<b>29,221</b>	<b>43,218</b>
Other	14,164	17,710
<b>Total all States</b>	<b>43,385</b>	<b>60,927</b>

4.60 Again, it should be emphasised that these results have been extrapolated from limited base data and therefore the conclusions are uncertain.

**Profile of coach users and trips**

4.61 In four of the Member States that were selected as case studies (Sweden, Spain, UK and Greece), we were able to obtain survey data which provides some indication of the type of passengers that typically travelled by coach.

- 4.62 The surveys use different methodologies and categorisations, and ask different questions, so it is difficult to make comparisons between the States. This section identifies what conclusions can be drawn. The surveys undertaken in Greece and Spain were undertaken at terminals and therefore cover regular users only; they are also liable to distortion if the terminal or time of the survey were unrepresentative.

#### *Users characteristics*

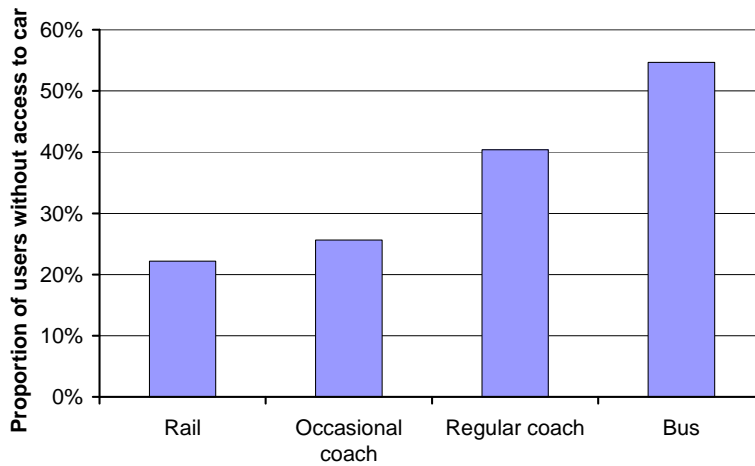
- 4.63 The survey data for Spain, Greece and the UK provides an indication of the typical age of coach users (Table 4.17 below). The results show a significant difference between the Member States: users in Greece and Spain tend to be young, whereas in the UK and Sweden users tend to be older. In the UK, users of occasional coach services tend to be much older than users of regular services, whereas the reverse is true in Sweden. This may indicate that school tours account for a significant proportion of occasional trips in Sweden.

**TABLE 4.17 AGE PROFILE OF COACH USERS**

Member State	Proportion of coach users aged		Notes
	30 or less	50+	
Greece	63%	14.5%	
Spain	48%	21%	
Sweden (regular services)	31%	45%	Trips over 100km only
Sweden (occasional services)	55%	38%	
UK (regular services)	33.5%	47.5%	
UK (occasional services)	14.3%	71.1%	

- 4.64 The data for Spain and Greece shows that occupation status of coach users. In both Member States, a high proportion of users were university students (26% and 42% respectively) and a relatively low proportion of users were in full time employment.
- 4.65 The surveys for the UK and Greece provide information on car ownership amongst coach users. 40% of regular coach users in the UK and 50% in Greece live in households without access to a car. The UK data shows that the proportion of regular coach users that do not have a car is much higher than for rail travel or local bus travel, whereas occasional coach users are almost as likely to have a car as rail users (Figure 4.17). This indicates that a proportion of regular coach users are may be using this mode because they do not have any alternative.

**FIGURE 4.17 PROPORTION OF PUBLIC TRANSPORT USERS WHO DO NOT HAVE ACCESS TO A CAR (UK)**



Source: UK National Travel Survey

4.66 The survey data for Spain and Greece provides data for the gender of users. According to the surveys, 57% of users in Greece were female, but in Spain, the figure is the exact reverse. We have some doubt about the reliability of these figures.

*Motive for travel*

4.67 The surveys for UK, Spain and Sweden provide information on the motive for travel of coach users (summarised in Table 4.18). The data shows significant differences in motive for travel between the Member States. Visits to friends and relatives and holidays accounted for a significant proportion of trips in all States, but whilst trips for educational and work purposes accounted for a significant proportion of trips in Spain, the proportion was very low in the UK and Sweden.

**TABLE 4.18 MOTIVE FOR TRAVEL**

Motive for travel	Spain	Sweden (regular)	Sweden (occasional)	UK (regular)	UK (occasional)
Visit friends/relatives	23%	47%	15%	22%	3%
Holiday	28%	15%	12%	25%	35%
Work/business	18%	4%	3%	3%	0%
Education	14%	5%	1%	2%	0%
Other	17%	29%	70%	48%	63%

*Other aspects of the coach journey and user*

4.68 Only the data for Sweden provides information on the typical length of stay. This shows that 68% of coach trips are day trips, and that the average length of stay is 2.4

days for occasional services and 2.9 days for charter services. However, this is distorted by the fact that it is based on a survey which only includes journeys over 100km. The shortest trips, which are most likely to be day trips, are not included.

- 4.69 Only the data for Spain provides information on the frequency of travel. 60% of passengers travel once per month or less, and 37% travel less than 3 times per year.

### Service quality

- 4.70 Almost no data is available on customer satisfaction, or service quality indicators such as the proportion of services which run on time. This reflects the fact that coach services are generally operated by private companies which have no obligation or indeed incentive to publish service quality indicators. In other transport sectors, where service quality indicators such as these are published, they are usually published by independent third parties (for example, in the air transport sector, punctuality data is based on information collected by airports, air traffic control, and trade associations).

- 4.71 The only Member State in which we obtained data on customer satisfaction was Spain. This indicates that coach passengers were generally quite satisfied with the service offered (the average service quality score was 71%). The survey also indicates that passengers were most satisfied with those elements of service quality which they ranked as being most important to them, such as security during the trip and departure punctuality.

- 4.72 Anecdotal evidence, confirmed during our interviews with coach terminal managers in the course of the work undertaken in section, does indicate that coach services are prone to running late due to traffic congestion, particularly long distance/international services. However, the only terminal operator which was able to make an estimate of coach punctuality (Germany) suggested that over 90% of services arrive with less than 15 minutes delay, which compares well to other long distance transport sectors.

### Regulatory arrangements

- 4.73 Differences in the volume of coach travel in different Member States reflect, in part, the different regulatory restrictions that are placed on the sector. There are significant differences in the regulatory arrangements applying to regular coach services in different Member States. The main systems that we have identified are:

- **Liberalised:** No restrictions on operation of new services, apart from meeting basic requirements for example regarding safety of vehicles
- **Concessions:** Number of operators on any individual route limited, but competitive bidding for the right to operate services
- **Prohibition on entry:** Incumbents have the right to operate services, but market entry is not permitted
- **Prohibition on operations:** Some Member States prohibit operation of long distance coach services particularly where these would compete with rail services

4.74 The regulatory systems applying in the case study States are summarised in Table 4.19 below.

**TABLE 4.19 REGULATORY ARRANGEMENTS FOR REGULAR COACH SERVICES**

Member State	Regulatory arrangements	Notes
Germany	Prohibition of most services	Licenses required to operate services, and new services not permitted to compete with rail network.
Greece	Prohibition of new entry	Regular services may only be operated by the incumbent KTEL companies. No potential for new entry.
Italy	Liberalised but with administrative barriers	Liberalised in theory since 2007, but licenses required to operate services and in practice administrative/indirect barriers apply
Poland	Partially liberalised	In most respects liberalised, but some restrictions on competition with existing coach services, and some administrative barriers to new entry
Romania	Concessions	Competition for the market rather than in it. Some barriers to entry as concession competitions favour incumbents.
Spain	Concessions	Competition for the market rather than in it. Barriers to entry as concession competitions favour incumbents and in some cases there are long concession periods (up to 99 years)
Sweden	Liberalised	Number of services low despite liberalisation
UK	Liberalised	Fully liberalised. Local buses also liberalised except in the London region and Northern Ireland.

4.75 In Germany and Greece, the barriers to entry into the long distance regular coach market are explicit. In Greece, no companies other than the established KTEL are permitted to operate regular coach services, although there is nonetheless a significant coach market, partly as a result of the relatively limited rail system. In Germany, new operations are not permitted where they compete with the rail network, and the only significant regular routes operated are to/from Berlin, where the operators have licenses for historical reasons. This represents a significant restriction on consumer choice, not least because, where coach services do operate, we found that their fares were approximately 50% less than those charged by the national rail operator.

4.76 In many other Member States, there are indirect barriers to entry. For example, in Spain there is in theory competition for the market through the bidding process for new concessions, but in practice this process has been identified as favouring incumbents, due to:

- long concession periods, and the tendency of both the national and regional governments to extend concession periods after the concession has been granted (for example, in 2003 the Cataluña region extended 147 concessions, for a period of 25 years each);
- differences in the extent of the information available to incumbents and new entrants, which provides incumbents with an advantage when bidding for concessions;
- complex criteria for award of new concessions, which limit the incentive for new entrants to offer lower prices or better service quality, and which allow the

awarding authority significant discretion; and

- explicit discrimination in favour of the incumbent in the concession competitions (for example, the concession can be awarded to the incumbent even if another bidder scores 5% better, and the requirements regarding age of vehicles are less onerous for the incumbent).

4.77 Other examples of barriers to entry include:

- in Poland, permission to operate new services is required from regional authorities, but most do not adopt transparent criteria for when new services will be approved, and it can be difficult to obtain a license to operate in competition with an incumbent operator
- in Italy, requirements not to compete directly with rail services or existing coach services have been dropped, but it is still necessary to obtain a license and almost no new services have been licensed
- in Romania, incumbents have an advantage in concession competitions for similar reasons to those applying in Spain
- in Spain, the concession contracts for domestic services require use of coach terminals, but the terminal operators may be vertically integrated with other coach operators and in at least one case have been found to discriminate against new entrants (see section 6 below)

4.78 It appears that there are also a number of barriers to entry in many of the non case study States, although these restrictions often not always transparent, and it was not within the scope of this study to investigate them in detail. Several States appeared to restrict coach services where these would compete with the state-run rail service, on the same model as in Germany. States that appeared to do this included France, Switzerland and Austria. There seemed to be fewer such restrictions in place in the new Member States than in the EU15 States.

4.79 The UK regular coach market is the most liberalised of any large Member State. Except in the London region and in Northern Ireland, all regular bus and coach services are fully liberalised. Some basic regulations apply to the operation of local bus services (defined as those serving stops that are less than 24km apart), such as a requirement to notify the authorities of a timetable, and then operate the service in accordance with this timetable. However, there are no such requirements for long distance coach operations. There have recently been proposals to re-regulate the market for local bus services, in order to allow improved co-ordination of services and facilitate integration with other modes of public transport, but there has been no such proposal to change the liberalisation of long distance coach services, which is generally viewed as a success.

