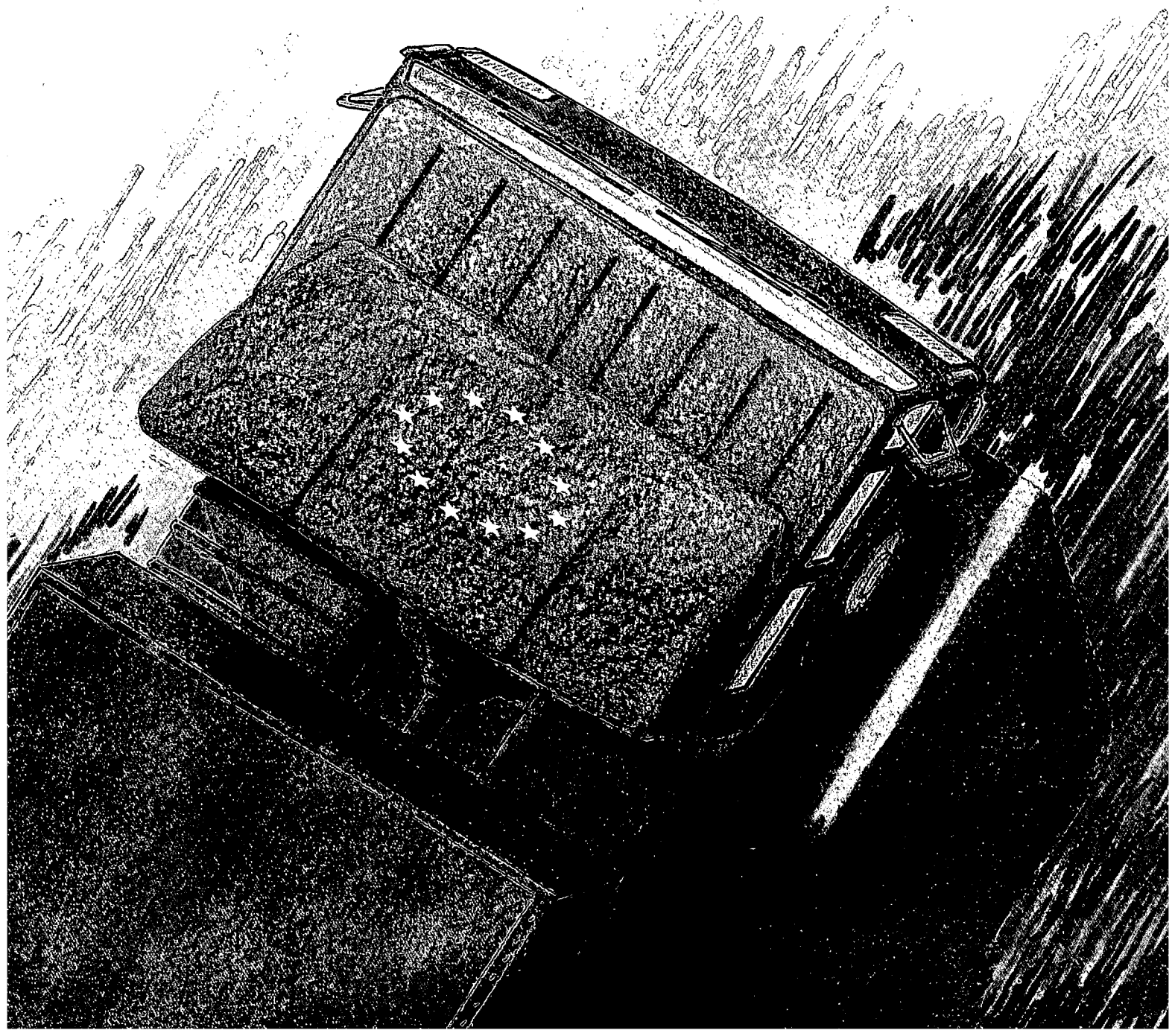


ROAD FREIGHT TRANSPORT IN THE SINGLE EUROPEAN MARKET

Report of the Committee of Enquiry - July 1994



**REPORT OF THE COMMITTEE
OF ENQUIRY ON
ROAD FREIGHT TRANSPORT
IN THE
SINGLE EUROPEAN MARKET**

Co-Chairmen

**B.T. BAYLISS
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ACKNOWLEDGEMENTS

The Committee conducted its investigations through formal meetings and hearings and informal meetings and discussions with experts and organisations in relation to specific areas of its work, and would wish to acknowledge the substantial assistance it has received from official bodies and individuals from all Member States and also a number of non-Member States, in the form of both written and verbal evidence. Also it appreciates the valuable co-operation it has received from the Directorate-General for Transport in servicing the Committee's needs, particularly with respect to the securing of information and data from a wide variety of sources both within and outside the Union; and in particular the Committee would wish to acknowledge the contributions of its co-chairmen: Director General Mr Coleman, as neutral chairman, in facilitating and ensuring its efficient functioning, and Professor Bayliss in progressing the Enquiry investigations and Report preparation. Finally the Committee would wish to convey its thanks to its Secretaries M.P.A. Billiet, M.G.H. Damen and P.W.Kok and the Belgian Institute for Road Transport (I.W.T./I.T.R.) for their servicing of its work.

REPORT

To Mr M. Oreja Aguirre, Commissioner responsible for transport and energy.

We were appointed by your predecessor in June 1993 to investigate the economic and social situation in road freight transport and its likely future development, taking account of the importance of the sector to the functioning of the Single European Market and the economic and social development of the Union as a whole as well as concerns voiced by certain industry representatives, and to make recommendations with respect to policy.

The Committee's Report, established after a broad ranging enquiry, underlines the vital role of the road haulage sector in providing the logistical services fundamental to the competitiveness of the Union's economy, now and in the future. Problems encountered recently within the sector are primarily attributable to the adverse economic environment and to the adjustment process that is often associated with measures of liberalisation. Given the importance of road haulage to the success of the economy as a whole, the Committee is of the opinion that the sector must continue to operate in as competitive a manner as possible, on the basis of adequate levels of investment in modern infrastructure and within a framework of harmonised standards to ensure fair competition and the protection of important interests including safety, the environment and the working conditions

of those employed in the industry. These standards need to be further harmonised and improved in particular as regards qualifications for entering the profession, fiscal and other charges imposed on road haulage operations and working conditions. Also all harmonised standards need to be more strictly applied and enforced than is at present the case. Unauthorised and illegal operations are a major distortion for the market and need to be addressed urgently.

As to relations with third countries, particularly in Eastern and Central Europe, difficulties faced by Union operators should be addressed rapidly and steps taken to prepare a policy that will accommodate significant traffic growth in the future. The Union should develop a common approach as quickly as possible. This should be progressive and linked to advances in the operating conditions applicable to operators of the third countries concerned.

We now have the honour to submit our Report

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RECOMMENDATIONS

The aim of this Report is to examine the operations and regulation of the road freight transport sector with a view to recommending measures to maintain and increase its efficiency, while simultaneously observing the need for the efficient use of infrastructure, beneficial interaction with other modes, respect for the environment and the requirements of safety. In making its recommendations the Committee has borne in mind both the long- and short-run positions of the sector, and particularly the influence of the current economic recession on the latter.

Introduction

In response to the competitive threat faced by both mature and high-technology sectors in Europe from the US, Japan and the newly industrialising countries (NICs), the Union has sought to break down its fragmented and distorted markets and create a Single European Market (SEM) in which Union firms can enjoy both scale economies and the benefits of European/global strategies, and in which efficiency is stimulated through greater intra-Union competition.

Industry itself has reacted through an increased concentration on core business with outsourcing to specialist suppliers; the adoption of integrated corporate global strategies with respect to purchasing, production and marketing, with emphasis on conducting individual activities in the most favourable location; the creation of cross-frontier strategic alliances; and the introduction of lean production and Just-in-Time (JIT) strategies.

Such industrial strategies have involved greater geographical separation both within and between the corporate func-

tions, resulted in reduced stock levels and created a demand for fast, flexible and high quality freight services, operating over extensive and sophisticated networks, where lot sizes are smaller and delivery frequencies higher.

The success of such corporate strategies, on which European industrial competitiveness is so dependent, is inextricably linked to the efficiency of the logistic systems. The main burden in this respect has fallen upon the road haulage sector, with rail currently not providing either the type or volume of service required on account of both capacity and flexibility constraints. Within the constraints imposed by regulation and infrastructure, road haulage has met this challenge through a combination of growth and changes in operating practices which have raised quality and improved productivity.

In 1970 output in road haulage across the Union was some one and three-quarter times greater than for rail, and some four times greater than for inland waterways, but by the beginning of this decade it was approximately four times greater than for rail and some ten times greater than for inland waterways. At the same time fleet capacity has grown less than proportionately, safety and environmental performances have improved, productivity has increased and prices fallen in real terms.

Since the beginning of the present decade the road haulage sector together with other sectors has been faced with the problem of a general economic recession, a situation which in certain Member States has been exacerbated by adjustment problems following both domestic and international intra-Union deregulation. The impact of the recession has consequently not been uniform: in the

long established liberal markets there has been remarkable stability in operator numbers, with financial performances superior to many other sectors, whereas in some newly deregulated markets operator numbers have risen and prices fallen. Historic and contemporary evidence would suggest however that this latter is an adjustment process, and road haulage prices have been more stable than industrial prices in general during the recession, and there is no evidence of undue instability in terms of excess capacity and bankruptcy levels.

For road freight transport to meet the challenge of industry and the demands of the general public in terms of the efficiency and quality of its operations it must function in a competitive market free of restrictive and distorting barriers, within a social framework designed to protect such areas as health, safety and the environment, and a fiscal framework in which all modes meet their full costs. Given the importance of an efficient transport sector in economic, social and environmental terms, it is incumbent upon responsible authorities to establish regulatory systems and levels of investment consistent with the attainment of those objectives, and to take the necessary measures to counter the high levels of unauthorised and illegal operations which are distorting competition and endangering the general public, those engaged in the profession, and the environment.

The future competitiveness of industry and related living standards in the Union in the face of ever increasing global competition are dependent upon the realisation of the advantages offered by the elimination of fragmented and distorted markets, and consequently upon continuing gains with respect to the efficiency and quality of the road haulage sector. This Report seeks to make Recommendations for the realisation of such gains.

The Competitive Framework

The primary economic objective of the Union is the optimal use of scarce resources through a market operating within a framework of harmonised rules designed to protect and further important social goals in such areas as health, safety and the environment. The fundamental justification for reliance on the market is that the optimum allocation of resources will be realised if the prices upon which the choices of economic operators and consumers are based reflect real costs. For prices to reflect real costs, markets must be competitive and all costs passed through. Where they are distorted through barriers to competition or exclusion of significant cost elements, the objective of an optimal allocation of resources will not be achieved.

Through the creation of an SEM, the Union seeks to apply these competitive principles over a vast geographical area, benefiting thereby from both the static and dynamic effects of the liberalisation process. The allocation of resources is improved through the removal of barriers which distort markets (static effects) and, at the same time, economies of scale and increased competition are achieved through the ending of market fragmentation (dynamic effects).

The Committee considers that these principles must continue to govern the approach of the Union and its Member States to the transport sector generally and to road haulage in particular. This will not only ensure that the sector is as efficient as possible in itself but that it makes its vital contribution to the competitiveness of the Union's economy as a whole, while at the same time limiting the environmental impact.

Accordingly the road haulage sector must operate in a competitive framework, free of restrictive and distorting barriers, permitting enterprises to optimise their individual operating efficiency on the basis of a sufficiently harmonised regulatory regime. It should meet its full costs - including infrastructure, environmental and other social costs¹ - which should be based on the same principles for all modes.

Given the importance of an efficient transport sector to the economy in general, governments should at the same time both ensure a level of investment sufficient to guarantee the development of the transport system taken as a whole, including its road component, and take the necessary measures to counter the high levels of unauthorised and illegal operations which are distorting competition and endangering the general public, those engaged in the profession and the environment.

The current wide divergences in operating practices across the Union are creating harmful distortions in the market which are exacerbated on account of the mobile nature of transport services. The Committee is of the opinion that action on further harmonisation and enforcement needs to be taken urgently if the sector is not as a consequence to be further damaged, and recommends that the Commission makes proposals for timetabling the implementation of these recommendations, bearing particularly in mind that the success of any actions is dependent upon adequate measures to ensure compliance.

Access to the Market

The Committee considers that the removal of quantitative barriers to entry and price controls is fundamental to the efficient operation of the road haulage sector and consequently to the competi-

tive position of Union industry; and that it is fundamental in achieving harmonisation of operating conditions across the Union.

Subject to the remarks on further harmonisation and enforcement made below, the Committee therefore endorses Union policy with respect to cabotage and the ending of quantitative and price restrictions on international intra-Union movements. The Committee also considers that where market entry controls of a quantitative nature still exist in domestic markets this is detrimental to the Union road haulage sector as a whole in that in general it militates against harmonisation and in particular restricts entry into the market by non-domestic operators and hampers the formation of cross-frontier strategic alliances.