4.80 Most Member States impose few if any regulatory requirements on the operation of occasional services. The most important exception to this is Greece, where the government limits the total number of public coach licenses. As a result, the cost of acquiring a license is very high (comparable to the cost of acquiring the vehicle). Some other Member States, such as Germany, require authorisations to be issued for

operation of occasional services, but these are relatively easy to obtain provided it can be shown that the service is genuinely occasional.

## Conclusions

4.81 There are significant variations between Member States in the nature of the coach market and in the volume of coach travel. It is difficult to draw clear conclusions because of the limited nature of the data available, and inconsistencies in data, but our key conclusions are:

- measured in terms of passenger kilometres, coach services account for around 25% of total public transport within the European Union;
- the distinction between coach services and bus services are unclear in many States, and the distinction varies between States (for example many services classified as coach in France would be classified as local bus in the UK), but overall in the EU around 50% of bus/coach passenger kilometres are handled by services which would be classified as coach;
- the proportion of passenger journeys which are handled by coach services is much lower, as average journey lengths are long;
- regular coach services are a very important mode of long distance transport in some Member States, including Spain, Greece and Poland, but not in others such as Germany or Italy;
- occasional services account for around half of the coach market in most Member States in terms of passenger kilometres, and almost all of the coach market in Germany, but usually a lower proportion if measured in terms of journeys, as journey lengths tend to be longer for occasional services; and
- in most Member States, the vast majority of coach journeys are domestic.

4.82 We estimate that the EU coach sector has a turnover of around €15 billion per year, operates around 250,000 vehicles, and employs around 550,000 people.

4.83 For regular services, differences in the volume of coach travel partly reflect differences in the regulatory arrangements applying to the sector. Some western European States, such as Germany, prohibit the operation of most regular coach services, in order to improve the economic viability of the rail network. This is a significant limitation on consumer choice, and the evidence that we have collected indicates that the economic impact of this is likely to be regressive, because the regular coach services (where they are available) tend to charge significantly lower fares than the rail operator, and therefore make travel more accessible for citizens with lower incomes. In contrast, most States do not impose significant regulatory restrictions on the occasional coach sector.

## 5. SAFETY ISSUES

### Introduction

- 5.1 This section provides a summary of the work that has been undertaken as part of this study on coach accidents by the Vehicle Safety Research Centre of Loughborough University. The complete report has been included as an Appendix.
- 5.2 The objectives of this task are to understand the main causes of coach accidents, with a particular emphasis on understanding the role of driver fatigue; given the debate around the possible reintroduction of the derogation allowing drivers of international coach tours to work for 12 consecutive days.
- 5.3 The work conducted for the report contains four elements:
- Review of existing literature
  - Review of European accident databases
  - Review of UK-specific detailed data from DfT database
  - Review of specific coach crashes

### Summary of the work undertaken

#### *Review of existing literature*

- 5.4 The report includes a review of the literature concerned with the issues associated with driver fatigue. The literature does not cover coach driving specifically, and there is limited data available on professional driving, although it is possible to draw conclusions about the relevance of findings from suppositions about the specific nature of coach driving. Coach driving may involve factors such as; night driving, and long and straight roads, both of which are driving factors that have been shown to increase the risk of fatigue.
- 5.5 However, the literature also highlights the difficulty of isolating fatigue as the cause of an accident. There have been a number of studies which the report draws on, using data from Australia, the USA, and Europe, regarding the proportion of accidents and road fatalities which are caused by fatigue. However, the different studies show significantly different results. One study suggests that fatigue plays a role in around 30% of accidents, and of these, 90% are on inter-urban roads; however, another study finds that fatigue is only responsible for 1-4% of accidents.
- 5.6 The report highlights the fact that legislative approaches tend to focus on governing drivers hours rather than fatigue itself, which may remove some of the onus from the individual to the company. Importantly the literature distinguishes that time of task

has less impact on the onset of fatigue than other factors such as the time of day, sleep, physical fitness, shift patterns and age. Time on task is generally not considered to be a good indicator of accident risk.

*Review of European accident databases*

- 5.7 A review was undertaken of accident data published from the European CARE database (Community Road Accident Database) and also other existing European data sources. This report includes a summary of the various data sources and a description of the data available in them. In all the data examined it is difficult to separate coaches from a broader vehicle type description. In most cases 'bus or coach' is a single variable; in other cases other public service vehicles such as trams or trolley buses are also included. Accidents involving buses or coaches are responsible for only a small proportion of total road accident fatalities in Europe (2.5% in 2006), this is shown in Table 5.1 below. It should be noted though, that these figures are higher than the figures for fatalities attributed to bus or coach in the EC statistical pocketbook, as these figures include pedestrians and occupants of other vehicles.

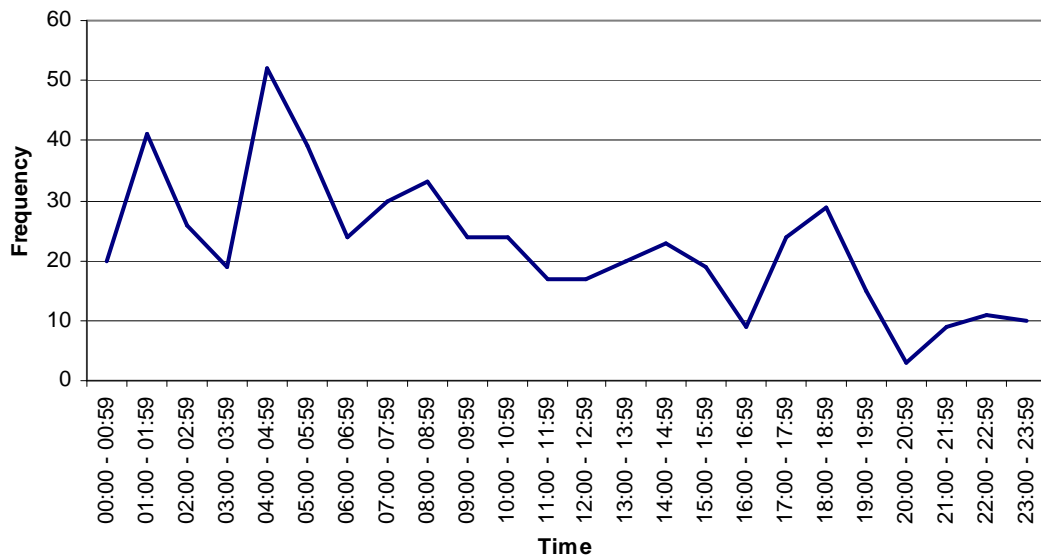
**TABLE 5.1 FATALITIES IN ACCIDENTS INVOLVING BUSES OR COACHES IN THE MEMBER STATES 2003 – 2006**

	2003	2004	2005	2006
Belgium	29	31	19	31
Czech	-	-	-	34
Denmark	26	15	11	14
Estonia	-	-	7	13
Greece	94	48	53	36
Spain	126	80	108	100
France	97	99	91	76
Ireland	2	-	-	-
Italy	122	125	-	-
Luxembourg	-	-	-	-
Hungary	71	58	62	64
Malta	-	-	1	0
Netherlands	21	-	-	-
Austria	20	24	10	19
Poland	-	-	252	-
Portugal	26	41	23	13
Finland	13	29	13	19
Sweden	33	16	13	36
UK	160	154	140	164
TOTAL (coach/bus)	840	720	803	619
Total (all)	29,243	26,919	26,060	24,684
Coach / Bus as a percentage of total	2.9%	2.7%	3.1%	2.5%

Source: CARE database

- 5.8 The published figures suggest that there is some evidence to support the findings of earlier studies looking at fatigue, in that there is an apparent increase in fatal accidents in the early morning and towards the end of the working day. This increase is more noteworthy on motorways than other road types. These results are illustrated in Figure 5.1 below.

**FIGURE 5.1 FATALITIES IN ACCIDENTS INVOLVING BUSES AND COACHES ON MOTORWAYS BY TIME OF DAY (1997-2007)**



Source: CARE database

5.9 While the literature and data available does show that there are a number of factors linked to fatigue that present an observed increase in the risk of an accident, none of these factors can be adequately linked to the fatigue that may be caused by trips over a higher number of days. Most observed correlation between fatigue and accidents is linked to the following;

- Personal factors; such as amount of sleep needed, general fitness & fitness to drive;
- Journey factors; such as, level of motorway driving as opposed to intra-urban driving
- External factors; such as, driving conditions.

5.10 However, the published data are not sufficiently detailed to assess the effect on accident risk of shift patterns, time spent driving and rest periods, so are not well-suited to addressing the question of the 12 day derogation.

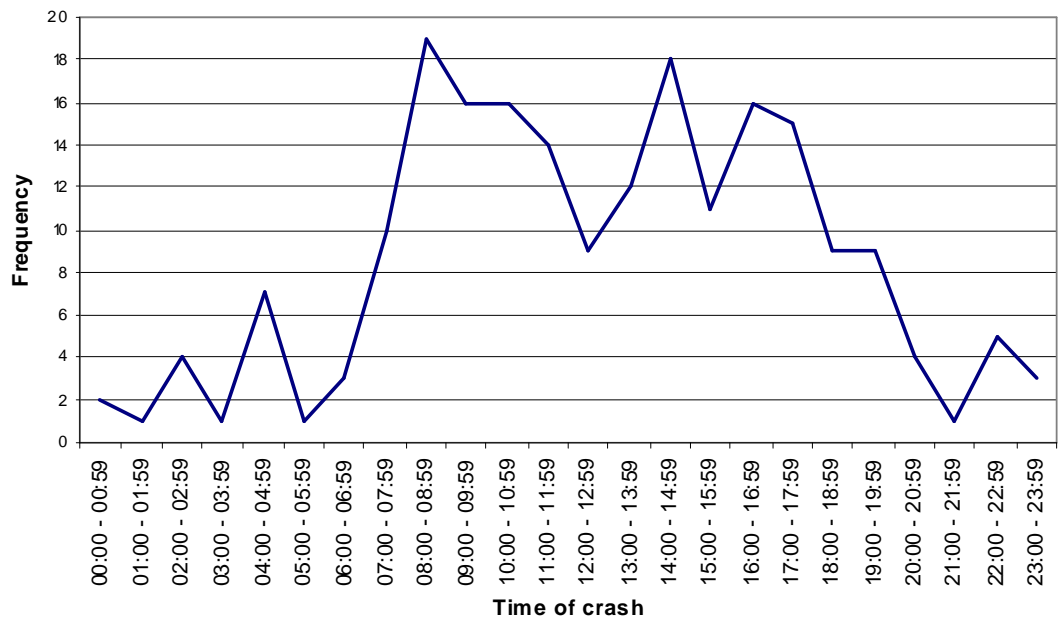
*Review of UK-specific detailed data from DfT database*

5.11 A review and analysis of the national accident data for Great Britain (STATS19) has been undertaken. Permission was obtained from the UK Department for Transport for the analysis of data for the years 2005 to 2007, using make/model and accident causation data fields. Initially it was considered that it may be possible to interrogate the data from this database at a more detailed level than the CARE database, however, the results of this analysis indicate that the STATS19 database is not ideally suited to addressing the question of the likely impact of the 12 day derogation on road safety

due to the difficulty of identifying the vehicle type of interest and the small sample of cases with fatigue identified as a causation variable.