The Committee believes that the policy towards cabotage will in itself help break down the barriers to the development of an SEM and the role of competition within it caused by constraints on entry to some domestic markets in the Union, but nevertheless considers that a timetable should be established for the ending of such quantitative restrictions. As situations differ between Member States the Committee recommends that the Commission work together with the individual Member States with a view to fixing timetables for the liberalisation of quantitative restrictions on market access, in the interests of the Union as a whole. Such programming should seek to identify the degree of adjustment likely to be caused by the liberalisation and measures possibly needed to accompany and facilitate the adaptation. The possibility of a Union contribution to such measures should be examined at the same time².

Although the removal of both international and, in some instances, domestic quantitative controls has created certain

¹ Such costs need to be set in the context of the necessary role and function of freight transport in furthering the objectives of industry and the Union as a whole with respect to economic development and living standards.

² Precedents for such measures exist, for example, in the case of Union support for Customs Agents. (Council Regulation 3904/92/EEC).

problems in some Member States, the evidence from other countries in the European Economic Area (EEA) is that these are adjustment problems, and that the industry in the longer term returns to relative stability and is more efficient in the absence of such controls.

Access to the Profession

Qualitative standards regulating entry to the profession are intended not only to protect those engaged in the profession, shippers and the general public, but also to raise operating efficiency with resulting benefits for the environment and resource and infrastructure utilisation. The Committee notes in particular in this respect the Statement³ of the Secretary of State for Transport in the UK that 'Reductions in numbers of accidents involving heavy lorries - reflected in the 35 per cent fall nationally since 1980 - illustrates the potential benefits from the better design of roads, higher technology vehicles and a more professional approach to distribution on the part of operators, managers and drivers'.

Given the mobility in provision of transport services and the aspects of safety and environmental damage and pollution related to them, the Committee is of the opinion that adequate qualitative standards are essential. However, substantial divergences exist between Member States which are distorting competition and, in particular instances, quality levels are not adequate to fulfil the role for which they are intended.

The Committee notes that with respect to Financial Standing, for example, the objective of the relevant Directive is to "assure equality of treatment for enterprises of the different Member States". It considers that within an SEM, and given the mobile nature of transport services, conditions of access to the profession should be uniform across the Union. The

Committee, therefore, recommends that the present minimum levels should, with the exception of Good Repute, be replaced by a uniform Union-wide level and that this uniform level should be higher than the current minimum levels. The appropriate level in the view of the Committee, is one that affords adequate protection for the general public and those engaged in the profession, and leads to a high level of efficiency in operations with its consequential economic and environmental benefits. It should not act as an arbitrary barrier to entry.

The Committee is aware that such a standardising, and in certain instances raising, of entry levels could in the absence of improved enforcement increase the levels of unauthorised operations, and reiterates the point made previously that the efficiency of the sector is highly dependent upon governmental action in the area of enforcement.

The Committee's specific recommendations with respect to Professional Competence, Good Repute and Financial Standing are as follows :

Professional competence : the Committee makes the following recommendations:

- the Commission should undertake a comparative study of training and examinations in the different Member States with a view to making proposals in relation to the detailed content of both the courses of study and the examinations.
- a body responsible for moderating both training and examinations, and monitoring compliance should be established at Union level;
- the training programme should meet the requirements necessary to manage a transport undertaking. This should include *inter alia* modern techniques in the fields of Information Technology (IT)

³ *Statement on Transport in London, the Secretary of State's approach towards the operation and development of London's transport systems. The Department of Transport, January 1989, para. 4.41, p.29.*

- multi-modal transport, financial management, safety and the environment;
- continuing education following entry into the profession should be promoted as a matter of importance. Professional organisations can play an important role in this respect.

Good repute: the Committee considers that the principle of subsidiarity is of particular importance here, and does not recommend any changes at this stage. The Commission should consider, however, if a study is required to establish whether significant competitive distortions are arising because of present divergences concerning the granting and withdrawal of licences and, if so, whether limited further harmonisation could be envisaged.

Financial standing: the Committee considers, first, that a uniform standard applicable throughout the Union is desirable since the mobility of the profession requires a similar guarantee to be available to all parties and interests likely to be affected whatever the hauliers' State of origin. If this cannot be achieved immediately then the present minima should be raised progressively to produce a uniform standard, or at least a significantly reduced range, within a certain time period. Provision should be made for the periodic adaptation of the requirements to take account of inflation. In addition, as neither the resources necessary to ensure that operations do not damage third party interests nor the risks of such damage increase in direct proportion to fleet size, it is recommended that the fixed rates currently required per vehicle or tonne of maximum authorised weight should be replaced by a sliding scale as currently proposed in France.

Enforcement

Lack of enforcement of regulations is perhaps the single greatest problem facing the sector, in that it not only distorts competition but endangers both those engaged in the profession and the general public. Enforcement depends upon the ability to detect infractions, and the ability to deter infractions, through both high probabilities of detection and adequate penalties. Also the Committee would wish to emphasise that realistic and cost-effective regulation is a necessary precondition for effective enforcement.

Information technology can assist greatly with respect to detection in areas such as:

- the production of documents which are better protected from fraud and abuse;
- the access to administrative information between administrations;
- monitoring vehicle and container movements;
- driver hours' monitoring and control;
- advanced digit control tachographs;
- monitoring of vehicle axle weights through road systems linked to camera identification and automatic debiting.

The Committee recommends that such technologies be developed and introduced on a harmonised basis in all Member States as a matter of greatest urgency. On-board computers should ideally contain both driver and vehicle records for a period corresponding to the average time frequency with which vehicles are controlled. Such systems should be aimed at maximising efficiency in control, thereby minimising disruption to haulage operations, and it is to be expected that in the future automatic roadside reading of on-board records will be the principal form of control, but in the meantime the efficiency of road side controls should be improved.

In those instances where vehicle records are downloaded automatically the Committee considers that when hauliers are willing to download directly to regulators, the frequency of control audits on haulier premises should be reduced to an absolute minimum, thereby freeing resources for controlling other hauliers.

The Committee is of the opinion that effective and uniformly fair penalties across the Union can only be achieved where vehicles are impounded in cases of serious infringement of regulations, and particularly where this relates to safety and repeat offences; and recommends that the Commission develops proposals with respect to such a policy. Impounding is now a standard policy in urban areas for unauthorised parking, and the Committee notes that proposals for its extension to cover illegal goods vehicle operations are current in Denmark. In the view of the Committee it has two very positive advantages with respect to its extension to illegal operations: as the principal penalty is a time one it automatically takes into account first, different values of work time in different Union countries irrespective of the country where the offence occurred; and secondly, the different inventory values of shipments.

The Committee also considers that exchange programmes between Member States for members of enforcement agencies will facilitate co-operation Union-wide and extend the transfer of ideas and experiences, and should therefore be encouraged and developed.⁴

Liability

The Committee notes that in Ireland, Germany and Spain shippers employing unauthorised operators are jointly liable for such offences, and considers, particularly by reason of the safety aspects of such operations, that such joint liability should be introduced across the Union⁵.

The Committee is also of the opinion that the relationship between shippers/freight forwarders/prime contractors and sub-contractors should be regulated, and recommends that a contract between the parties, providing at least the minimum details, such as consignment and journey details, that would permit verification of compliance with labour and fiscal laws and with operator and traffic regulations in terms of contract conditions, be obligatory. The Committee would wish to emphasise that the purpose of such a requirement should not be to standardise such contractual provisions, which should be left to be selected by the parties, but to ensure that the key elements of the agreement are fully transparent.

Restructuring and State Aid

Although in all Member States a large number of very small professional hauliers predominate in terms of operator numbers, it is a relatively small number of large hauliers that command a major part of total operations, both directly through their own haulage operations and indirectly through their sub-contracting and freight forwarding business.

In liberal markets the sector has been able and quick to restructure and modify operating practices to effect efficiency gains and meet changing demand. This has resulted, *inter alia*, in a reduction in the numbers of small operators, moves from own account to professional operations and the formation of a wide range of strategic alliances.

In Belgium, for example, the number of firms with fewer than 5 vehicles halved between 1970 and 1993 and the number with more than 20 vehicles increased more than 3½ times; in the Netherlands between 1985 and 1990 the proportion of firms with fewer than 6 vehicles declined from 65 per cent to 57 per cent and those with more than 10 vehicles

⁴ Exchange programmes between national authorities (including inspectorates) are already in existence in line with for instance Directive 88/599/EEC and Council Decision 92/481/EEC (the "Karolus-programme").

⁵ Additionally in Germany and Spain joint liability can also exist with respect to the overloading of vehicles.

increased from 16 per cent to 22 per cent; in the short-distance zone in Germany (old States only) between 1984 and 1992 the number of firms declined slightly and the average size increased from 2.9 to 3.5 vehicles.

In the UK in 1965 prior to deregulation own account operators carried some 54 per cent of total tonnages, by 1977, seven years after the entry into force of the deregulation legislation, it had fallen to 43 per cent⁶. In Sweden, the other EEA Member with over 20 years' experience of deregulated markets, the move from own account operators has been even more marked with its share of tonne-kms worked falling from some 40 per cent in 1961 to some 13 per cent in 1990⁷.

In dirigiste markets, by contrast, governments have sought to influence the structure of the sector through regulation, and in certain instances through State aid. Such aid has been granted in an attempt to restructure the small enterprises in the sector and particularly to reduce perceived excess capacity by way of an incentive to encourage operators to leave the profession.

The Committee notes that under Article 92(3c) the Treaty of Rome allows State aid where it does not distort or threaten to distort competition to an extent contrary to the common interest; and that in the particular case of road haulage legislation permits aid where it is given exceptionally and as a temporary measure in order to eliminate as part of a reorganisation plan excess capacity causing serious structural problems⁸.

The Committee would, however, wish to draw attention both to the new phenomenon of cabotage and the existence of extensive unauthorised markets in certain Member States.

Where State aid has been granted in the past to hauliers operating predominantly in local markets it would have been unlikely that this would have caused any distortion of competition vis-à-vis operators from other Member States, but with the deregulation of international intra-Union markets and the introduction of cabotage this does not necessarily continue to pertain. Many small operators are now more able to operate in international markets, particularly as sub-contractors to larger operators (either in local collection and distribution or trunk haul), and cabotage is introducing competition into local markets from non-domestic operators.

The existence of large unauthorised markets is, however, likely to negate the effects of any State-aided restructuring policy, and in particular by reason of the fact that hauliers leaving the sector under any such restructuring aid are able to return via the unauthorised market.

The Committee recommends, therefore, that State aid only be permitted where there is evidence of the introduction of a strong enforcement system controlling the unauthorised market. The Committee is additionally of the view that the long-term interests of the sector are best served through: State aid geared to the establishment of training schemes and the establishment of local organisations able to further the efficiency and structure of the sector; the implementation of its recommendations relating to access to the profession; the ending of quantity constraints on market access; and the enforcement of legislation.

⁶ In 1992 the proportion was 42 per cent but the proportion increases during downturns in economic activity as shippers tend to reduce outsourcing at such times and retain a higher proportion of traffic for their own fleets.

⁷ Data provided by Dr Lars Kritiz, of the Federation of Swedish Industries.

⁸ Regulation 1107/70.

Third Countries

In recent years there has been a substantial increase in the level of traffics with the former east bloc countries. Union operators have generally obtained only small shares of these traffics on account *inter alia* of: lower operating costs of third country operators, imbalances in the traffic flows in favour of the third countries, difficulties faced by Union operators in these third countries, and border delays.

Lower operating costs arise from, for example, differing technical, social and fiscal requirements as well as lower labour costs and cost distortion due to the non-application of market principles where State monopolies still exist. Imbalance in traffic is to the disadvantage of Union operators as it is easier to obtain traffic in the domestic than the foreign markets. Difficulties relating to infrastructure and facilities, discriminatory practices and security are generally greater for Union than domestic operators. Border delays (frequently 24 hours) have a much greater cost impact upon Union operators due to the substantially greater importance of drivers' costs in total operating costs compared with third countries.

In the longer term, development in Eastern European countries and growing economic integration with the Union will lead to considerable further growth in traffic. This will require the development of efficient, modern transport links and services, implying liberalisation, adequate investment in infrastructure and the full exploitation of all transport modes. In any event road haulage will clearly have an important role to play whatever contribution is made by other modes.

Existing disparities, obstacles and structural problems make instant and complete liberalisation impossible. Moreover, differences in the speed with which

Eastern European countries are adapting to market practices make uniform solutions unlikely. What is needed is a progressive approach in which proper account is taken of the progress being made by and within the different countries concerned.

Given the removal of internal frontier controls within the Union the Committee favours that improved bilateral access and transit be negotiated by the Union as a whole. This should be progressive and linked to appropriate advances in harmonising the operating conditions of third countries with those of Union operators. Such harmonisation would need to apply to technical, social and fiscal regulation, access to the profession, the enactment of a non-discriminatory policy, and the ending of any cost distortions on the part of State monopolies. However, the Committee considers that the changes in facilities, manpower and procedures that are necessary to reduce border delays should be implemented, as rapidly as possible, as such delays discriminate against Union operators, and are impeding the process of economic adaptation.

Infrastructure and Operations

For Union industry to meet the global challenges it faces, every part of its operations and not least the logistic systems upon which such operations depend must be at maximum efficiency. For the logistics system to operate efficiently it must not only have appropriate infrastructure and mobile equipment, but also make optimum use of them. The form of the infrastructure and mobile equipment stock and the optimum utilisation of that stock, as determined by operations management, traffic management and transport policy and regulation, are interdependent and must be the subject of simultaneous decision-making and action⁹.

⁹ See, for example, *Transport Policy and Planning: An Integrated Analytical Approach*, by Brian Bayliss, World Bank, Washington D.C., 1992.

Infrastructure

With Union industry increasingly functioning on a European/global basis it is the efficiency of the whole infrastructure network that is of concern in terms of logistic operations, and "one small investment can therefore have a dramatic effect on logistics efficiency, while another only creates over capacity"¹⁰.

Infrastructure investment and management, and transport policy and regulation must be co-ordinated both with each other and with the requirements of efficient logistics management. Infrastructure bottlenecks, missing links and lack of facilities, for example, can create major problems for freight operators. Instances include bottlenecks in and around major urban areas, delays at borders and inter-modal terminals, lack or undercapacity of stop-over facilities for drivers, and secure parking. Likewise, congestion in the absence of appropriate charging policies can lead to over-utilisation of infrastructure and facilities, and hence to non-optimal operations¹¹.

Given the creation of a Single European Market and the globalisation of industry's strategies within it, it is vital that networks be considered on a European basis and not on an individual country basis. Article 129 of the Union Treaty offers a new basis for the development of infrastructure policy, and the Committee considers that this needs to be fully exploited both as regards traditional "concrete and steel" infrastructure and the intelligent systems that can in the future greatly improve the efficiency of the system taken as a whole. The Committee, therefore, welcomes both the initiative of the Commission in developing a Trans-European Road Network (TERN) and the principles underlying it, reiterates the importance of adequate levels of investment in this respect and recommends:

- the full use and development of IT in

order to achieve the best possible use of capacity, including aspects of safety such as the monitoring of hazardous goods, weather and road conditions.

- the provision of adequate service facilities, particularly on strategic corridors, relating to information transmission, transshipment, inter-modal exchanges, payment of road user charges, vehicle maintenance and checks, secure parking, storage, and drivers' rest facilities.

It is surmisable that in the future, in light of possible changes in industrial and social practices, consideration may have to be given to less restricted use of strategic corridors by freight vehicles. Use of such corridors 24 hours per day 7 days per week would permit important productivity gains to be realised in the interests of the Union as a whole; it would also ensure that full benefit is derived from infrastructure investment. The Committee therefore recommends that the Commission should investigate the possibilities for realising such a policy in a way which takes properly into account the environmental, safety and other objectives pursued by current restrictions on the use of main roads by heavy goods vehicles.

Fiscal Regimes

As to whether road transport pays for the infrastructure it uses and meets the full social costs (e.g. environmental, congestion, accident) it generates, is the subject of extensive debate. One of the problems in this area has been that taxes raised in this sector have neither been specifically calculated nor specifically designated to meet these two groups of costs. The Committee considers it important, therefore, that charges on the sector designed to meet infrastructure and social costs should be separated from any charges of a general revenue-raising nature and be specifically designated for this purpose.

¹⁰ *Advanced Logistics and Road Freight Transport*, OECD, Paris, 1992, p.93.

¹¹ See World Bank, *op. cit.*, pp.14-15.

In terms of international business the road haulage sector is different from most other sectors in that it carries out a substantial part of such business in the country to which it is exporting its services. The sector is thereby imposing social costs and utilising infrastructure in another country.

As social costs and infrastructure provision vary enormously both between Member States and between regions within Member States, fiscal regimes aimed at internalising these costs must relate to the geographic area where operations take place (the territorial principle) as well as levels of operations and infrastructure usage. The Committee recommends, therefore, that the appropriate form of taxation for this purpose is a road user charge.

The principles for the calculation of such charges would need to be regulated at Union level as they could be used in a discriminatory manner, thus harmonisation would be in terms of the establishment of the principles of the road user charge, with charges varying as appropriate between Member States and regions.

The Committee notes that developments in IT will permit an accurate calculation of the road usage of individual vehicles on the different parts of the Union networks. However in the short to medium term it will only be possible for such calculations to be made for the primary networks and some urban areas. It will therefore be necessary for other types of taxation to be used to cover infrastructure and social costs on the remainder of the

network. This should be a combination of vehicle and fuel taxes, thereby allowing both vehicle weight and usage to be taken into account.

The Committee reiterates that it is incumbent upon governments to ensure that all modes of transport meet their full infrastructure, environmental and other social costs, and that the level of funding in infrastructure, operator and driver training and enforcement is compatible with the transport service requirements and hence requisite competitiveness of Union industry within an SEM. The Committee considers it important in this context that the Commission develops proposals for further harmonisation of fiscal and charging regimes across modes of transport.

Technical Standards

The Committee welcomes the improvements achieved in recent years in vehicle noise, engine emissions and safety, notes that where increases in maximum vehicle weight have occurred, this has resulted in a reduction of heavy vehicle movements¹², and considers that the maximum benefits in terms of the environment and the utilisation of resources of all types should be sought in relation to vehicle weights and dimensions, and recommends that such increases that are compatible with safety, operational efficiency and the topography and infrastructure of Member States be introduced¹³.

In making such a recommendation the Committee is aware that on account of varying topographies across the Union, subsidiarity is of particular importance in relation to this matter. It considers,

¹² In the UK, for example, it has been estimated that the raising of the maximum vehicle weight from 32.5 tonnes to 38 tonnes in 1983 resulted in some 12,000 fewer vehicles in 1991. See *The Transport of Goods by Road in Great Britain 1991* (Department of Transport, London, 1992). There are some 65,000 articulated vehicles in the 33-38 tonne category which would suggest a reduction of some 15 per cent. However, the calculation depends on a number of important assumptions and there is some reason to believe that the reduction may be overstated. It is nevertheless perhaps more realistic to attempt such a calculation for the UK rather than other Member States as the situation has not been influenced by changes in the regulatory regime which have impacted on vehicle size elsewhere. In France, for example, three classes of licence (A, B, C) existed prior to deregulation: class C - vehicles of less than 11 tonnes; class B - articulated vehicles up to 21 tonnes and rigids up to 19 tonnes; and class A up to maximum permitted weight, with a system of licence equivalence whereby, for example, 4 C licences = 2 B licences = 1 A licence. A 38-tonne vehicle could, therefore, have been authorised through 1 class B plus 2 class C licences.

¹³ The Committee considers that in the long term this might result in vehicle combinations with maximum laden weights of 48-50 tonnes on six axles (driving and rear axles air suspension - or at least equivalent new techniques) and a total length of 20m (2.30m cabin length, 16.40m body length and 1.30m coupling length).

however, that the Commission's proposals for a norm of 44 tonnes on six axles (driving axle with air suspension) with basically the same dimensions as at present will achieve important benefits for both the economy and the environment, and supports this as a move in the right direction. It is however additionally of the opinion that, where feasible in relation to the infrastructure, consideration should be given to extending the use of 44 tonne vehicles on 5 axles (driving and rear axles on air suspension). Also that in terms of driver and public safety consideration should be given to increasing the coupling length in the proposals¹⁴. It is nevertheless important to promote stability with respect to investments, and the Committee recommends that further changes should not be countenanced for another 6-7 years.

The Social Framework

The social regulations are intended to protect those engaged in the profession in terms of their working conditions, and the public in general in terms of their safety, while at the same time harmonising the conditions of competition between Member States and paying regard to operating efficiency.

The current legislation and its application are, however, failing to achieve these aims on a number of grounds. First, the legislation is in certain respects too complex, as recently confirmed by the European Court of Justice; secondly, application and enforcement vary between Member States; and thirdly, there is both widespread infringement and avoidance of the regulations.

With labour costs forming such a substantial proportion of total operating costs, avoidance and non-enforcement of these regulations is not only endangering

drivers and the general public but also distorting competition. Such distortion exists not only between operators based in different Member States but also between different types of operator, owing to the varying degrees of difficulty of workplace monitoring in different-sized establishments.

The Committee is of the opinion that on grounds of safety and market distortion, immediate action needs to be taken to redefine, harmonise and enforce the regulations. It recommends therefore with respect to the form of the legislation that this should be considered in the Joint Committee on Road Transport; and with respect to enforcement that the proposals made above regarding harmonisation and efficiency of enforcement, whereby initially the electronic tachograph and subsequently automatic roadside monitoring become the norm for roadside control, be acted on as a matter of urgency.

The Joint Committee on Road Transport should be the appropriate authority for the study of the social problems of the sector such as the question of social regulations including working time and other working conditions. If required, it should act not only as an authority for consultation but as a source for new initiatives, in the spirit of the Treaty of Maastricht. The Committee recommends therefore that the Commission examines in close co-operation with this Joint Committee whether its terms of reference are appropriate for the tasks with which it has to deal, and considers the possibility of broadening these tasks in all their aspects, including training, taking into account the increasingly important link between transport as such and the logistic aspects of management.

¹⁴ This would involve an increase in total length.

ENQUIRY

Introduction

During the last two decades there has been not only a very substantial growth in the freight transport sector but also very important changes in the relative importance of the different modes and the geographical distribution of markets. Over the Union as a whole road haulage is now by far the most dominant form of freight transport, but important differences exist both between Member States and between different markets within individual Member States.

Structure and operations are determined by a wide range of factors affecting both the supply and demand sides of freight transport. A number of these factors have been subject to rapid change in recent years, and by impacting simultaneously on the sector have required both rapid response and complex adjustment. Of particular importance in this connection have been:

- (a) the deregulation of international and many domestic markets in the Union - including the challenges that this poses as regards enforcement and control;
- (b) the creation of a Single European Market (SEM) and the development of the Common Transport Policy (CTP);
- (c) increasingly demanding standards for the protection of the environment;
- (d) changing operating and production practices in the industrial and retail sectors - particularly those relating to globalisation and Just-in-Time (JIT) systems;
- (e) the development of information technology (IT) and telematic systems with their implications for road freight transport operations, infrastructure utilisation and enforcement;
- (f) increased competition from third

- countries, particularly the former east bloc countries;
- (g) the pattern and structure of investment in infrastructure;
- (h) the current economic recession.

The adoption by the industrial and retailing sectors of, for example, global, lean production and Just-in-Time strategies, has created a demand for fast, flexible and high quality freight services, operating over extensive and sophisticated networks, where lot sizes are smaller and delivery frequencies higher.

In terms of the structure of the freight transport sector this has meant an increased demand for road services, and within road freight transport moves from own account to professional operations and to increasingly larger operators. In terms of operations these larger firms have extended their services into freight forwarding and logistic operations. The increasing demand for flexibility in the provision of services is being met through extensive sub-contracting in a range of forms, and a major part of road haulage operations is now directly or indirectly conducted by the larger operators. This is a process that has been facilitated through deregulation with respect to quantitative restrictions on access to international intra-Union markets and domestic markets in many Member States, the creation of an SEM, and developments in IT and telematics.

This development of the road haulage sector has important implications for the provision and form of regulatory control in the sector. Unlike nearly all other production and service sectors road freight transport services are not provided in a fixed workplace but are continually mobile and permanently in the domain of

the general public. Both the form and enforcement of provisions relating to such factors as health and safety are consequently more complex and difficult in this sector than in most other sectors. The expansion and development of the sector in terms of its overall size, its range of operations, and its geographical mobility have added to these complexities.

These changes in the size, structure and operations of road freight transport in response to a changing industrial and retail demand have themselves had consequences for other parts of the economy and Union. These include increased demands on the transport infrastructure with their consequences for other users and future investments, increased levels of transit traffic through countries that receive no benefit from such traffic, and increased levels of environmental pollution in a range of forms.

The success of Union industry within an SEM where market fragmentation is being broken down and global strategies increasingly practised, is inextricably linked to the efficiency of the physical distribution and logistic systems¹⁵ within that market. The aim of this Enquiry is to examine the efficiency of the road haulage sector.

The following Enquiry is divided into 6 sections and an Appendix. In section 1 road haulage is placed in perspective within the total freight transport sector; in sections 2, 3 and 4 three of the most important factors that bear upon the structure and operations of road haulage are analysed, namely, the nature of demand, EU and Member State regulation, and infrastructure; in sections 5 and 6 the structure and operations of road haulage are considered. The Appendix includes detailed statistical information relating to matters raised in the Enquiry.

15 Physical distribution is a series of inter-related functions (transport, stockholding, storage, stock handling, order processing) involved in the physical transfer of goods from producer to consumer. If the chain is from raw material source to final point of sale this is usually termed logistics.

1. The Freight Transport Sector

Over the Union as a whole during the last two decades there has been little change in the output of the rail and inland waterway branches, whereas output in road haulage has more than doubled¹⁶. In 1970 output in road haulage was some one and three-quarter times greater than for rail, and some four times greater than for inland waterways, but by the beginning of this decade it was approximately four times greater than for rail and some ten times greater than for inland waterways (see Figure 1 below and Appendix Table 1).