- 5.12 However, it was possible to identify coaches and buses accidents only, an overview of these accidents on motorways by time of day shows the same pattern as that identified through the CARE analysis. This is illustrated in Figure 5.2 below.

**FIGURE 5.2 BUS AND COACH ACCIDENTS ON MOTORWAYS BY TIME OF DAY (2005-2007)**



Source: STATS19

- 5.13 Using the accident causation variable for fatigue that was identified within the STATS19 database, detailed analysis of the relevant coach fatigue cases (n=24) does not give a clear picture of the types of accident or accident scenario expected for these accidents. Despite the very small number of cases, the in-depth accident review (n=4) indicates that accident time could be an indicator for fatigue accidents. This follows on from the literature review on the subject where time of day was identified as a major indicator of fatigue accidents.

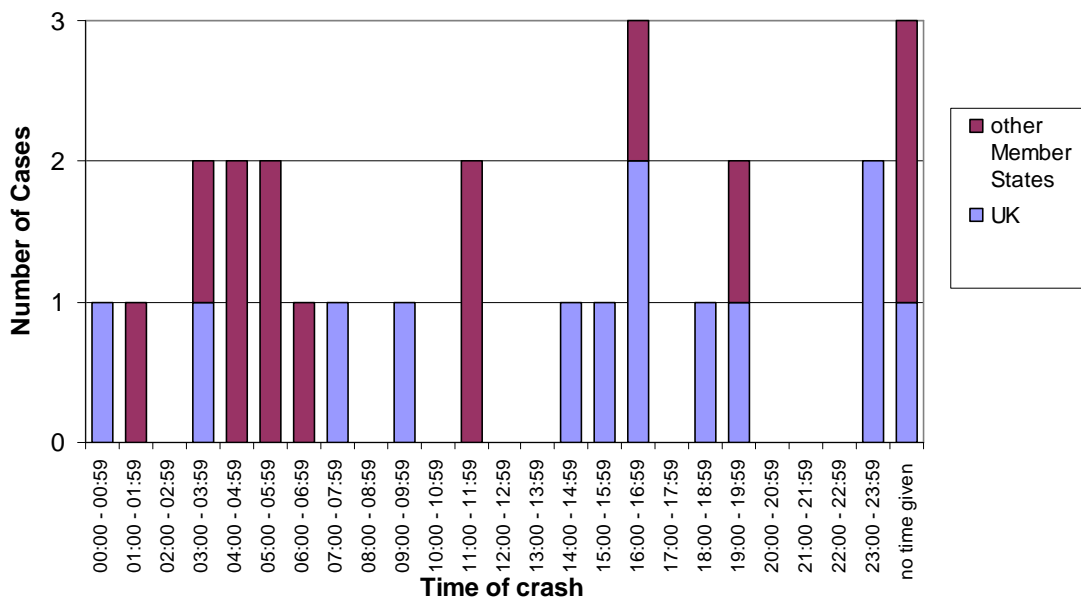
*Review of specific coach crashes*

- 5.14 A review has also been undertaken of a number of recent coach crashes in the UK and other Member States. These crashes were reported in the media and/or came to the attention of the VSRC through its routine accident investigation work. As far as is possible, information has been gathered in relation to the circumstances of the crash, the causes of the crash and the recommendations. 13 of these accidents occurred in the UK and 13 in other Member States.

5.15 Of all these, 12 (46%) cases were considered to be caused by factors other than fatigue and 1 of these cases occurred at a peak time for fatigue (16.00hrs). However, 4 cases (15%) had a specific reference to fatigue or had strong evidence that fatigue was a cause. In addition, 1 of these cases occurred at a peak time for fatigue (16.00hrs). In a further 10 cases (39%) fatigue may have been a contributory factor as the time of the crash, or the nature of the crash circumstances or journey type, are consistent with the main indicators of fatigue related accidents. In addition, 1 of these cases occurred at a peak time for fatigue (06.00hrs). As it is equally likely that fatigue did not play a part in a number of these 10 crashes, no firm conclusions can be drawn regarding the actual role of fatigue.

5.16 Figure 5.3 below, taken from the VSRC report, shows the distribution by time of day of the 26 coach accident case studies.

**FIGURE 5.3 DISTRIBUTION OF CRASHES IN THE UK AND OTHER MEMBER STATES BY TIME (N=26)**



5.17 The causes of crashes are complex and in many cases it is difficult to determine if fatigue played a role. However, whilst the number of cases is small, these findings support the indication from the literature that fatigue related accidents are more prevalent than the available statistical data might otherwise suggest.

5.18 Whilst the literature demonstrates that fatigue is a contributory factor in road accidents involving coaches, it is not possible to quantify this contribution with the available accident data. The European data are not sufficiently detailed regarding the number of coach crashes or the information that is necessary to determine the role of fatigue. Using the national data for Great Britain (STATS19) the data are not sufficiently detailed regarding the number of coach crashes, even when using the make/model

information.

- 5.19 Using the accident causation field for fatigue, the number of cases that can be confirmed and investigated is so small that reliable conclusions cannot be drawn. However, analysis of both the European data and the data for Great Britain, gives some indications that fatigue might be a contributory factor when the time of the accident (small hours of the morning and late afternoon) and the type of road (motorway) are considered. The review of a small number (26) of detailed crash reports of coach accidents across the EU also demonstrate that fatigue is evident as a contributory factor in some of these cases.

## Conclusions

- 5.20 The data indicate that the total contribution to fatalities of accidents where a coach is involved is relatively small. As is shown in Figure 5.1 bus and coach accidents accounted for only 2.5% of fatalities in 2006. The proportion of those accidents accounted for by coaches is indefinable due to the way the vehicles are recorded. As stated above, the EC pocketbook statistics report a lower number as pedestrians and occupants of other vehicles are reported separately.
- 5.21 Within this relatively small number of fatalities, the studied literature suggests that somewhere between 1-4% and 30% may have fatigue as a contributory factor. However it is not possible to make estimates of the total contribution of fatigue with the data currently available. The European data are not sufficiently detailed regarding the exact number of coach crashes or the information that is necessary to determine the role of fatigue.
- 5.22 Recommendations to define a common Accident Data Set (CADaS) which formed part of the SafetyNet project ([www.erso.eu](http://www.erso.eu)) include a variable to indicate fatigue as a causal factor in accidents. However, adoption by the Member States of this set of variables is voluntary at the current time. In any case, in those countries which do adopt this set of variables, data will still be collected by police officers at the scene and will continue to be subject to the difficulties in identifying the presence of impairment due to fatigue.
- 5.23 Using the national data for Great Britain (STATS19) the data are not sufficiently detailed regarding the number of coach crashes, even when using the make/model information. Using the accident causation field for fatigue, the number of cases that can be confirmed and investigated is so small that reliable conclusions cannot be drawn.
- 5.24 Analysis of both the European data and the data for Great Britain, gives some indications that fatigue might be a contributory factor when the time of the accident (small hours of the morning and late afternoon) and the type of road (motorway) are considered. However, limitations in the available exposure data make it very difficult to separate the effect of variations in traffic conditions at different times of the day.

- 5.25 Data concerning the level of exposure to accidents among the population is currently collected across Europe using fairly simple measures. The Safetynet project identified deficiencies in current exposure data and also made proposals for the future collection of exposure data to better address questions relating to the scale of specific safety issues such as this one. However, it is likely to be several years before all countries can collect comparable and compatible exposure data. In the short term it is only the simplest indicators (population, registered drivers, registered vehicles) that are likely to be considered feasible for all countries to collect. However, it is detailed data on the more complex indicators (time spent in traffic, number of trips) that would be the most useful in addressing the particular question of the role of fatigue. These are unlikely to be available on a European level for some years.
- 5.26 It is unlikely that suitable exposure data are currently available in sufficient countries to make a representative sample possible. Indeed, it is likely that such data would be highly variable, with factors such as local customs, latitude and social and economic factors having a significant impact on variations in traffic conditions throughout the day, making it problematic to generalise to the whole of Europe.
- 5.27 The review of a small number (26) of detailed crash reports of coach accidents in the UK and other Member States also demonstrated that fatigue is evident as a contributory factor in some of these cases. However, this sample is small and cannot be considered as representative of all coach crashes in either the UK or other member states, and it is not therefore possible to use this information to determine estimates for the number of cases in which fatigue may have played a role in crashes across Europe.
- 5.1 Therefore, in terms of addressing the specific question of the safety implications of reinstating the derogation of the drivers' hours, the data that are currently available in Europe are not sufficiently detailed to address this issue. Nonetheless, there are a host of other policy measures that could be taken and that are more likely to be effective in addressing the risk of fatigue related fatalities. The VSRC report cites work being undertaken by the European Road Safety Observatory, and this body details a number of strategies that may be particularly useful in targeting fatigue related accidents in coaches, namely;
- Fatigue management plans
  - Driver awareness campaigns
  - Other effective counter measures
- 5.2 Fatigue management plans have been introduced in Australia and the USA to good effect, and aim to ensure a consolidated approach to dealing with the risk of driving fatigue, for example, in a road transport business. While driver hours regulations offer a minimum daily and weekly rest period, these are minimums and anecdotal evidence suggests that the minimum can still be too little for drivers to maintain a healthy sleep pattern. To promote fatigue management plans would require the support of the coach industry, and consideration of personal circumstances in the situations of drivers.

- 5.3 Driver awareness campaigns have proven to be effective in raising awareness of tiredness and its dangers.<sup>4</sup> The most effective of these are highlighted on the ERSO website.<sup>5</sup>
- 5.4 Other counter-measures that can prove successful as part of driver education can include the development of training for drivers to help them deal with tiredness, thereby addressing the specific problem. This is linked into the a key conclusion of the VSRC report in that coach drivers are less in a position to deal with their tiredness than truck drivers or private car drivers. Coach drivers are potentially more likely to avoid taking a break as their passengers would not be happy to make an unscheduled stop. An American Bus Association initiative has sought to address this by providing handouts containing information on rest time rules to passengers. Furthermore, it is essential that coach drivers at risk of fatigue related accidents are openly scheduled appropriate breaks and have the training to deal with situations that may arise from unexpected onset of fatigue.

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<sup>4</sup> <http://www.dft.gov.uk/pgr/roadsafety/strategytargetsperformance/rsap/mp30oct03/rsap0308publicityreport>

<sup>5</sup> [http://www.erso.eu/knowledge/content/55\\_fatigue/publicity\\_campaigns.htm](http://www.erso.eu/knowledge/content/55_fatigue/publicity_campaigns.htm)

## 6. COACH TERMINALS

### Introduction

6.1 We have undertaken studies of coach terminals in each of the Member States selected as case studies. The purpose of this analysis is to:

- identify if access to terminals directly or indirectly limits new entry to the coach market; and
- determine whether the number of coach terminals and the facilities provided are sufficient and appropriate.

6.2 Access to coach terminals is primarily relevant as an issue for regular coach transport. Occasional coach transport is mostly carried out on the routes specified by the organisation or individual that procures the service, and special regular transport is based around the school or workplace concerned, so these do not usually require use of coach terminals (although we have identified that a small number of occasional services do operate from coach terminals).

6.3 In order to assess these issues, we have undertaken an evaluation of a coach terminal in each of the Member States selected as case studies. In most cases, the selected terminal is the largest terminal in the Member State concerned, but we also identify whether the terminal is representative of the other terminals in the State. The detailed evaluation of the coach terminals concerned is provided in appendix C. This section summarises the conclusions of this analysis.

### Our approach

6.4 Our team visited each of the coach terminals and undertook face-to-face interviews with the terminal operator and one of the main coach operators at the terminal. A potential new entrant to the terminal was also interviewed, where one could be identified.

6.5 As part of the research, we also contacted the Pan-European Association of Coach Terminal Operators, who provided some information on other terminals. This is also included in appendix C.

### Access to terminals

6.6 This section outlines the extent to which access to terminals may be a factor limiting competition in the market. It discusses:

- whether sufficient capacity is available at the terminals;
- the structure of ownership and management of the terminals, and whether this has the potential to lead to unfair treatment of new entrants;

- procedures for ticket sales;
- pricing of access to the terminal; and
- other issues identified relating to access.

#### *Availability of capacity*

- 6.7 Some of the terminals that we evaluated face capacity constraints at certain peak times. However there was no evidence that the coach market is being constrained or rendered uncompetitive by a restriction of capacity at coach terminals.
- 6.8 Several of the terminal operators informed us that there had been a decline in the coach market over the last ten years, and therefore the amount of terminal capacity has increased; this applied particularly in central and eastern European States, where rapidly increasing car ownership has reduced the demand for long distance coach travel. In some States, this also reflected some operators deciding to operate services to stops other than the main coach terminal, where they considered that this was more convenient for passengers.
- 6.9 Table 6.1 summarises the issues with terminal capacity that we have identified.

**TABLE 6.1 CAPACITY ISSUES IDENTIFIED**

<b>Terminal</b>	<b>Capacity restriction</b>
Berlin	Not constrained overall, but limits at certain peak periods each day, due to 'hub' strategies of various operators
Thessaloniki	None identified – terminal is relatively new, constructed in 2002. However, terminals in Athens do lack capacity particularly in the summer.
Bologna	Limited only for a short period in the middle of the day
Warsaw	None. However operators have been denied access to other terminals in Poland on the basis of lack of capacity.
Bucharest	None, due to decline in traffic and availability of other terminals
Madrid	Lack of capacity has been used as an excuse to restrict entry for an international operator (see under ownership/management of terminals)
Stockholm	None, even in peak periods
London	Limited at some peak periods (primarily Friday and Sunday afternoons)

- 6.10 There were some examples of best practice from terminals acting in order to cope with demand. For example, Stockholm's Cityterminalen is currently looking at reducing the turnaround time for coaches from 30 minutes to 15 minutes, which would double capacity with no significant detrimental effects. Victoria Coach station only allows most coaches (with certain exceptions such as the shuttle services to airports and Oxford) to depart on the hour and on the half hour at present, which clearly limits the capacity of the terminal, but is intended to avoid conflicting moves between arriving and departing vehicles.

6.11 A key issue is, where there are capacity restrictions, how it is decided to distribute slots between the operators. Unfortunately, this is often not transparent, and coach operators in Poland did inform us that they had been refused access to terminals on the basis of capacity restrictions which were unclear. In contrast, Victoria Coach Station in London is an example of good practice: operators have to reapply for slots each year, so new entrants have equal opportunity to gain access at peak periods. This contrasts with other transport sectors, for example airports, where under European law incumbents have grandfather rights to slots and therefore capacity constraints create a major barrier to entry. However, at the terminal we studied in Spain, the facilities which appear to be most restricted (ticket sales booths) are allocated on the basis of grandfather rights.

*Financing of terminals*

6.12 In the majority of cases, construction of the terminals we considered was financed using public funds (either directly, or as in Greece, through subsidised coach operators). The main exception to this is Bologna, where a group of private construction companies built the terminal. In Madrid about half of the funds were provided by the concessionaire, and in London it was funded by an association of coach operators (although this was in an era prior to significant state involvement in public transport investment).

6.13 Information on the finances of terminal operations is limited. However, it appears that in the majority of cases they generate an operating profit, in that operating costs are exceeded by departure slot charges and other sources of revenue such as leasing retail space. This tends to be the case even where there is vertical integration between coach and terminal operation (and hence ‘profit’ from terminal operation is just a transfer of funds from the coach operation side of the business). This is a result of charges being set sufficiently high to generate a profit from other coach operators using the terminals.

6.14 The companies which operate the terminals are a mixture of state-owned companies, private concessionaires and coach operators. This is summarised in Table 6.2.

**TABLE 6.2 FINANCING OF TERMINALS**

<b>Terminal</b>	<b>Construction</b>	<b>Operation</b>
Berlin	Publicly funded	Operated at a profit by a state-owned company
Thessaloniki	Funded by a group of (state-subsidised) KTEL coach operators	Operated by KTEL, but unclear on what financial basis
Bologna	Funded by a group of private construction companies	Operated at a profit by a concessionaire
Warsaw	Publicly funded	Operated by coach operator. Official figures unavailable, but one source suggested the terminal is profitable
Bucharest	Publicly funded	Operated by coach operator, official

		figures unavailable, but charges likely to be set at a profitable level
Madrid	Joint funding between City Council and concessionaire	Operated at a profit by a concessionaire
Stockholm	State-financed as part of wider transport development	Operated commercially (but owned by the state, and subsidised through free rent)
London	Funded by an association of private coach operators (who were later nationalised)	Operated commercially (but owned by the state). Some capital funding provided by the public sector

#### *Ownership and management of the terminal*

- 6.15 There is a particular risk that access to terminals may be a barrier to entry if the company that manages the terminal is vertically integrated with one of the coach operators. Where the terminal operator is independent of coach operators, it is more likely that they will treat operators equally, although this is not guaranteed and they may, for example, still face incentives to protect the largest operator.
- 6.16 We found that there were several models of ownership across the terminals that we studied, illustrated in Table 6.3. Four of the eight coach terminals that we reviewed were at owned at least partly by one of the operators of the terminal.

**TABLE 6.3 OWNERSHIP OF TERMINAL MANAGEMENT COMPANY**

Terminal	Vertically integrated	Details on ownership
Berlin	No	Federal State of Berlin
Thessaloniki	Yes	The Co-operative Partnership, for Northern Greece & Thessalia KTEL companies (the sole operator of regular coach services)
Bologna	No	The Municipality of Bologna, the Province of Bologna and ATC (the local public transport operator)
Warsaw	Yes	PPKS Warszawa, the major bus & coach operator
Bucharest	Yes	Atlassib Group, the biggest coach operator in Romania
Madrid	Yes	Avanza group, one of the largest coach operators at the terminal, owns 56% of the concession company
Stockholm	No	Cityterminalen is owned by the Swedish government (40%), Stockholm region (20%), and by the city traffic authority, SL (40%)
London	No	Transport for London, the city transport authority, own and operate the terminal on a commercial basis

- 6.17 We found a number of examples where access to terminals could act as a barrier to entry. The main examples were:
- **Spain:** There is no issue of access for domestic coach services, as the concession agreements specify which terminals must be used, and the terminal operator is

required to provide access. However, this does not apply to international services, and the operator of the largest Madrid terminal was recently fined nearly €0.5 million by the national competition authority for abusing its dominant position in order to restrict access to an international operator which launched services in competition with a company with which it was vertically integrated.

- **Poland:** Terminals are generally owned by the PPKS companies, which are also the main bus and coach operator serving the terminal. One of the major private coach operators in Poland informed us that it had experienced difficulties in gaining access to terminals in cities other than Warsaw, which under Polish law is a precondition for gaining a license to operate a new regular route.
- **Romania:** Most of the coach terminals are owned/managed by coach operators. Although in principle these have to give equitable access to all operators, other coach operators believed that they were placed at a competitive disadvantage because they were required to use terminals that were managed by their competitors. The main issue was that the terminal operator would have access to additional information on their operation, such as the number of passengers they carried, which could give them a competitive advantage.

6.18 The Romanian operator interviewed suggested that the creation of a new terminal with independent ownership and management structure (along the lines of the new terminal that is being developed at Brasov, elsewhere in Romania) would improve the situation in Bucharest.

6.19 However, in some Member States the issue of access to terminals is irrelevant, because the coach market is highly restricted or regulated in other ways (as discussed in section 4 above). Of the Member States selected as case studies, this applied primarily in Germany and Greece:

- in Germany, the terminal is operated independently from operators, but this does not facilitate access to the domestic market because the government has a policy of not licensing new regular coach services where these compete with existing public transport links; and
- in Greece, the KTEL companies (the operators of the regular coach services) are also the owners of the terminals, which could in principle create a barrier to entry; however the key issue is that no companies other than the KTEL are permitted to operate domestic regular coach services, and the KTEL do not compete with each other.

#### *Ticket sales*

6.20 Ticket sales is another potential area in which there could be discrimination between operators, particularly if the company managing the ticket sales office is vertically integrated with an operator. There have been some examples of this being a problem in the rail sector where there are multiple operators on the same route, and in the air transport sector the Commission has taken measures to ensure equitable treatment of carriers on ticket distribution systems. However, in practice, ticket sales were not cited as a problem except in Madrid (as discussed above).