Although road haulage has grown substantially in importance in both relative and absolute terms in most Member States, the rate of change has not been uniform. In the UK, for example, over the two decades road haulage output only increased by about one-half, whereas in Belgium and Germany it more than doubled, and in Italy and Spain it trebled. In Denmark, by contrast, growth was less than one-fifth, and in Portugal output fell while rail output more than doubled.

Despite support from public authorities rail traffic has tended to decline, but on the other hand combined transport in the form of container and piggy-back traffics has expanded rapidly, and the second half of the 1980s saw an increase in both container and piggy-back traffics of some one-half. The growth in Continental (i.e. non-maritime) container traffic was particularly strong. Both these forms of combined transport form, however, a very small part of the total freight market - the 25 member countries of Intercontainer work some 11 billion tonne-kms, and the

17 member countries of the Union Internationale des Sociétés de Transport Combiné Rail/Route (UIRR) work some 20 million tonne-kms. This is to be contrasted with road freight movements in the Union alone amounting to some 800,000 million tonne-kms. Similarly the work of Intercontainer in 25 countries is equivalent to only some four per cent of rail traffic in the 22 (since 1993, 29) member countries of the European Conference of Ministers of Transport. Further development of combined transport depends on the removal of a variety of constraints including the limited capacity of rail infrastructure as it is currently organised.

The dominance of road freight transport in physical distribution is particularly marked in domestic markets within the Union where the market share is now over four-fifths. Its importance in international intra-Union traffics has been growing strongly, with a current share of about three-fifths and with average distances hauled identical with rail¹⁷.

International intra-Union road freight transport has been growing at a faster rate than national transport. In 1986 this international market was just over one-quarter the size of total domestic road transport within the Union, but by 1991 had risen to almost two-fifths for a majority of Union countries¹⁸ (see Figure 2 below). The situation varies, however, between Member States - in the case of Belgian and Dutch operators the international intra-Union market is appreciably more important than the domestic market, whereas for German operators domestic

¹⁶ In this Section, unless otherwise stated, output is measured in terms of tonne-kms. This is a frequently used measure but as the nature of the tonne-km varies substantially between different segments of the freight market, it can be very misleading when making comparisons between transport branches and market segments. As a general rule road transport provides a more flexible service than rail and inland waterways, and has a high proportion of non-bulk traffics and operations in congested urban areas; as a consequence the value added of road tonne-kms is generally higher than for rail. Likewise because of the concentration of road own account transport in short-distance operations, the value added of own account tonne-kms is generally higher than for professional road haulage.

¹⁷ *Europa Transport: Observation of Transport Markets* (Annual Report 1989), EU Commission, 1991.

¹⁸ Strictly comparable figures for 1986 and 1991 were not available for Germany, Italy, Luxembourg and Spain.

Figure 1 : Growth in Road, Rail and Inland Waterways Freight Traffics, 1970-90

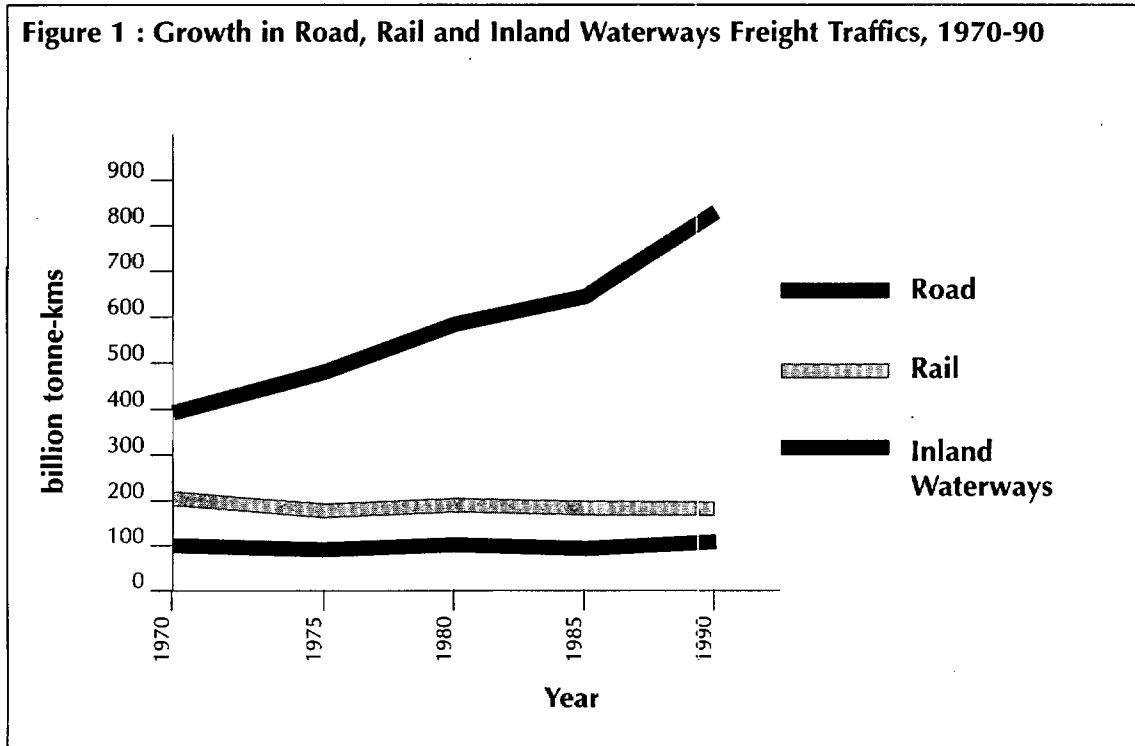
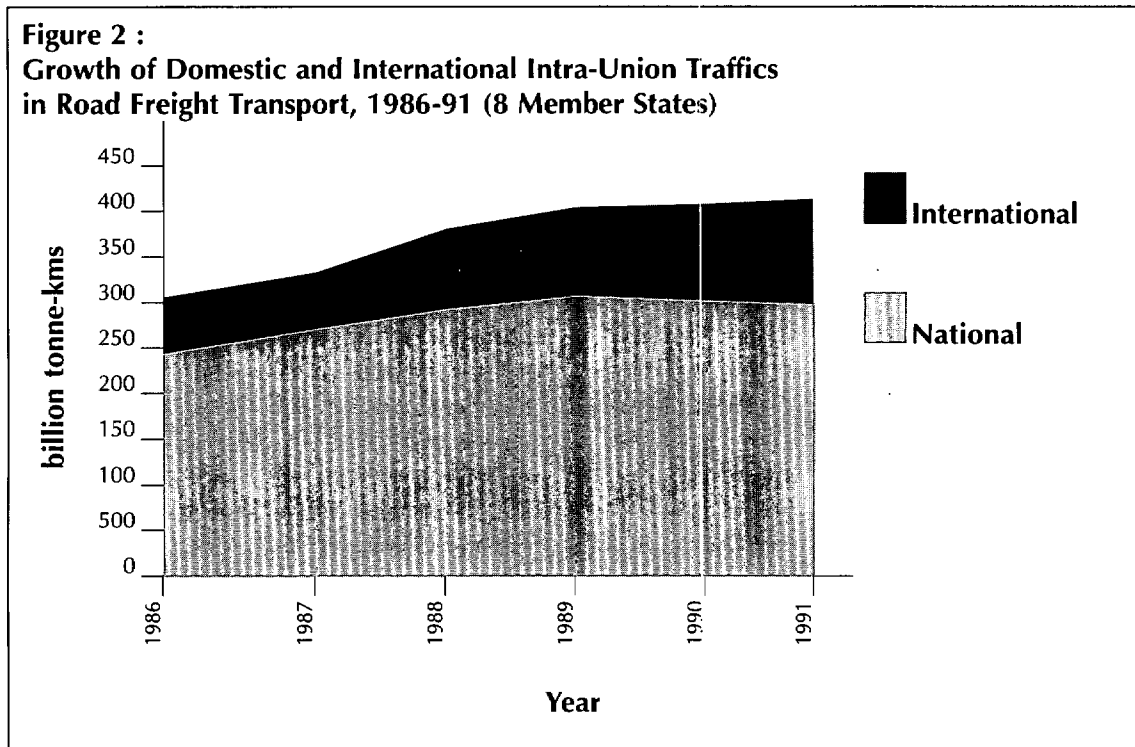


Figure 2 : Growth of Domestic and International Intra-Union Traffics in Road Freight Transport, 1986-91 (8 Member States)



traffics are over five times more important than international intra-Union traffics (see Appendix Tables 2 and 3).

The share of international intra-Union traffic held by operators in the state where the traffic originates or ends also varies considerably. German operators are only responsible for about one-third of the international intra-Union traffic loaded and unloaded in Germany, compared with the Dutch who have a two-thirds share of traffic to and from the Netherlands. Over all the Member States domestic hauliers are responsible for about one-half of international intra-Union traffic loaded in their respective countries, and for about two-fifths of the traffic unloaded¹⁹.

Although traffic levels with the former east bloc countries are low they have nevertheless grown substantially in a number of instances since the end of the eighties. By far the most important former east bloc trading partners with respect to road traffics are Poland and the former Czechoslovakia, with traffic levels for each being greater than for the other former east bloc countries combined. Imports from these countries into the Union are as a general rule substantially greater than exports from the Union, with the major part of road traffic passing through Germany - some 27 million tonnes in 1992²⁰.

Summary

Although clear general trends are apparent in the Union there exist substantial differences between Member States, not just with respect to the rate of change but also in some instances with respect to the direction of change. The increasing dominance of road transport in both domestic and international intra-Union markets, as demonstrated by the physical tonne-km measure, underestimates in fact

its key role in physical distribution; as many of the services provided by road operators have a higher value added than rail and inland waterway services.

Combined transport has expanded rapidly, and particularly in the second half of the 1980s but its market share remains very small, and its future growth will depend among other things on overcoming current capacity constraints.

Within the road freight sector the growing importance of international operations relative to domestic operations has been an important trend in the eight Member States for which comparable time series data are available.

Although traffic with Eastern Europe is low in absolute terms it has been growing rapidly since the end of the eighties; it is probable that as much as four-fifths of this traffic is either with Germany or passes through Germany.

Three major factors have had a major influence on both the absolute size of the freight transport sector and the split between modes; these are the nature of demand, the regulatory regimes, and infrastructure, and they are considered in the following three sections.

¹⁹ *Europa Transport: Observation of Transport Markets (Annual Report 1989)*, EU Commission, 1991.

²⁰ There are general problems with statistics relating to the former East-block countries due to changes in definitions. Also of particular importance is the German unification, as the large traffic flows from former East-bloc countries to the former GDR now count as flows to the Union.

2. Demand for Road Freight Transport

Both industry and retailing are increasingly dominated by major firms operating over geographically large areas. Within Europe the pressure upon both mature and high-technology sectors from the US, Japan and the newly industrialising countries (NICs) has led during the last decade to major changes in industrial practices.

There has been increasing concentration on core business with outsourcing to specialist suppliers - this outsourcing has been global in nature. Internally these firms have sought to adopt integrated corporate strategies based upon high quality performance and minimum stock levels. These integrated global strategies have been aided by the reduction in barriers to international operations and deregulation in a number of key sectors, and depend upon highly sophisticated logistic systems.

Global strategies relate to all aspects of corporate activity - purchasing, production and marketing - the emphasis being on conducting individual activities in the most favourable location. This involves greater geographical separation, both within and between the activities of purchasing, producing and marketing. The integrated corporate aspect of this is reflected in recent research²¹ which showed that international trade inside the world's largest 350 multinational companies (MNCs) accounts for almost two-fifths of world trade in goods. This integration of the largest MNCs has resulted in substantial increases in foreign direct investment (FDI) - itself aided by deregulation of capital markets. According to the World Bank²², after unremarkable growth up to 1982, FDI grew five-fold to average over US\$ 125 billion a year between 1985 and 1989. Almost one-half (47 per cent) of this investment was

in the Union.

The fragmentation of markets, caused by the existence of non-tariff barriers (NTBs) within the Union, frequently obliged industry to pursue strategies on the basis of national markets rather than the Union as a whole. The breaking down of this fragmentation through the creation of an SEM is speeding up the process of globalisation.

The emphasis on quality performance has led *inter alia* to concentration on core activities and outsourcing of non-core activities to quality suppliers. This has occurred, for example, in physical distribution with the move from own account operators to professional operators - a move assisted by deregulation in the sector (see section 3 below). Quality with respect to outsourcing is sought through the building of strategic alliances between purchaser and supplier; this involves fewer suppliers and longer-term contracts.

A 1993 UK survey²³ showed that since 1990 some three-fifths of shippers surveyed had increased their expenditure on third-party physical distribution, and about one-third had reduced the number of contractors they use. Three-quarters of all these operations are now carried out under formal contract as opposed to just over three-fifths three years ago. Over one-quarter of all such contracts are for more than four years, and over three-fifths are for two years or longer.

The most important reason for changing haulier is service failure, followed by levels of cost²⁴.