6.21 Many of the terminals, including those in London, Berlin and Bucharest offered a

single ticket sales point which sold tickets for all operators on a non-discriminatory basis, and agreement has been reached to adopt a similar arrangement in Stockholm. At the terminals in Warsaw and Madrid, operators have separate windows selling their own tickets.

### *Pricing*

- 6.22 The main issue identified in relation to pricing is that terminals often offered volume discounts to operators (Table 6.4 below). At some terminals, these could be quite substantial; the most extreme example we found was at the ZOB Hamburg terminal, where the maximum volume discount was almost 88%.

**TABLE 6.4 VOLUME DISCOUNTS AVAILABLE**

Terminal	Maximum discount	Notes
Berlin	50%	At Hamburg terminal higher maximum discounts available (88%)
Thessaloniki	Unclear	
Bologna	None	
Warsaw	20%	Also reported that non-PPKS/PKS companies charged up to 50% more
Bucharest	None	
Madrid	None	Access fees are set by the public authorities not the terminal
Stockholm	43%	The largest operator, the airport coach link, has negotiated a substantially greater discount
London	54%	

- 6.23 We were also informed that, at some terminals in Poland, the local coach operator is not charged for its departures, whereas private operators are required to pay charges. There is no evidence to substantiate this although, by definition, it is unlikely that such an arrangement would be made public.
- 6.24 Volume discounts inevitably represent a barrier to entry, because a new entrant will have to pay higher charges than an incumbent that already operates a large number of services. However, the availability of some volume discount also reflects the greater costs that the terminal operator will have in handling one-off operations and is therefore consistent with European Union policy that infrastructure pricing should reflect marginal costs. Nonetheless, it is not clear that the scale of the discounts available at some of the terminals are reflective of the difference in costs that the terminal operator is likely to experience. We also note that the Commission has taken measures in the rail and air transport sectors to ensure that access fees are equivalent for all operators.
- 6.25 It is notable that there is no correlation between the terminals at which volume

discounts were available and the terminals which were owned or managed by a coach operator. The fact that discounts were available even at terminals run on a commercial basis by an organisation completely independent of the operators, such as Victoria Coach Station in London, indicates that terminal operators must believe that such discounts are in their own commercial best interests.

- 6.26 Other differences in charges could distort the coach market in other ways, whilst not necessarily distorting competition between operators. For example, the charges at the Madrid terminal vary depending on the length of the coach journey concerned, and there are much higher charges for international journeys than domestic journeys. This results in a cross-subsidy from international and long distance domestic passengers to other passengers. We note again that, in the air transport sector, the Commission has taken measures to limit these cross-subsidies.

*Other issues*

- 6.27 We found few explicit regulatory restrictions on the ability to set up new, competing coach terminals (the main exception to this is Spain, where the concession contracts specify which terminal must be used). In both Poland and the UK, some operators have decided to serve on-street stops rather than the main coach terminal, often because they consider that the terminal location is less convenient for passengers.

- 6.28 However, in practice, the availability of space and the cost of land in city centres is a major limitation on the ability of operators to establish new terminals. In addition, the fact that demand for long distance coach travel is in many Member States not increasing significantly, means that there is unlikely to be substantial need for the development of new coach terminals.

- 6.29 In Spain, it has been identified that the ownership of terminals could be a barrier to entry to the domestic regular coach market even though terminal operators have to grant access to the operators that are granted the concessions to run each route. This is because one of the criteria for the award of coach concessions is the facilities and especially the terminals held by the operator. A report recently undertaken for the competition authority identified that this the inclusion of this criteria is a barrier to entry, because inevitably the incumbent operators are more likely to own terminals<sup>6</sup>.

**Facilities provided at terminals**

- 6.30 The individual profiles of the terminals in appendix C provide details on the facilities that each provides. We found that the facilities provided were generally comparable to those provided at main railway stations, such as:

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<sup>6</sup> Comisión Nacional de la Competencia, Competencia en el transporte interurbano de viajeros en autobús en España, 2008

- waiting rooms;
  - basic retail and catering facilities;
  - cash machines;
  - luggage storage office and/or lockers;
  - toilets; and
  - taxi ranks.
- 6.31 However, there were two areas in which we found significant differences between coach terminals:
- the quality of passenger information provided; and
  - connections to local public transport
- 6.32 At some terminals, extensive passenger information was provided. For example, at Victoria Coach Station, there are electronic information displays, and coach drivers call the duty manager at the coach station to provide updated information on arrival times. The main passenger information board is automatically linked to information displays at each departure gate. At other terminals, the information available is far more limited; for example, in Warsaw and Bucharest, the main source of information was printed timetables.
- 6.33 Connections to public transport are also variable (Table 6.5). The coach terminals in Madrid and Stockholm were directly integrated with the rail and metro systems, and the terminal in Berlin had direct access to a metro station. The other terminals were served by local buses but did not have direct links to rail or metro stations.

**TABLE 6.5 CONNECTIONS TO LOCAL PUBLIC TRANSPORT**

<b>Terminal</b>	<b>Public transport connections available</b>
Berlin	Direct access to metro system but not to suburban rail system
Thessaloniki	Coach terminal also serves as key terminal for local buses
Bologna	Approximately 300 metres from rail station. Also served by local buses.
Warsaw	Served by local buses only
Bucharest	Not directly on metro network, but close to station
Madrid	Metro and suburban rail stations within same building as coach terminal; also directly served by some local buses.
Stockholm	The terminal is situated directly above Stockholm's main rail station, which also has a metro station
London	Approximately 500 metres from Victoria rail, underground and bus station. Directly served by some local buses.

- 6.34 This situation appeared to be fairly typical of other coach terminals within the Member States:
- in the UK, most bus/coach terminals are distant from the rail stations (there is no significant metro network outside London); whereas

- other main coach terminals in Spain are well integrated with local rail stations (for example, the main terminals in Barcelona and Zaragoza are co-located with the main rail station), and of the other terminals in Madrid, two are directly integrated with metro interchanges, and the other is adjacent to one.

### Conclusions

- 6.35 In most cases, the availability of and access to terminal infrastructure did not appear to be a significant constraint to development of the regular coach market, although in two of the case studies (Germany and Greece), this was largely because other regulations prevented access to the market. As discussed above, this is unlikely to be an issue for the special regular or occasional coach markets.
- 6.36 The main Member State in which access to terminals did appear to be a significant issue was Poland, where virtually all terminals are owned and managed by the dominant bus operators, the PKS/PPKS companies, and there have been complaints of discriminatory treatment by other operators. It is important that, where there is vertical integration between terminal and coach operators, systems and regulations are in place to ensure that other operators are able to access to terminals on an equitable basis. This should include fully independent management of the terminal company.
- 6.37 We identified one serious case in Spain of illegal abuse of a dominant position by a vertically integrated terminal operator. This had been properly investigated by the competition authority, and the sanction imposed on the terminal operator should be a significant deterrent to similar behaviour by other terminal operators in Spain in the future. However, the amount of time required for this investigation (and probably any investigation under competition law) means that this may not be sufficient to guarantee equitable access for all operators.
- 6.38 Given the resources available for this study, our analysis of this issue was limited to the States selected as case studies. However, we were informed by coach operators that access to terminals has been a significant issue for the operation of international regular services to/from some other Member States. For example, one coach operator informed us that permission to use the bus/coach terminal in Strasbourg had been refused, and that in Austria operators had been forced to use inconvenient stops on the outskirts of cities rather than the city centre terminals. This creates particular difficulties for passengers with reduced mobility (PRMs), and in the future might risk inconsistency with passenger rights legislation. Operators also informed us that there could be safety issues with using stops by busy roads instead of terminals.
- 6.39 An operator also told us that a number of other major cities do not have coach terminals which they are permitted to use, including Paris, Bordeaux, Brussels, Amsterdam, Copenhagen, Florence and Milan. As a result of the lack of local authority provision, in some cases they have built their own terminals, although these are often on out-of-town sites. This does not provide convenient connections with other transport services in the city, and so misses the opportunity to create integrated transport facilities.



## 7. CASE STUDY OF THE 12 DAY RULE

### Introduction

- 7.1 Regulation 561/2006 introduced a number of changes to the rules regarding rest periods for coach drivers. The most significant of these was to abolish the derogation by which drivers of international non-regular services (coach tours) were able to work for 12 days without a weekly rest period. This change was strongly opposed by the coach operators and some other stakeholders.
- 7.2 At the time this study was planned, the Commission had intended that it should include a case study of the impact of abolition of (and potential reinstatement of) the 12 day rule. However legislative developments reduced the need for an extensive piece of work to be undertaken. On 5 June 2008, the European Parliament voted an ‘initiative report’ to reinstate the rule. In addition, a detailed study had been commissioned on behalf of the Parliament into the abolition of the derogation. Therefore, the Commission asked us to undertake a critical review of this study and make adjustments to build on this work where appropriate.
- 7.3 As part of this study, an analysis of coach accidents has been undertaken by the Vehicle Safety Research Centre (VSRC). The Commission requested that this be focussed on addressing the safety impact of the 12 day derogation. The conclusions of this report are summarised in section 4 of this document, and the entire report is contained in the Appendices. The conclusions are also taken into account in our analysis below of the 12 day derogation.

### Summary of conclusions

- 7.4 The study, undertaken by PwC, reviews the economic, social and safety implications of the abolition of the 12 day derogation. In summary, it argues that the abolition of the derogation would have strongly negative economic impacts, without having significant positive safety or social benefits. It therefore recommends reintroduction of the derogation, although possibly with some measures to safeguard the limited social and safety benefits achieved through the abolition of the derogation.
- 7.5 On the basis of the review that we have undertaken, we believe that the PwC study may have significantly overestimated the economic impact of the abolition of the derogation, and also possibly underestimated the social impacts. The analysis that has been commissioned as part of this study shows that it is not possible to quantify the safety impact of the withdrawal of the derogation.
- 7.6 PwC’s conclusions may partly reflect the approach that they adopted, which was a combination of statistical analysis and review of other published reports, supplemented with surveys of coach operators, but without apparently any evidence of equivalent surveys of drivers or their representatives (it is not clear from the report who was consulted).