An essential element of such practices is the optimum use of all resources, e.g. manpower, buildings, equipment and

21 *Global Economic Aspects and the Developing Countries*, World Bank, Washington, D.C., 1992.

22 *Ibid.*

23 *Contracting Out or Selling Out?*, P.E. International, 1993.

24 *Ibid.*

materials. Outsourcing is thus a means by which a firm will attempt to minimise the costs of goods or services by taking them only when required in the production process - hence the name Just-in-Time (JIT). Similarly, production processing times are reduced to minimise the cost of work-in-progress stocks, and finished goods are despatched on completion and not held in stock.

Transport is also required to make its own contribution in terms of efficiency savings. In the electrical and electronics sector, for example, total processing times were reduced from 23 weeks in 1979 to 5 weeks in 1990, and the physical distribution times in 1990 were only about one-fifth of those in 1979²⁵.

These changes in industrial demand are taking place very rapidly. According to a World Bank survey²⁶ some 28 per cent of all shipments in the US and EU in 1990 were on a JIT basis, and the proportion projected for 1995 is over one-third. This same survey of 625 North American and 225 European firms showed that between 1987 and 1990 the frequency of inventory turnover increased by almost one-quarter, and it is estimated that by 1995 it will have increased by almost three-fifths. It also showed that order cycle time had fallen by almost one-quarter over the three-year period.

Also, changes in the process of internationalisation have greatly speeded up the time taken to establish production facilities abroad. Research in the late 1970s and early 1980s pointed generally "to a process of evolutionary, sequential build-up of foreign commitments over time"²⁷, but the latest research supports "a life cycle model which is based on the inter-

national development of the firm rather than the market or product international experience may be transferred across markets and between products, thereby enabling firms to leap-frog the incremental process within markets"²⁸.

These changing practices are not confined to the industrial sector. Retailing in many Member States is becoming increasingly concentrated, with individual retailers covering large geographical areas, and with outsourced physical distribution operating in a JIT system. The turnover of the top six retailers in Germany equates to some three-tenths of all retail sales in that country²⁹; in France the equivalent proportion for the top five is about one-quarter³⁰. In the UK the top five grocery retailers are responsible for three-fifths of all grocery sales in that country.

This demand for flexible, highly reliable services has increased the demand for road freight transport. Within the road freight transport sector itself the outsourcing and longer distances, frequently involving international movements, favour professional as opposed to own account operations.

The demands on professional road hauliers to provide sophisticated logistic services over large networks, with often only one central storage point for the whole SEM³¹, has favoured larger operators. It is only the larger operators who can assure shippers of the flexible services they require, can operate over large networks with high capacity utilisation levels and can take advantage of sophisticated information technologies (IT) and telematics systems. The sophistication of these networks is indicated in Figure 3 below.

25 See Bayliss, B.T. "Industry, Industrial Location and the Role of Transport in a Single European Market" in *European Transport Economics* Blackwells, Oxford, 1993.

26 The following information relating to the survey was supplied by H. Peters of the World Bank.

27 Millington, A.I. and Bayliss, B.T. "The Process of Internationalisation: UK Companies in the EC", *Management International Review*, 1990, pp.151-61.

28 *Ibid.*

29 Not all sales of these firms are in the home market, therefore this proportion does not represent their share of this market.

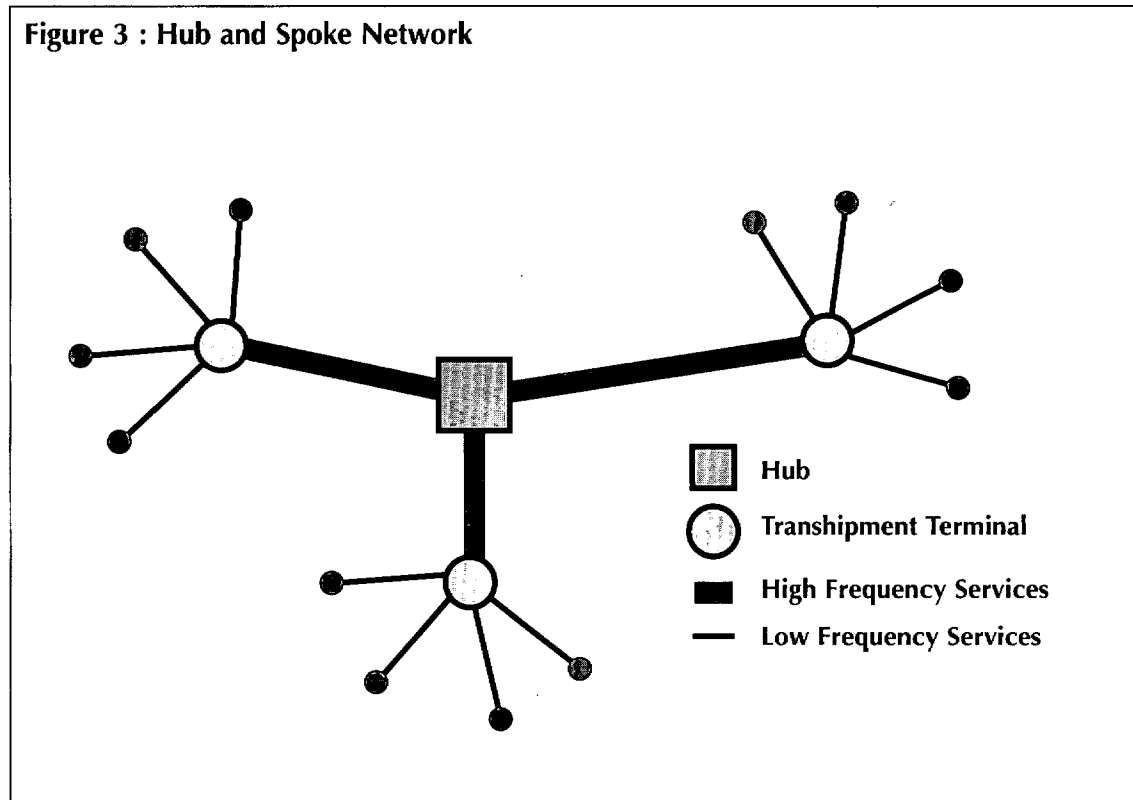
30 Footnote above also applies here.

31 This is particularly the case for spare parts, high value components and finished products that come in many variants.

In order to operate over such networks and meet the flexible JIT requirements of shippers the larger operators are having to modify their own operations. In particular they have also moved towards outsourcing, with sub-contractors operating both on the line-hauls and as part of the pick-up and delivery operation.

Summary

In such industrial strategies where purchasing, production and final despatch must be absolutely synchronised, and where material sources, the production process and markets can all be spread over wide geographical areas (globalisation), the role of transport is crucial. Lot sizes are smaller, deliveries



Local markets comprise, therefore, traditional point-to-point and multi-stop operations as well as operations that form part of inter-terminal and integrated hub-and-spoke movements; the continuing demand for traditional operations means however that they continue to comprise by far the major share of this local market. By contrast, in the long-distance market integrated logistic operations are commanding an ever larger share.

more frequent and transport networks much greater, yet schedules must be strictly adhered to and 'inventory on wheels' costs must not negate the benefits of overall lower inventories.

As a consequence the demand for road transport has increased with the large, professional hauliers being preferred. In turn, these enterprises are modifying their operations making use of sub-contractors to carry out different parts of the service. Traditional point-to-point and multi-stop operations continue to comprise however a significant share of the important local markets (see section 5, geographical markets).

3. Regulation of Road Freight Transport

In the past both domestic and international markets have been the subject of restrictive regulatory regimes. As a rule these implied qualitative conditions relating to access to the profession and quantitative conditions relating to access to the market; also in many Member States regulation of prices. Such regulatory regimes have been an important contributory factor in determining the structure and operations of the sector, and, as they have differed widely between Member States, in creating country variations.

Although the United Kingdom deregulated as early as 1968, in that all quantitative restrictions on entry to the market were ended and regulation subsequently related solely to qualitative conditions in connection with access to the profession, such moves in other Member States did not materialise until the 1980s - France (1986), Ireland (1986), Denmark (1989), Belgium (1991) and the Netherlands (1992).

A number of factors contributed to this deregulatory movement in domestic markets. First, across the industrialised world there were widespread moves towards deregulation in all sectors; secondly, the 1985 decision of the Court of Justice confirming that the Council should act to realise the basic liberties of the Treaty in the inland transport sector; thirdly, the actions of the Commission to both harmonise operating conditions across Member States and create an international intra-Union transport market free of quantitative restrictions - a move which has impacted on domestic markets.

The Union has acted to harmonise operating conditions with respect to access to

the profession and in the social, technical and fiscal areas; to de-restrict access to the international intra-Union market with respect to quotas, prices and right of establishment; and to facilitate international movements through ending border controls. These aspects of Union policy are considered below, together with access to domestic markets, compliance, non-Union EEA operators and third-country operators.

Access to the Profession³²

With certain exceptions, professional hauliers operating in domestic and/or international intra-Union markets must meet criteria relating to good repute, financial standing and professional competence³³. The exceptions relate to vehicles with a carrying capacity not exceeding 3.5 tonnes and with a total authorised weight not exceeding 6 tonnes³⁴, or where Member States, after consultation with the Commission, exempt operators in domestic markets in cases where these operations have little impact upon the market by reason of the nature of the goods carried or the limited length of haul. Additionally, where operations are solely of a domestic nature operators are not required to take Part B of the professional competence examination relating to international operations, and Member States may dispense with the financial standing requirement.

In the case of international intra-Union operations there is mutual recognition of certificates across the Union. Where establishment is sought in another Member State by a haulier there is mutual recognition across the Union of certificates relating to professional competence; however in the cases of good repute and financial standing a non-domestic opera-

³² A summary of legislation in individual Member States is to be found in a Report from the Commission to the Council COM(93) 341 final, Sept. 1993.

³³ Directive 89/438/EEC.

³⁴ Member States may lower this threshold for all or certain types of transport in the case of operators established in their territory.

tor must meet the same conditions as domestic operators of the country in which establishment is sought. Certificates from the country of origin of an operator providing proof of compliance with the conditions of the host country must be recognised by the host country.

With respect to good repute the operator must not have committed a serious criminal offence, been declared unfit to practise the profession with respect to the rules in force, or been convicted of serious and repeated infringements of regulations relating to the conditions of pay and work in the sector, and transport operations - notably those concerning driving hours, weights and dimensions, and safety. It is for the individual Member States to determine the specific nature of these conditions and who in the undertaking should meet them.

In Belgium and the UK, for example, this condition is not fulfilled if the applicant has been sentenced to more than three months' imprisonment, whereas in Italy it has to be two years or more. In a number of countries all persons holding a management position must fulfil this condition, whereas in others this is not the case.

Appropriate financial standing requires that an undertaking has minimum capital and reserves of ECU 3,000 per vehicle or ECU 150 per tonne of permitted gross vehicle weight. Where operations of an undertaking are solely of a domestic nature Member States may dispense with this condition. In practice there are wide variations between Member States. Operators in Portugal, for example, must have a registered capital of at least ESC 50 million (ECU 277,290) and also be in possession of ESC 600,000 (ECU 3,335) per vehicle, whereas Greece, France, Ireland and the UK require only the

minimum of at least ECU 3,000 per vehicle, with other countries falling in between.

Professional competence is adjudged through passing an examination covering such topics as law, commercial and financial management, technical operations and safety. Additionally where hauliers intend operating in non-domestic markets, topics relating to international operations must also be included in the examination. Member States may dispense with the examination where the applicant has had at least five years' practical experience in a management position in a transport undertaking or holds an appropriate diploma.

The Directive requires that the examinations relating to professional competence be appropriate for candidates with a level of education of compulsory school-leaving age. As levels of education vary substantially across the Union this would suggest that attainable levels vary correspondingly - in Portugal³⁵, for example, four out of five transport managers left school between the ages of 9 and 11, and in large firms two out of five; and in Spain³⁶ two-thirds of the workforce in the road haulage sector has had either no formal education or did not complete primary education; only 15 per cent has had more than primary education: this can be compared to France³⁷ where only 42 per cent is without some type of qualification and 7 per cent has the baccalauréat. Over and above the initial capabilities of candidates the preparatory courses for the professional competence examination vary from 65 hours in the UK to 300 hours in the Netherlands. In most Member States attendance at the course is compulsory but in others a correspondence course can be substituted. Only in the case of the UK is it not mandatory to take a course. Of the 2,060

35 *Direcção-Geral de transportes terrestres* : "Transportes públicos ocasionais Rodoviários de mercadorias", 1991, p 28/29.

36 *Ministerio de Obras Públicas y Transportes* : "Programa de medidas para el sector del transporte de mercancías por carretera aprobado por la comisión delegada del gobierno para asuntos económicos, 1992, p. 18.

37 *Rapport du groupe présidé par Georges Dobias* : "La situation économique et sociale du transport routier de marchandises", 1993, p. 6.

hauliers in the Netherlands who received operators' licences between May 1992 and the end of 1993, 646 had obtained their professional competence certificates from the UK.

Access to Domestic Markets

Five Member States retain quantitative controls with respect to market entry, namely Germany, Greece, Italy, Spain and Portugal, and two (Italy and Spain) also have price controls. These quotas, however, frequently do not apply to smaller vehicles and local markets.

In four of these countries (Greece, Italy, Spain, Portugal) the quotas have been tightly controlled during the last decade; however unauthorised operations are very extensive, with estimates according to country lying between one-quarter and one-half of authorised professional operations³⁸.

In Germany quota constraints have been less restrictive in recent years, and operator numbers also rose disproportionately as a result of reunification. This has been reflected in the value of professional operators' licences, i.e. independent of the value of the undertaking. In 1980 the value of a licence was approximately DM 200,000, five years later it was ca DM 100,000 and in 1993 it was some DM 18,000³⁹; in 1994 the value appears to be zero. This fall also almost certainly reflects the markets' views that the opening-up of international intra-Union markets will directly affect returns and possibly indirectly lead to further deregulation. Germany ended price controls as from the beginning of 1994 but in practice these had not been enforced for the previous two or three years.

As noted earlier, five Member States have ended quantitative controls since 1986, but the previous regulatory regimes varied substantially in their rigour.

In Belgium for example, no quantity restrictions existed with respect to the short-distance market - prior to 1987 this zone was 25 kms but in that year it was extended to 75 kms. Operators who could demonstrate satisfactory utilisation of their capacity in the short-distance zone could then obtain a licence to operate nationally. Although some care has to be taken in interpreting the statistics, due to changes in their composition, an indication of the liberal nature of the regime is shown by the decrease in the number of vehicles in the short-distance zone between 1970 and 1987 - a reduction to almost one-half - and the increase in the number of vehicles in the long-distance zone - a doubling.

By contrast, in France and Ireland the ending of restrictive regimes (in the case of France for the long-distance zone, there having been no quantitative restrictions in the short-distance zone) in 1986 was a precursor to the substantial increase in the scale of professional operations in the following years. Following deregulation the proportion of domestic road freight transport attributable to professional operations increased respectively from 66 per cent and 38 per cent (in 1986) to 72 per cent and 60 per cent in 1991/92 (see Appendix Table 4), and total domestic traffics worked by professional operators increased by two-fifths or more in both countries (see Appendix Tables 5 and 6).

A measure of the decreasingly restrictive nature of the licensing regime in France is the value attached to Class A licences. In 1984-5 such a licence had a value (independent of the value of the undertaking) of some FF 200,000, but by 1989 the value was no more than FF 50-70,000⁴⁰.

³⁸ See Section 5, on Unauthorised and Illegal Operations.

³⁹ Figures provided by BAG.

⁴⁰ Data courtesy of Professor A. Bonnafous.

Access to the International Intra-Union Market

Under a 1992 Council Regulation⁴¹ quota restrictions for international traffic between Member States and transit traffic to and from non-Member States were abolished with effect from 1 January 1993 for Union operators. Licences for such operations are available to all operators established in a Member State and entitled to carry out the international carriage of goods by road, this latter being determined by the qualitative criteria relating to good repute, professional standing and financial capacity⁴².

Since 1 January 1990 prices for international operations have been freely negotiated between the parties⁴³.

Under a 1989 Council Regulation⁴⁴ a Union quota of 15,000 cabotage licences was established, each valid for two months, as a temporary regime. These licences allowed the recipient free access to the markets of host Member States. In 1993 the Member States agreed upon a definitive Regulation⁴⁵ under which the quota was fixed at 30,000 from the beginning of 1994 and is increased annually by 30 % until 1st July 1998, when all quota restrictions will be ended.

Hauliers established in a Member State have Right of Establishment in any other Member State, subject to meeting the conditions of the host state in relation to access to the profession and, where market access is controlled through quotas, subject to obtaining the necessary market access authorisation.

41 No. 881/92.

42 *In the case of Greece it is necessary to obtain a bilateral licence in order to travel through third countries to other Union countries if the land route is chosen.*

43 Council Regulation No. 4058/89.

44 No. 4059/89.

45 Regulation No. 3118/93.

46 EU Commission, 1992, *The European Challenge*, Gower Press, Aldershot, 1988, p.12.

Intra-Union Border Controls

In the past a major disadvantage in international operations has been the delays caused by border controls. It was estimated⁴⁶, for example, that the haul time between London and Milan (1,200 km) was increased by about 50 per cent as a result of border delays, and that in total such physical delays to road hauliers in the EU as a whole used to cost between ECU 415m-830m per annum.

In a 1983 Council Directive⁴⁷ it had already been stipulated that "the various inspections and formalities are carried out with the minimum of delay necessary" (Article 2), but in a 1989 Regulation⁴⁸ it was stipulated that controls shall no longer be performed as frontier control but solely as part of normal control procedures applied in a non-discriminatory fashion.

Under a 1991 Regulation⁴⁹ the Union is held to form a single customs territory, thus eliminating entirely the need, at internal frontier crossings, for the formalities and controls inherent for example in the use of TIR and ATA *carnets* as transit documents.

Both hauliers and shippers have suggested important savings in international journey times as a result of these measures. United Parcels Service (UPS) for example has increased the number of pick-ups per driver by 20 per cent, and achieved a reduction in total costs of 15 per cent. A major French operator has indicated an improvement in journey times of about 30 per cent, and a leading Dutch haulier has also reported overall costs savings of 15 per cent resulting directly from these measures.

Several shippers have indicated savings in transport delivery times of 2-3 days⁵⁰.

47 No. 83/643.

48 No. 4060/89.

49 No. 719/91.

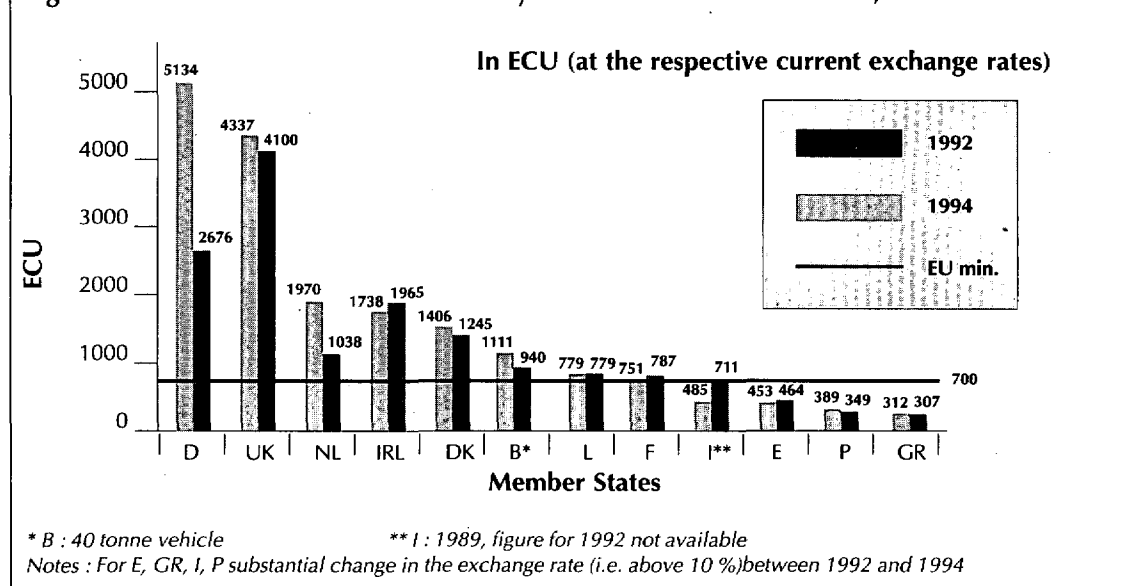
50 Survey by Euro Info Centres - there are currently 211 Centres in this network, set up by the Commission in 1987 to provide enterprises with reliable and up-to-date information on Union developments affecting their operations.

Social, Technical and Fiscal Harmonisation

Social legislation in relation to road transport was initially determined in 1969⁵¹ and is currently subject to Council Regulation No. 3820/85 - 20 December 1985. Under this Regulation minimum ages of drivers as well as maximum drivers' hours, breaks and minimum rest periods are stipulated. The legislation is aimed at improving road safety and working conditions for the Union as a whole, as well as harmonising the conditions of competition between Member States (see Enforcement and Compliance below). Complexities in the legislation, which have been acknowledged by the Court of Justice⁵², have however, led to

relating to safety, noise, gaseous and particulate emission standards have been improved in stages⁵⁵. Although a maximum gross vehicle weight of 40 tonnes has been agreed for international intra-Union movements, Union domestic markets have maximum limits ranging from 38 tonnes to 50 tonnes; and within the EEA the range extends to 60 tonnes (Sweden). Such differences arise from, for example, topographical, infrastructure and environmental factors. In mountainous regions, for instance, greater weight on the drive axle improves traction, whereas in other countries many of the bridges were constructed well before vehicle technology permitted such heavy vehicles, and are unsuitable for them.

Figure 4 : Annual Vehicle Taxes for Heavy Goods Vehicles of 38 Tonne, 1992 and 1994



differences in interpretation between the Member States.

In the technical area weights and dimensions and certain other technical characteristics of vehicles participating in international traffic are regulated⁵³, and more recently these technical aspects have been extended to include safety aspects such as speed limitation devices⁵⁴. Also, type approval construction requirements

In 1992 and 1993 agreements were reached on fuel⁵⁶ and minimum vehicle⁵⁷ taxes respectively, which are leading to a reduction in some of the disparities in these taxes that have existed between Member States (see Figures 5 and 6). The 1993 agreement also gave Member States the option to levy road user charges - five countries will introduce such a system on a common basis from the beginning of 1995.

51 Regulation No. 543/69.

52 Court of Justice C 116/92.

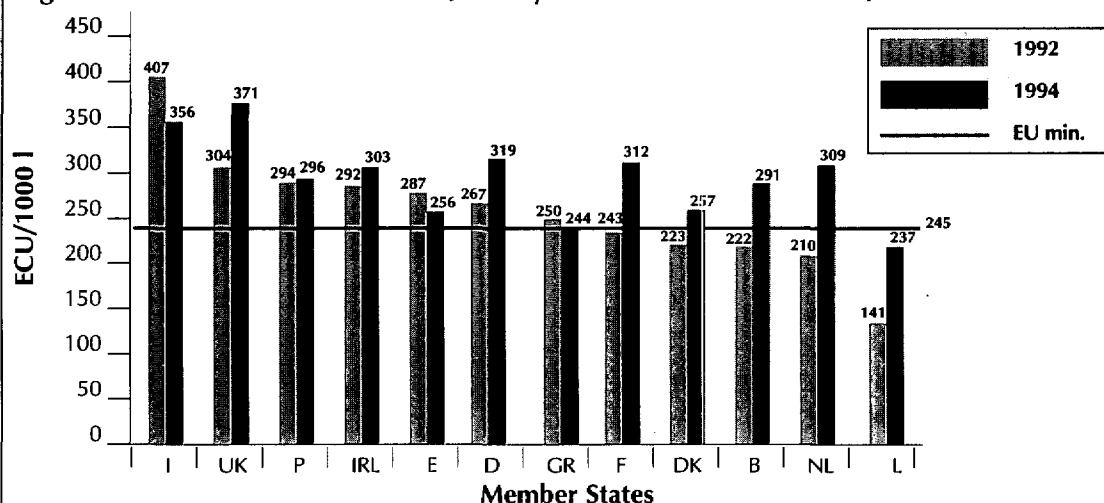
53 Council Directive No. 85/3.

54 Council Directive No. 92/6.

55 Council Directives Nos 70/156; 78/315; 78/547; 80/1267; 87/358; 87/403; 92/53; 93/81.

56 Directive 92/82.

57 Directive 93/89.

Figure 5 : Excise Duties on Fuel - January 1992 and 1994 - in ECU/1000 l

Notes : For E, GR, I, P substantial change in the exchange rate (i.e. above 10 %) between 1992 and 1994

Enforcement and Compliance

Enforcement is regulated at a national level. However in the case of the social legislation and vehicle roadworthiness the Union stipulates minimum regulatory regimes.

Since 1985 all vehicles must be equipped with a tachograph for the monitoring of compliance with the social legislation⁵⁸, and in November 1988 the Council introduced minimum requirements with respect to such monitoring. This stipulated *inter alia* that checks must cover at least 1 per cent of days worked each year, and that not less than 15 per cent of the days checked shall be at the roadside and not less than 25 per cent at the workplace. However, sanctions for non-observance are determined by the individual Member States. Under the Directives 77/143 and 91/328 roadworthiness tests are defined and these must take place annually.

In none of the other areas of regulation are minimum requirements for monitoring compliance stipulated on a Union basis. In Portugal, for instance, it has been estimated that a vehicle is controlled for overloading once every 25 years, and

only ca 1 per cent of own account vehicles have paid the vehicle tax⁵⁹.

Non-Union EEA Operators

The EEA Agreement was initialled in August 1991. Under this Agreement Union legislation adopted by that date and, when agreed upon by the EEA Joint Committee, legislation adopted later, will be extended to Iceland, Norway, Sweden, Finland. Road transport legislation, and in particular Regulation 881/92 on international transport, and Regulation 3118/93 on cabotage, as well as fiscal harmonisation (Directive 93/89) will be applicable in these countries, probably from July 1994. There are exceptional conditions in the case of Austria.