- 7.7 We have estimated that the economic impact of the derogation is likely to be over 90% less than PwC have estimated, but still might be around €81 million. We initially sought to estimate the monetary value of the safety benefit in order to compare it to our lower estimate of the economic impact, but on the basis of the research undertaken for this study, we have concluded that this cannot be quantified on the basis of the information available. However, we agree with the conclusion of the PwC study that the impact is probably small, as coach is already a relatively safe form of transport (although, as discussed in more in paragraph 7.26 below, in our view the data cited by PwC overstates how safe coach is).
- 7.8 It should be noted that the analysis that was undertaken by PwC, and which is reviewed in this report, relates only to the impact of the 12 day derogation on international coach tours. The possibility of extending the derogation to other coach services has not been considered as part of this analysis.

### **Economic impacts**

- 7.9 The study argues that coach trips account for 45% of organised tours, that 90% of these tours exceed 6 days, and that the abolition of the derogation will lead to increases in the coach component of the cost of holidays of 15-20%. It then argues that this will result in increases to the total cost of the trips of 3%, which leads to a reduction in demand of 5.1%, and a total reduction in the size of the European tourism sector of €1.1 billion (0.3%).
- 7.10 We have reviewed the assumptions and rationale set out in the report. In our view, it is likely to significantly overestimate the impact of the abolition of the derogation. Nonetheless, even taking this into account, the economic impact could still be significant. The rest of this section sets out the issues we have identified with the economic analysis in the report.
- 7.11 The estimate that coach trips account for 45% of international trips organised by tour operators is based on PwC's survey of tour operators, but seems to be inconsistent with the figure it presents on mode of transport used by visitors arriving in each Member State (which indicate that only around 10% of visitors staying more than 4 nights arrive by coach), and with the figures it presents for the proportion of total tourism that is coach related (which according to the report does not exceed 15.8% in any Member State). We have also checked this figure against statistics from the UK, which show that in 2008:
- 22.6 million passengers used charter flights between the UK and other EU Member States; and
  - 2.4 million passengers used international coach services as part of inclusive tours<sup>7</sup>

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<sup>7</sup> Sources: UK CAA Airport Statistics and International Passenger Survey

- 7.12 Therefore, the UK data also implies that coaches account for around 10% of international inclusive tour journeys. It is not possible to estimate an equivalent figure for the whole of the EU given that no definitive source exists, but in our view it is likely that the economic value of the international coach tourism sector is considerably less than indicated.
- 7.13 The estimate that 90% of coach tours last more than 6 days is based on the PwC survey of tour operators. However, it is inconsistent with the other source of data presented in the report for this, which is a survey of the UK market which shows that only 48.9% of coach tour holidays exceed 6 days. It is also inconsistent with some other data we have collected in the course of our study: for example, surveys undertaken in Sweden show that the average length of a coach holiday is 2-4 nights. These figures cover both domestic and international coach tours as no specific data for international coach tours was available. No consistent data is available for the other Member States. There is a risk that the methodology adopted, based on a survey which was clearly related to the 12 day rule derogation, will have led to an overestimate of the proportion of trips affected.
- 7.14 The estimate of an increase in costs of 15-20% is based on the additional salary, travel and accommodation costs incurred by a second driver travelling out to join a 12 day coach tour, and associated incremental administrative costs. In our view, the approach used is reasonable, but the assumptions are likely to lead to an overestimation of these costs:
- As acknowledged in the report, for some coach tours a ‘coach free day’ can be inserted (for example if the tour includes visits to major cities, or excursions by boat), although this is difficult for certain other types of tours especially those in rural areas. Therefore, not all tours that are longer than 6 days would need to incur the costs of a second driver. The report states that 31% of tour operators would consider a coach free day but does not take this into account in the calculation of the net economic impact.
  - As an alternative, the first driver could return to base at the end of the 6 days and a replacement driver could travel out to cover the remainder of the tour. The incremental cost associated with doing this would be lower. This possibility is not discussed in the report.
  - Use of a 12 day itinerary as the basis of the calculation increases the proportionate additional costs arising from the abolition of the derogation. A 14 day tour would have needed two drivers even with the derogation, and therefore the incremental costs would have been lower.
  - The study assumes that, if a second driver does need to travel out to join the trip, two full paid working days are used for travel. In practice this is likely to be an overestimate – particularly if the tour is close to a city, travel is unlikely to require one full day in each direction.
  - In addition, there are other ways that the coach tourism sector could adapt – some of which might be consistent with broader market trends – for example by transferring passengers by air from their home region to the region in which the tour takes place, rather than taking them by coach, thereby reducing the number of days coach transport required.

- 7.15 The study then argues that the increase in costs of the overall trip would be 3%, taking into account the proportion of the cost of the trip that is accounted for by the coach and driver costs. Using estimates of the price elasticity for holidays of 1.7-1.8, it estimates that the reduction in demand is 5.1%, and this reduces the overall size of the European tourism sector by €1.1 billion. This is the estimated economic impact of the abolition of the derogation.
- 7.16 In our view, even if the reduction in demand for coach tours approaches this level, the impact on the overall size of the tourism sector is exaggerated. This is because many passengers who decide not to take coach tours will decide instead to take other types of holidays and therefore the loss to the tourism sector is reduced. In some cases these alternative holidays might be outside Europe (particularly in the case of visitors to Europe from Asia). However, in most cases the alternative holiday would be within Europe, as most coach tour customers are European residents and long haul travel beyond Europe is more expensive, uncomfortable and time consuming.
- 7.17 Even where the customer decides as a result of the price increase not to take a holiday, they are likely to spend at least a proportion of the price of the holiday on other goods. This will generate economic activity in other areas of the European economy. Therefore, again the economic impact is lower.
- 7.18 In our view the combination of these factors is likely to reduce the estimate of the economic impact of the abolition of the derogation significantly. There is inevitably significant uncertainty about many of the values that are used, and it is not within the scope of this study to undertake primary research to attempt to identify alternative values. However, we have calculated an **indicative** value of the adjustment that in our view might need to be made to arrive at a more appropriate figure:
- the total turnover of the coach holiday sector is at least 50% less than assumed, because the proportion of package holidays taken by coach is less than the 45% assumed by PwC;
  - the proportion of these tours which exceed 6 days would be less than the 90% assumed by PwC on the basis of their survey (for comparison here we use a value of 48.9% based on the actual figure for the UK presented in the report);
  - there would be no impact on 31% of tours, for which even according to PwC's survey, a coach-free day could be inserted;
  - the incremental cost of a second driver could be 25% less than indicated, because it would not always require two full days travel time, and in some cases alternative approaches could be adopted by the operators; and
  - at least 50% of the value of any coach holidays not undertaken would be used for other holidays within Europe.
- 7.19 Our indicative alternative calculation is summarised in Table 7.1 below. The result of the alternative assumptions we have used is that the economic impact of the withdrawal of the 12 day derogation is over 90% less than estimated by PwC. We should emphasise that these figures are indicative.

**TABLE 7.1 CALCULATION OF ECONOMIC IMPACT OF WITHDRAWAL OF COACH TOURISM**

	<b>PwC value</b>	<b>Alternative value</b>	<b>Rationale</b>
Turnover of tourism sector (€ millions)	419,000	419,000	No adjustment
% of tourism packages	18%	18%	No adjustment
% of package tourism international	80%	80%	No adjustment
% of international package holidays that are by coach	45%	22.5%	Figure reduced by 50% as appears too high compared to other data presented (indicative as no definitive EU data available - UK data would imply a larger reduction)
% for which coach free day not possible	Not included	69%	Coach free day assumed possible for 31% of trips
% of coach holidays over 6 days	90%	45%	Figure reduced by 50% as other data sources lower than PwC survey (indicative as no definitive data source available)
Increase in price where tours affected	3.0%	2.3%	Incremental cost 25% lower (indicative estimate)
Reduction in demand	-5.1%	-3.8%	Elasticity of 1.7 maintained
Proportion offset by increase in other trips	Not included	50%	Indicative estimate – at least half would still take holidays in EU
<b>Net economic impact (€ millions)</b>	<b>-1,246</b>	<b>-81</b>	Lower figure results from adjustment to other figures

7.20 However, even with this reduction, the economic impact would still be significant (around €81 million), and therefore it would still be necessary to make a strong case in terms of safety and social impacts for the abolition of the derogation.

### Safety impacts

7.21 This section reviews the safety analysis provided in the PwC report, taking into account the analysis of the role of fatigue in coach accidents undertaken for this study by the Vehicle Safety Research Centre of the University of Loughborough.

7.22 The PwC report identifies that limited data is available for the number of coach accidents and the causes of these accidents, and therefore there is inevitably significant uncertainty about any conclusions drawn on safety. This conclusion is confirmed by the VSRC research undertaken for this study.

7.23 In order to try to make an estimate of the potential impact of the 12 day derogation on safety, PwC uses data on the number and causes of coach accidents in Germany to estimate that the number of coach accidents caused by fatigue is only 6.9 per billion vehicle kilometres, representing only 4.2% of all accidents that occur on long distance

coaches. This implies that long distance coach is one of the safest forms of transportation and that fatigue is responsible for a very low proportion of accidents.

- 7.24 This also implies (although this is not specifically stated in the report) that, if any passengers are prompted to switch from coach travel to car travel as a result of the price increase caused by the introduction of the derogation, additional accidents may occur as car travel is much more dangerous.
- 7.25 The analysis of coach accidents undertaken for this study by VSRC (summarised in section 5 above) reviewed the major literature and research on the subject of coach accidents, in particular to identify whether there was any evidence to support a link between number of days worked, fatigue, and accidents. The review found that it was impossible to draw a clear conclusion on the basis of the evidence available about whether the reinstatement of the 12 day derogation would have a significant negative impact on safety.
- 7.26 Nonetheless, the analysis in the PwC report is still potentially useful, if it is considered as an estimate of the potential order of magnitude of any potential safety impact. It would however have to be accepted that, given the limited evidence available, the impact might be significantly more or significantly less than they have estimated. We have however identified some factors which point to the impact potentially being greater:
- The PwC report uses data from Germany, which has a relatively good road safety record, which means that there is a risk that the number of accidents on long distance coaches quoted is not representative of the rest of the EU.
  - The data quoted by PwC does not indicate the proportion of fatalities which are caused by fatigue. It is possible that, even if fatigue causes only a small proportion of coach accidents, it might cause a larger proportion of fatalities, if fatigue-related accidents are more likely to occur on motorways, where the vehicles would be travelling faster and therefore the risk of an accident resulting in fatalities would be greater (although lack of evidence makes it difficult to substantiate this hypothesis)
  - The analysis of coach accidents undertaken for this study by VSRC, using the CARE database, showed that the number of fatalities in accidents involving a bus or coach was significantly higher than the figures quoted in the PwC report (although these figures do not seem to be used in PwC's calculation of the impact of the withdrawal of the derogation). The variation arises because PwC's figures, based on the EC's statistical pocketbook, do not include fatalities of pedestrians or occupants of other vehicles involved in an accident with a bus or coach.
- 7.27 It should also be noted that (as PwC points out) the abolition of the derogation was only one of a number of measures that have been taken to improve safety. It could not be expected that the abolition of the 12 day derogation would eliminate all fatigue-related fatalities.