The developments in the EEA are however being overtaken by the membership negotiations with four (Austria, Finland, Norway, Sweden) of the non-Union EEA members. This means no substantial change for the Nordic countries, but it does for Austria. The exception for Austria derives from the transit agreement between the Union and Austria, which foresaw a special ecopoint regime for transit trips, and the maintenance of bilateral agreements, often involving

⁵⁸ Regulation 3821/85.

⁵⁹ See Study of Road Freight Transport - Portugal April 1993: Report prepared for ANTRAM by Mercer Management Consultants and ESFI, p.III-8.

quotas, between Member States and Austria.

The Transit Agreement is due to be assessed before 1 January 2001, six years after Austria's accession to the Union. If the aimed 60 per cent reduction of NO_x pollution has been attained by that date on a sustainable basis, then the transit regime ceases to apply after the year 2000. If not, the transit regime remains in force until 1 January 2004. Bilateral market access with Austria is being progressively freed and in accordance with Regulation 881/92 will be totally free from 1 January 1997.

Third-Country Operators

Operators from outside the EEA enter the Union under bilateral agreements with individual Member States. In the case of the UK, traffic with most third countries is carried without quantitative constraints, whereas this is not the case for the other Member States. Under Union rules Member States are obliged to allow all traffic carried by Union-hauliers to pass through their territories. However for non-Union-hauliers transit through Member States is governed by bilateral agreements and may be restricted.

Any third country operator is free to operate to and from a Member State of the Union subject to obtaining an authorisation and meeting weights and dimension and gaseous emissions requirements as well as any other conditions laid down in bilateral or multilateral agreements. In addition, the Vienna Convention⁶⁰ allows vehicles registered in a signatory State and complying with that State's regulations free movement in other signatory States if certain minimum requirements laid down in this Convention are met.

Third country operators from a signatory State of the Vienna Convention are not obliged to meet Union or Member State regulations with respect to drivers' licences and vehicle maintenance. They are also not governed by Union legislation on access to the profession.

Labour costs in Eastern Europe are only at about one-quarter of those in northern Union countries, and total operating costs at about three-quarters of those in the Union (see section 6 below). Moreover, many of the state-owned conglomerates are still wholly or partly in being, and such conglomerates do not operate according to market principles; their pricing policies do not therefore necessarily relate to their cost structures. They can also dominate commercial relationships with shippers.

Union operators find themselves at a disadvantage in a number of respects in this traffic: first, their operating costs are higher; secondly, there is a substantial imbalance in traffic with far more traffic originating in Eastern Europe than in the Union and in general it is easier for domestic operators to obtain traffic originating in the domestic market than foreign operators⁶¹; thirdly, increasing use is made of customer pick-up within the Union by firms in Eastern Europe, as this is not only cheaper but obviates the need to make payments in hard currencies.

In 1989 the German share of its traffic with Eastern Europe was 27 per cent, but by 1992 had fallen to 20 per cent. Dutch operators have fared better but their shares have also been falling, and the Chairman of a Dutch road haulage association has commented that competition from Eastern Europe, and more specifically Poland, is "fatal"⁶².

⁶⁰ Treaty concerning road transport of 1968. It regulates certain aspects of traffic regulation, mutual recognition of drivers licences and vehicle registration and lays down minimum requirements with respect to type approval of vehicles for domestic and international road traffic.

⁶¹ In Section 1 it was noted with respect to international intra-Union operations that domestic operators obtained about one-half of outward flows and about two-fifths of inward flows. Because of both the imbalance between flows in the two directions and differing levels of competition, operators use differential pricing policies with respect to the direction of the flow - there is, for example, some 40 per cent difference between UK/German and German/UK flows, and in general in the Union return loads are carried at some 20-25 per cent lower prices than outward loads.

⁶² Transport en Logistiek Nederland, Annual Meeting, 1993.

It has been suggested that the low operating costs and favourable exchange rates are making these countries potential locations for Union operators⁶³.

Summary

The major changes in the size, structure and operation of road freight transport that have occurred in recent years have been facilitated by the deregulation of international intra-Union markets and many domestic markets. The second half of the 1980s witnessed the fastest growth rate in road freight transport in any five-year period in the last two decades⁶⁴, with a move from own account to professional operations, and an increasing importance of international intra-Union operations in total operations. In 1991 international intra-Union operations comprised just over one-third of total professional operations, compared with just over one-quarter in 1986 for the eight Member States for which comparable data are available (see Appendix Table 6). Several shippers have indicated that their transport costs have been reduced (sometimes substantially) through access to non-domestic operators⁶⁵.

Although there has been an opening-up of markets both within the Union and between the Union and third countries, with a resulting increase in competition, substantial variations still exist in the regulatory and fiscal regimes to which hauliers of different nationalities are subject. This lack of harmonisation in operating conditions distorts competition and the optimum location of activities, and militates against a full realisation of the benefits of competition.

Although prior to the establishment of the SEM Union industry considered lack of harmonisation in national technical standards to be the second most important barrier to business in the Union⁶⁶, the variance in permitted vehicle sizes in Union domestic markets has not proved a major hindrance to efficient scale in vehicle manufacture but possibly acts to the disadvantage of some operators undertaking cabotage. Goods vehicle manufacturing standards have converged over time and this convergence is expected to be completed this year with uniformity of type approval standards within the Union.

The success of harmonisation measures is, of course, dependent upon compliance. There is, however, evidence of substantial unauthorised operations in a number of Member States and also substantial breaches of operating regulations. With the exception of the social regulations and vehicle testing the level of control is determined by individual Member States, and this varies considerably between them. Penalties for infringements are also determined by individual Member States and similarly vary considerably across the Union⁶⁷. Such unauthorised and illegal operations raise questions of safety and distort competition, in that tax avoidance and vehicle utilisation are involved.

Union operators face a particular problem with respect to competition with Eastern European operators due to differing cost structures and pricing policies, and the large imbalance of trade in favour of Eastern Europe.

63 Cf, for example, *Bericht über die Entwicklung im Güterkraftverkehr*, BAG, Cologne November 1993, p. 26.

64 See *The Future Development of the Common Transport Policy*, EU Commission, 1992, Annex I, Table 1.

65 Survey by Euro Info Centres. *op. cit.*

66 Cecchini, P. *The European Challenge 1992: The Benefits of a Single Market*, EU Commission, Brussels, 1988, p.5.

67 See Butt Philip, A. *Implementing the European Internal Market: Problems and Prospects*, Royal Institute of International Affairs, London, 1988.

4. Infrastructure

In the logistic system outlined in section 2 it is the efficiency of the whole infrastructure network, that matters : "a bottleneck or a missing link result in less efficiency for the whole network. One small link investment can therefore have a dramatic effect on logistics efficiency, while another only creates overcapacity"⁶⁸.

The globalisation of purchasing, production and marketing and substantially increased outsourcing are resulting in freight operations over much larger networks. Within these enlarged European networks the "missing links" are basically in border areas, e.g. Alps and Pyrenees crossings, the Great Belt, Öresund, and links with the former east bloc countries.

At the same time the great importance now attached to timing and reliability by transport users means that infrastructure bottlenecks and lack of facilities can also create major problems for the road freight operator. Examples include bottlenecks in and around major urban areas, delays at borders and inter-modal terminals, lack or undercapacity of stop-over facilities for drivers, and secure parking⁶⁹.

In addition to missing link and bottleneck factors certain Member States have wider infrastructure problems, for example: Greece has no land border with other Union countries, and since the outbreak of hostilities in the former Yugoslavia the earlier 1,500 kms haul from Thessaloniki to Germany via Yugoslavia and Austria has now become a 2,600 kms haul via Bulgaria, Romania, Hungary and Slovakia, and costs have increased, according to the Hellenic Federation for International Road Transport, from DM 2,223 to DM 6,023. Substantial delays

are also involved. If the maritime route Patra-Ancona-Austria-Germany is taken, the cost is DM 3,377 and journey time is 50 hours. Both the maritime and land routes involve major uncertainties with respect to timing as delays by both routes can be substantial.

The LET/Irish Road Haulage Association has argued that the poor quality of the road network means that fuel costs per kilometre are one-quarter higher than in the UK, to which must be added longer journey times and greater repair costs; and the Portuguese National Association of Public Road Hauliers has stressed the absence of groupage facilities in its country.

In October 1993 the Council of Ministers, in line with Article 129 of the Union Treaty, adopted a trans-European road network (TERN) as the official road network of the Union. Three key strategies underlie TERN, namely the development of an interconnected network, the interoperability of the network, and traffic management on the network.

In particular these strategies involve the completion of some 120 missing motorway links - involving 12,000 kms, of which two-fifths are in peripheral countries - by the year 2002; the standardisation of inter-urban road topology - e.g. geometric standards, user service levels, signs and marking; and the development of, for example, telematic systems, modal interchanges and road pricing related to congestion.

⁶⁸ *Advanced Logistics and Road Freight Transport*, OECD, Paris, 1992, p.93.

⁶⁹ More than 9,000 vehicle thefts were reported in Italy in 1992.

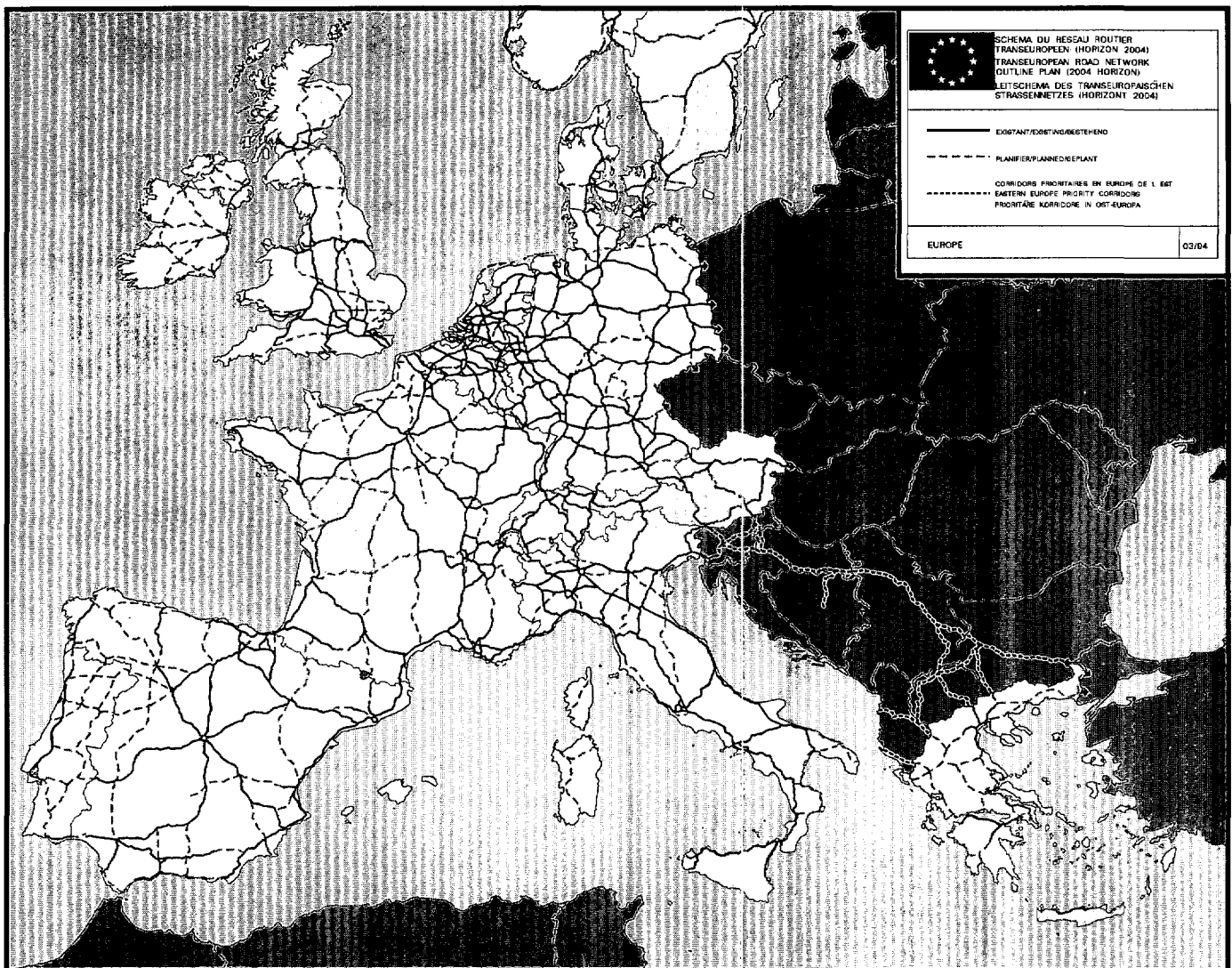
The estimated cost of such an integrated infrastructure policy is ECU 120 billion, of which almost three-quarters relates to the completion of missing links. The programme will be mainly financed by Member States but with substantial support from the Union⁷⁰.