### **Social impacts**

- 7.28 The report argues that the abolition of the derogation would have limited social impacts, and indeed that these might be negative, because drivers would often be forced to take the additional rest period away from home, and therefore the rest periods available to them whilst at home might be reduced.
- 7.29 However, a key weakness is that the analysis appears to be entirely based on interviews with coach and tour operators, rather than with coach drivers or their representatives. These would appear to be the stakeholders that are best placed to comment on the social impact of the abolition of the derogation. This may have led the report to miss important social impacts. Therefore, the overall impact of the withdrawal of the derogation is unclear.
- 7.30 In order to address this weakness, we interviewed representatives of driver associations to establish drivers' views on the derogation. While the European Transport Workers' Federation (ETF) was against the re-introduction of the 12-day derogation, the ETF engaged in negotiations with the International Road Transport Union (IRU) in order to make sure that there are strict conditions that accompany the 12-day derogation, when approved. The ETF objectives were to make sure that road safety, the social aspects of the profession - health & safety, work-life balance – were adequately addressed in the legislative amendment.
- 7.31 As a result of negotiations, the ETF reached an agreement with IRU on conditions for the re-introduction of the 12-day derogation, these conditions have been transposed into the legislative amendment. There were a number of factors that led to this agreement, but included was the fact that some drivers do benefit economically from the longer trips of up to 12 days, and also this tends to be those drivers in the geographically outlying states of the EU. The ETF position now is that the most important of the conditions on the re-introduction of the derogation is the reference to the derogation only being used in the context of a single trip.

### **Environmental impacts**

- 7.32 The withdrawal of the derogation could have an impact on the environment in several different ways:
- additional trips might be made by second coach drivers in order to join tours that were longer than 6 days, increasing emissions;
  - more coach free days might be included in coach tours, reducing emissions;
  - some passengers might chose to travel by air rather than by coach, increasing emissions; and
  - some passengers might chose not to travel at all, reducing emissions.
- 7.33 All of these impacts are likely to be marginal, and the net direction of the impact is unclear.

- 7.34 The PwC report claims that the withdrawal of the derogation will reduce operator profitability which will in turn force them to rely on older vehicles, which could increase emissions. The rationale for this is that replacement vehicles are financed out of retained profits. However, in our view this is not credible. Decisions as to whether to replace vehicles will be based on the expected impact of this on coach operators' profitability: this will result from the relative operating and maintenance costs of older and new vehicles, and impacts on revenues arising from passengers and tour operators' perception of the quality of their vehicles. None of these factors should be affected by the withdrawal of the derogation. In addition, as explained above, PwC makes the assumption that the cost increase would be passed on in full to passengers, which would mean there should be no impact on operator profitability. In practice, the current economic situation means that operators might face difficulties in passing on incremental costs to passengers and therefore there could be some impact on profitability, but this would also mean that the price increase discussed above would be reduced.

### Conclusions

- 7.35 In our view the PwC report significantly overestimates the economic impact of the withdrawal of the 12 day derogation for international coach tours. It is not within the scope of this study to undertake detailed primary research to reach an alternative figure, but making indicative adjustments to the figures presented in the PwC report, we estimate that the economic impact of the withdrawal of the derogation is likely to be at least 90% less than PwC has estimated.
- 7.36 The PwC report argues that the impact of the withdrawal of the derogation on safety is likely to be very small. PwC attempts to estimate this impact, but the analysis of coach accidents undertaken by VSRC for this study shows that it is not possible on the basis of existing research and data to quantify this. Therefore, it is not possible to judge whether the safety benefit of the withdrawal of the derogation was proportionate to the economic impacts. However, we do not disagree with the general conclusion that the impact is probably relatively small, partly because coach is already a safe mode of transport.
- 7.37 The social and environmental impacts of the withdrawal of the derogation are small, and it is not clear what whether the net effect of these impacts would be positive or negative. The approach adopted by PwC, which was a survey of coach operators but not of coach drivers, raises a risk of underestimation of social impacts.

## 8. CASE STUDY OF CABOTAGE

### Background

8.1 Regulation 12/98 permits coach operators that hold a Community license to **temporarily** operate services within other Member States without being required to have a registered office in that State (cabotage services). These services may be:

- special regular services;
- regular services, provided that these are not urban or suburban services, and where the route is part of an international service (so, for example, a UK company could carry domestic passengers Calais-Paris as part of a London-Paris service, but it could not operate a standalone Calais-Paris service); and
- occasional services, such as tourist coaches.

8.2 The Regulation states that in the event of “serious disturbance of the internal transport market” caused or aggravated by cabotage, the Member State concerned may refer the matter to the European Commission to consider safeguard measures. A serious disturbance is defined as follows:

“...the occurrence on that market of problems specific to it, such that there is a serious and potentially enduring excess of supply over demand, implying a threat to the financial stability and survival of a significant number of road passenger transport undertakings”

8.3 Safeguard measures may be applied for a period of up to 6 months, renewable once.

8.4 A key limitation is that the Regulation does not define what “temporarily” means. Therefore, in practice this has been left to individual Member States to determine. This creates a risk that Member States may adopt inconsistent interpretations of this, or interpretations which limit the ability of operators from other Member States to operate services to a greater extent than had been intended.

8.5 This section undertakes an analysis of the experience of operation of cabotage services and identifies issues that have arisen with these services. Analysis of cabotage services has been undertaken in the eight Member States selected as case studies (see section 3 above). In most of the Member States analysed, the volume of cabotage services was very low, and these have not had a significant impact on the transport market. The main exceptions to this are Greece and to a lesser extent Sweden, discussed in detail below.

### Cabotage services in Greece

8.6 As discussed in the report on coach services in Greece, the domestic coach market is subject to a unique system of regulation. These regulations affect both regular and occasional services and significantly limit the potential for competition between coach operators registered in Greece. The particular circumstances of the Greek transport

market and the regulations applied to it mean that cabotage services potentially have a significant cost advantage and hence a significant impact on local operators.

#### *Cabotage services operated*

- 8.7 The cabotage services which have been operated in Greece, and which have created issues from the point of view of the Greek coach operators, are occasional services. The operators of regular services in Greece (the KTEL) are not aware of there being any regular cabotage services. Table 8.1 summarises the key characteristics of the occasional cabotage services.

**TABLE 8.1 SUMMARY OF CABOTAGE SERVICES OPERATED IN GREECE**

<b>Characteristic</b>	<b>Explanation</b>
Nature of service operated	Occasional services operated during the summer months
Origin of cabotage operators	Primarily Poland and Romania
Nature of contracting arrangements	Some of the cabotage services are contracted in advance by tour operators based in the Member State of origin of the operator. However, many of the services are contracted within Greece, through either foreign or local travel agencies.
Origin of passengers	Passengers may be residents of the Member State in which the operator is registered, or other tourists in Greece
Staffing arrangements	The staff are usually residents of the Member State in which the operator is registered

- 8.8 The Greek coach operators believe that the operating costs of the cabotage operators are up to 50% lower than their own costs. Although in part this reflects lower wages in the origin Member States, it also reflects the significant costs of obtaining a license to provide coach services in Greece, which the cabotage services avoid, and the greater potential for competition that arise as a result of these operations. This also means that the cabotage operators have the potential to offer significant benefits to consumers, in the form of lower prices.
- 8.9 Although the issue of cabotage services has created significant opposition from the Greek operators, as discussed below, nonetheless the proportion of services operated by cabotage operators is believed to be very low (although no statistics are available).

#### *Regulatory arrangements*

- 8.10 The tourist coach operators in Greece requested that the Greek Ministry of Transport and Communications introduce regulations on cabotage services in Greece to address the specific issues and structure of the Greek coach industry. In a document issued on 4 July 2007, the Ministry introduced rules applying to cabotage services undertaken by EU coach operators in Greece. These rules aim to clarify the “temporary” clause in the Regulation 12/98, and take into account the unusual characteristics of the coach

industry in Greece. The restrictions introduced were as follows:

- Other EU coach operators are allowed to undertake occasional and special regular services in Greece in line with Regulation 12/98
- No companies other than the KTEL, whether based in Greece or elsewhere in the EU, are allowed to carry out domestic regular coach services in Greece
- The occasional coach services can be provided for a total of 10 days per calendar month and the special regular coach services for a length of one month. Once these periods have expired the coach will have to exit Greece and will not be able to offer any additional services during the same calendar month.
- The total length of time allowed for offering any type of coach services in Greece is 2 months per year.

8.11 However, these additional regulations have not been sufficient to satisfy the Greek coach operators. According to an article in a local newspaper (Ta Kerkiraika Nea), the General Tourism Agencies in Corfu organised a demonstration on 19 July 2007 to protest about the impact of Polish coach operators offering coach services on the island. They also consider that some of the foreign operators have not adhered to the Greek regulations on cabotage. In various letters submitted to the Greek Ministry of Transport and Communications, Pan-Hellenic Federation of Tourism Enterprises (POET) has complained that coaches registered in Poland carry out services for a period of several months in Corfu, especially during the peak tourism seasons.

8.12 The main rationale for the objection by Greek tourist agencies to these services is that they are not able to compete with the KTEL, who are protected against cabotage services through national regulations and have exclusive rights to operate domestic regular services, and have also been given the right to operate special regular and occasional services. Hence, the tourist coach operators have to compete for a relatively small proportion of the Greek coach market with KTEL and coach operators registered in other EU countries, while they are not allowed to compete with KTEL on the domestic regular market.

#### **Cabotage services in Sweden**

8.13 The other Member State in which a significant number of cabotage services have been identified is Sweden.

8.14 Swedish coach operators tend to view the cabotage regulations in a much more positive light than the Greek operators. Some Swedish operators carry out cabotage services in other EU Member States, primarily in which they collect Swedish passengers from the airport in the other State and then provide the tour.

8.15 However, there has been a particular issue with Russian operators providing cabotage services in Sweden. As Russia is not an EU Member State, Russian operators are not permitted to do this.

8.16 Table 8.2 summarises the nature of cabotage services operated in Sweden.

**TABLE 8.2 SUMMARY OF CABOTAGE SERVICES OPERATED IN SWEDEN**

<b>Characteristic</b>	<b>Explanation</b>
Nature of service operated	Occasional tour services, mostly in Stockholm, Gothenburg and Malmo
Origin of cabotage operators	Numerous, but includes Russia
Nature of contracting arrangements	The cabotage tour services are generally contracted by tour operators based in Estonia, Latvia, Poland, Belgium and the Netherlands (as well as Russia).
Origin of passengers	Passengers may be residents of the Member State in which the operator is registered, or other tourists in Sweden
Staffing arrangements	The staff are usually residents of the Member State in which the operator is registered

8.17 The main advantages of cabotage services are:

- the driver may have more appropriate language skills for the tour group concerned;
- the costs may be lower than the costs of a Swedish operator; and
- the tour may be easier to contract, as all the arrangements can be made in the origin Member State.

8.18 However, a number of disadvantages have also been identified:

- the cabotage services may be more lightly regulated and it is perceived that they do not always comply with driving hours regulations; and
- the vehicles used may not comply with Swedish regulations for example regarding emissions (this is a particular issue for the illegal Russian operations).

#### **Cabotage services in other Member States**

8.19 Table 8.3 summarises the information collected on cabotage services operated in other Member States. It is clear that very few cabotage services are operated, and these have not had any significant impact on the market. However, the fact that the Swedish coach operators informed us that they undertook cabotage operations in other States where the authorities informed us there were no cabotage operations, may indicate that the extent of cabotage has been underestimated.

**TABLE 8.3 CABOTAGE SERVICES IN OTHER MEMBER STATES**

Member State	Cabotage services operated	Notes
Germany	No regular services Low proportion of occasional services (<1%)	International regular services are not licensed to carry domestic passengers. Some cabotage occasional services are operated, particularly in the regions close to the border with Poland and the Czech Republic. In theory there are no restrictions on these services. However, in practice local licensing authorities may impose significant administrative barriers.
Italy	Few services believed to be operated	The Ministry of Transport stated that there were neither regular no occasional cabotage services in Italy. However, the Swedish operators we interviewed stated that they had operated cabotage occasional services in Italy, mainly handling Swedish tourists arriving by air.
Poland	No services believed to be operated	We interviewed a number of stakeholders in the Polish coach market. They were not aware of any cabotage services being operated.
Romania	Volume of cabotage services very low, but some illegal operations have been identified.	At present, there are no foreign companies operating cabotage services in Romania. In some cases, the Romanian authorities identified illegal cabotage services, and fines have been imposed. We have requested more details of this from the Ministry of Transport but this has not been provided.
Spain	Little or no services operated	According to the Ministry of Public Works and ASINTRA (the Spanish Passenger Transport Business Federation), there are no legal restrictions on cabotage operations in Spain, but in practice there are few if any such services.
UK	Some occasional services operated	The UK coach sector is almost completely deregulated and therefore little information exists. UK operators believe that cabotage occasional services have been operated by Irish and Belgian registered operators. Swedish operators informed us that they had also operated cabotage services in the UK. Some UK operators believe that they have been put at a disadvantage due to the failure of authorities in some other Member States to enforce driver rest regulations on cabotage services by their operators in the UK.

*Services operated by subsidiaries of foreign companies*

8.20 Although there are few cabotage services in most of these Member States, a larger number of services are operated by domestic subsidiaries of companies based in other Member States. For example:

- the largest coach operator in Spain, ALSA, is owned by the UK bus/coach company National Express; and
- Veolia, a French company, operates a significant number of coach services in Poland through its Polish subsidiary.

8.21 These operations are not defined as cabotage services under the Regulation. However,

in other transport sectors international companies have not had equivalent opportunities to launch local services in other Member States. For example, until the major packages of reforms of the air transport sector undertaken in the 1990s, air carriers registered in a Member State had to be majority owned by the citizens of that Member State, and these restrictions still often apply if the carrier operates services outside the European Common Aviation Area. A number of barriers to entry also remain in the rail sector.

#### *Employment of staff from other Member States*

- 8.22 In a number of Member States, local bus/coach operators have taken advantage of the free movement of workers to employ drivers who were previously resident in other Member States. For example, a number of UK bus operators have recruited drivers in Poland. This has led to a shortage of drivers in Poland, which has in turn prompted Polish operators to recruit drivers from Ukraine.

#### **Operator perspectives on regular cabotage services**

- 8.23 As discussed above, there are currently almost no regular cabotage services. We interviewed three operators of international regular services in order to understand why operators are not taking advantage of the provision in Regulation 12/98 allowing temporary operation of cabotage services. One of the operators informed us that they were not interested in providing these services; the other two informed us that they were interested in doing so but that, despite this provision in the Regulation, most States do not allow cabotage. Reasons cited included:

- protection of the rail operators;
- protection of domestic coach operators; and
- concerns about the lack of oversight of international operators

- 8.24 States are able to block the operation of cabotage services through their right to refuse authorisation for the operation of international regular services that cross their territory. Operators informed us that a number of Member States will only grant authorisation for operation of international regular services if the operator agrees not to carry domestic passengers. The imposition of such a requirement by the Member States appears to be inconsistent with Regulation 12/98. However, no clear precedent has been established, because although the Regulation allows cases to be referred to the Commission, this has only occurred on one occasion<sup>8</sup>. Moreover the operators believe that cabotage is not permitted under national laws, and cited as an example the French law, ‘Loi n°2005-882 du 2 août 2005 - art. 93 JORF 3 août 2005’.<sup>9</sup>

<sup>8</sup> <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:1999:033:0021:0024:EN:PDF>

<sup>9</sup> <http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=LEGITEXT000006068730&dateTexte=20090218>

8.25 If cabotage was allowed, operators believe that this would strengthen their financial position and allow them to operate new routes. Operators stated that the types of routes on which they would wish to operate cabotage services included:

- Routes where rail is the primary modal choice over short distance air transport.
- Routes where the ultimate destination is not the largest urban area on the route.

8.26 Operators also informed us that work is being undertaken through a UNECE forum to break down the barriers to cabotage operations. There is a proposal that should cabotage services be allowed, that operators guarantee no more than 25% of the seats sold will be between the points on the service covered by cabotage regulations. It is hoped that this forum will open up the ground for the delivery of cabotage operations.

### **Conclusions and implications for policy**

#### *Issues that have arisen with cabotage*

8.27 The main difficulties with cabotage services have arisen in Greece. This is due to a combination of:

- the uniquely onerous regulations imposed on operators of occasional coach services, which impose significant barriers to entry and limit competition, and therefore increase costs;
- the geographical proximity of a number of Member States in which the operators have significantly lower operating costs, meaning that coaches from these Member States can at low cost enter Greece during the peak tourist season; and
- the lack of any definition of the word “temporarily” in Regulation 12/98, which has left the Greek government free to impose its own interpretation, which appears in practice to limit competition and consumer benefits whilst also failing to satisfy the Greek coach operators.

8.28 Other Member States do not impose regulations on occasional services which are as onerous as those in Greece. As a result, the number of occasional cabotage services appears to be very low, although the nature of the sector means that this conclusion is uncertain due to the poor data availability. For example, it is notable that Swedish operators informed us that they were carrying out cabotage services in the UK and Italy, but neither UK operators nor the Italian authorities were aware of these services.

#### *Implications for policy: regular services*

8.29 Almost no international regular services carry domestic passengers within Member States (regular cabotage). Operators informed us that this was partly because a number of Member States in practice prohibited all cabotage operations. However, even if this was not the case, cabotage services are currently limited as they can only be operated on a “temporary” basis, whereas international regular services are usually operated on fixed timetables for long periods. In the past this has made it impossible for these services to operate.

- 8.30 In our view, operation of cabotage services is only likely to cause difficulties when the regulations that exist within a Member State limit competition between operators and prevent new operators from entering the market. This means that it is impossible to separate the issue of whether cabotage should be permitted from the issue of whether these regulations are reasonable.
- 8.31 Regulation has potential negative impacts, such as increased costs arising from reduced competition, limited potential for operators to launch innovative new services, and limited ability for operators to meet consumer demand. However, these negative impacts need to be weighed against potential consumer benefits which it might be difficult or impossible to achieve without regulation, such as the ability to co-ordinate schedules between operators and with other modes of transport, and the ability to offer integrated ticketing. Overall, there may be benefits in regulating the regular coach sector, provided this is undertaken on a non-discriminatory basis and there is competition *for* the market if not *within* the market. If this approach is adopted, it is likely to be necessary to have some restrictions on cabotage services.
- 8.32 We note that the proposed Regulation on common rules for access to the international market for coach and bus services (recast) would address this issue. The new text clarifies that the requirement for cabotage services to be of a temporary nature only applies to national road passenger services, and not to the carriage of passengers within the same Member State in the course of a regular international service. The limitation regarding cabotage performed in the course of a regular international service is that it must not be the principal purpose of the service.
- 8.33 A further issue is that regulatory restrictions in some Member States can create an imbalance in competition between companies based in each State. For example, a German coach operator could bid for a concession to operate regular coach services in Spain, whereas the opportunity for Spanish operators to provide regular services in Germany is much more limited.

*Implications for policy: occasional services*

- 8.34 None of the potential benefits of regulation identified above apply in the occasional coach market. The main impact of regulation in this sector is likely to be to increase prices and limit consumer choice, without any offsetting benefits. We note that the Commission has taken measures to open a wide variety of other market sectors to competition and we suggest that it should in the future evaluate the potential impacts of undertaking similar measures in the coach sector, particularly with regard to occasional services.
- 8.35 Alternatively, if it is decided to retain the requirement that cabotage services must be operated temporarily as stated in Regulation 12/98, it would also be helpful if the Commission could clarify the meaning of the word “temporarily”, for example by issuing a clarificatory interpretation, or by proposing an amendment to the Regulation to clarify this point. This would avoid the risk that Member States adopt their own interpretations, which may be more restrictive than would be reasonable.

## 9. STAKEHOLDER WORKSHOP

- 9.1 A stakeholder workshop was held at the European Commission on 30<sup>th</sup> April 2009. This was attended by approximately 20 delegates, including representatives from operators, unions and the European Commission. Prior to the workshop a briefing paper was issued summarising the findings of this report.
- 9.2 The workshop was introduced and chaired by the European Commission, after which Steer Davies Gleave led presentations and discussions covering:
- The European Coach Market including Cabotage;
  - Terminal infrastructure; and
  - Safety issues and the 12-day rule.
- 9.3 During the course of the workshop delegates made a number of comments which have been incorporated into the final version of this report. They were also invited to submit comments in the week following the workshop, but none were added to those provided on the day itself. Minutes are provided in Appendix E.





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