Summary

Evaluation of infrastructure projects in individual Member States relates to national costs and benefits; the impact on other countries is not generally part of the remit. However, with the creation of an

SEM and the globalisation of industrial strategies the logic of ending analysis at national borders becomes tenuous. With industry increasingly operating by means of global logistic systems, the principal axes of the Union infrastructural network must be considered as a whole, and investment directed at bottlenecks and missing links.

Union policy with respect to financial support for infrastructure is in particular geared to completing missing links, of which a high proportion is in peripheral countries.



⁷⁰ The constituent funds are:

- the Transport Infrastructure Line (or TEN/Transport)
- the ERDF (Community support framework under negotiation)
- the Cohesion Fund (Cohesion Financial Instrument - 1/04/93)
- the European Investment Fund (set up in Edinburgh)
- EIB (including new loan mechanisms).

5. The Structure of the Road Haulage Sector

Road freight transport is both heterogeneous and complex in its structure. Its markets are fragmented both geographically and by industry sector, and the structure of road freight transport differs between these fragmented but not discrete markets. The sector is flexible and dynamic, and strategic alliances play key roles. Moreover the existence of unauthorised and illegal operations adds to the complexity of the structure of the sector.

For all Member States professional road haulage is more important than transport on own account but its share of the total road freight market (national plus international intra-Union) varies between just over one-half in Portugal and over four-fifths in Italy, the Netherlands and Luxembourg (see Appendix Table 4). There is also evidence in the eight Member States for which comparative data are available of a move from own account to professional haulage since 1986, and this is particularly the case for countries that have recently deregulated.

Substantial differences also occur between Member States with respect to the size of professional operators - in Spain and Italy, for example, more than 90 per cent of operators have five vehicles or fewer, whereas in Belgium and the Netherlands one-fifth have 11 vehicles or more (see Table 1 below).

Although small firms predominate in terms of numbers in the professional sector, there is nevertheless in reality considerable concentration - in the UK, for example, one-tenth of the hauliers

operate six-tenths of the total vehicle fleet⁷¹, and in France, although firms with fewer than five employees comprise 77 per cent of the total number, they have only 16 per cent of the turnover and 22 per cent of the assets⁷². In Portugal some 3 per cent of the firms have 20 or more vehicles yet they own 36 per cent of the vehicles, employ 40 per cent of the total workforce and enjoy 43 per cent of total receipts⁷³. Moreover the existence of extensive sub-contracting has further consolidated the position of the larger operators - in Italy, for example, 1 per cent of the operators enjoy one-half of the total revenues of the sector, with a substantial proportion of the remaining 99 per cent working for them⁷⁴.

Although where deregulation takes place there is evidence that any growth in demand is accompanied by a rise in new entrants into the market, this has not happened where growth has occurred in liberal markets.

In France, for example, tonne-kms worked by professional operators increased by almost a half between deregulation in 1986 and 1990 (see Appendix Tables 5 and 6), and in this latter year the number of firms was 28 per cent greater than five years previously⁷⁵.

In Ireland tonne-kms worked by professional operators grew by about two-fifths between deregulation in 1986 and 1991; the number of commercial vehicles also grew at about the same rate but by 1993 there were some four times as many operators as in 1986⁷⁶.

⁷¹ Department of Transport, 1993.

⁷² *La Situation Economique et Social du Transport Routier de Marchandises*, Commissariat Général du Plan, Paris, January 1993, p.5.

⁷³ ANTRAM, *op. cit.*

⁷⁴ *Le Tesi della Confetra per il Trasporto Merci*, Confetra Quaderno N. 84, Sept. 1993.

⁷⁵ *Op. cit.* Commissariat Général du Plan 1993, p. 5. It should be noted that in part this is due to larger operators concentrating on logistics and forwarding activity and divesting themselves of vehicles and drivers who then frequently act as independent sub-contractors, *Op. cit.*, pp.1-2.

⁷⁶ LET/Irish Road Haulage Association.

By contrast, in the unrestricted short-distance zone in Germany (old States only) although the number of vehicles operated by professional hauliers increased by one-fifth between 1984 and 1992, the number of undertakings declined very slightly (from 41,743 to 41,535) and the average size increased from 2.9 vehicles to 3.5⁷⁷.

Also in the liberal regulatory regime in Belgium the number of firms hardly changed in the decade 1983-1993 (8,266 and 8,274 respectively), yet the number of firms with fewer than five vehicles decreased by one-seventh and the number of firms with more than 20 vehicles increased by three-quarters⁷⁸.

It is interesting to note that in the UK and Sweden, where markets have been deregulated for over twenty years, the number of operators has shown a high level of stability. In both countries there has been remarkably little change in recent years in operator numbers, even given the substantial increase in tonne-kms worked (see Table 2 below).

Table 1 Size of Road Haulage Firms

Country	Number and Size of undertakings								Turnover in freight transport sector excluding taxes and subcontracting (expressed in billions of local currency units)			
			of which						Road (1)		Rail	
	Total	Total	1-5 vehicles(%)		6-10 vehicles(%)		11 vehicles and more(%)		1985	1990	1985	1990
	1985	1990	1985	1990	1985	1990	1985	1990				
Austria	6970	...	67.6	60.1	23.3	25.8	9.1	14.1	...	(3) 47600	...	(3) 18499
Belgium	7812	8172	73.5	68.3	10.9	11.6	15.4	20.1	167.4	...	33.0	...
Bulgaria	...	7067	...	43.8	...	22.8	...	33.4	...	...	...	...
Denmark	6875	7045	(13) 89.4	83.7	(13+14) 6.1	(14) 9.3	(13+15) 4.5	(15) 5.3	...	...	...	...
Finland	(10) 13639	14339	(10) 94.7	95.8	(10) 2.4	2.1	(10) 0.9	1.1	(8) 7.7	(8) 12.9	(12) 18.6	(12) 27.4
France	28895	37037	(9) 80.0	(9) 81.6	(9) 7.5	(9) 5.6	(9) 12.5	(9) 12.8	77.3	177.4	19.8	18.2
Germany	(2) 44572	(3) 41325	(4) 88.7	(4) 83.1	(5) 7.7	(5) 9.7	3.6	7.2	32.0	39.0	9.1	8.2
Italy	204119	...	95.0	...	3.1	...	1.8	...	...	...	...	...
Latvia	21	26	...	...	...	...	...	...	2279	2208	19933	18538
Luxembourg	260	(10) 289	...	...	...	...	...	...	6.1	...	1.9	...
Netherlands	7390	7173	64.5	56.8	19.8	20.9	15.6	21.7	9.5	(9) 13.8	0.3	(11) 0.2
Spain	164976	...	98.4	...	(6) 1.4	...	(7) 0.2	...	...	...	...	...
Sweden	17767	19371	92.7	91.0	4.3	6.0	3.0	3.0	32.5	36.0	4.5	5.0
United Kingdom	96000	86300	87.0	83.0	7.0	8.0	6.0	9.0	22.9	36.1	0.6	0.8

(1) professional road transport only

(2) 1984 figure

(3) 1988 figure

(4) 1-6 vehicles

(5) 7-10 vehicles

(6) 6-20 vehicles

(7) 21 vehicles and over

(8) Including tax and subcontracting

(9) estimate

(10) 1987 figure

(11) 1989 figure

(12) including passengers

(13) 1984 figure

(14) 6-9 vehicles

(15) 10 vehicles and over

Source : IRU based on statistics from AEBTRI, AISÖ, BAG, BDF, Camion Magazine, CBS 1991, EUROSTAT, FBAA, FNTR, FTA, INS, ITR, LAL, NIWO, ÖPV, Spanish and Italian Ministries of Transport, SA, SBF, SKAL, SNCB

77 Bericht über die Entwicklung im Güterkraftverkehr, BAG, Cologne, November 1993, p.22.

78 Les Entreprises de Transport Routier de Marchandises en Belgique Depuis 1970, ITR, 1993, Tables 1 and 3.

Geographical Markets

The vast majority of road freight transport operations take place in local markets⁷⁹. In Portugal, for example, three-quarters of all tonnages moved are for distances of less than 50 kms⁸⁰; in the UK⁸¹ and Denmark⁸² the corresponding proportion is three-fifths; and even in Italy, which has a very high average length of haul nationally (130 kms compared with, for example, 44 kms in Germany), one-half of freight moved is for distances of less than 50 kms⁸³.

It is in these local markets that the smaller professional operator and the transport on own account operator predominate. In France, in terms of turnover, professional haulage firms with fewer than five employees have proportionately twice the share of the market in the short-distance zone (24 per cent) as they have in the long-distance zone (12 per cent)⁸⁴. In Belgium three-fifths of professional operators in the former short-distance zone had only one vehicle, whereas in the long-distance zone (over 75 kms) the proportion was one-quarter⁸⁵.

Table 2 Professional Operators and Traffics in UK and Sweden (1985-93)

Year	UK		Sweden	
	Operators' Licences (1) (as at 31/3)	Tonne-Kms (billion)	Hauliers (as at 31/12)	Tonne-Kms (billion)
1985	70968	66.6		
1986	70115	68.7		
1987	70687	77.1	18103	(2) 19.0
1988	69993	87.6	18199	
1989	67458	95.3	18948	
1990	70548	94.7	19371	(2) 23.0
1991	70722	85.8	19484	
1992	70445	86.4	19124	
1993	68509		18706	(3) 11.5

(1) Standard and Standard International only - as hauliers can hold licences in more than one of the eight licensing areas the number of licences does not correspond to the number of hauliers.
 (2) Lorries of over 2 tonnes
 (3) First 6 months and only lorries over 3.5 tonnes.

Source : Compiled from figures from the UK Department of Transport and the Sveriges Industriförbund.

79 In comparing aspects of domestic and local markets for an individual mode, tonnages provide a more accurate measure of relative value added than tonne/kms and are therefore used below in analysing these markets.

80 ANTRAM, November 1993, op. cit.

81 Eurostat.

82 Danmarks Statistik : "Samfaerdsel og turisme 1993", p. 15.

83 *Road Freight Transport*, AGENS, December 1993.

84 Op. cit., Commissariat Général du Plan, 1993.

85 Op. cit., ITR, 1993.

It is also in these local markets where the own account operators predominate. In Portugal, for example, the average length of haul per tonne carried for own account operators is 38 kms, compared with 71 kms for professional operators⁸⁶. In France about three-quarters of own account transport in vehicles over 3 tonnes is for distances of less than 50 kms; in the case of professional operations it is only about one-half⁸⁷.

International markets are dominated by professional operators and larger firms. In terms of tonne-kms professional hauliers command some nine-tenths of the international market right across the Union (see Appendix Table 4). Even in Portugal, where some seven-tenths of total output (tonne-kms) in road transport is on own account, in the case of international operations practically one hundred per cent is conducted by professional hauliers.

The trend across the Union is, if anything, for professional operators to capture an ever larger share of the international market (see Appendix Table 4).

Large operators are particularly conspicuous in the long haul and international markets. In Italy for example less than one-fifth of total professional hauliers have more than two vehicles, but for those carrying out international carriage a half have 2 vehicles or more⁸⁸; and in Belgium less than one-half of hauliers with fewer than five vehicles operating nationally (over 75 kms)⁸⁹ also operate internationally, whereas three-quarters of those with 5-20 vehicles and four-fifths of those with more than 20 vehicles operate

internationally⁹⁰. However, it is interesting to note here that the proportion of small hauliers in Belgium operating internationally has doubled over the last decade. It should also be noted that in the case of both Belgium and the Netherlands, the two Member States where international transport is more important than domestic transport, one-fifth of hauliers have more than ten vehicles (see Table 1).

Finally it should be recalled (see section 2) that local and national/international markets are not necessarily discrete. In logistic systems local operations can be an integral part of an integrated hub-and-spoke operation.

Strategic Alliances

Strategic alliances are very extensive in the road haulage sector and are a key factor in determining its operational structure. Alliances can take the following broad forms: haulier/shipper⁹¹, haulier/haulier⁹², haulier/freight forwarder, freight forwarder/freight forwarder, haulier/rail, haulier/vehicle manufacturer. These categories are, however, not mutually exclusive (haulage operations and freight forwarding, for example, are frequently combined), and a wide variety of options exist within each.

Sub-contracting by large hauliers to smaller ones operates very extensively and can take the form of long-term contracts of several years, sometimes involving financial assistance towards the purchase of vehicles, the provision of a vehicle, operating under the contractor's livery; or spot contracts for a single load.

⁸⁶ *Op. cit.*, ANTRAM, 1993.

⁸⁷ Eurostat.

⁸⁸ Based on Ministry of Transport files - figures supplied by Professor M. Ponti.

⁸⁹ The distinction between short- and long-distance transport has recently been ended.

⁹⁰ *Op. cit.*, ITR, 1993, Table 8.

⁹¹ See section 2.

⁹² As well as joint venture agreements between pairs of operators there are also cooperation agreements involving larger number of operators which can relate for example to a specific type of transport operation, or be more general in nature relating for instance to a sharing of information and technology. Two examples are :

SIKO (Silo-Kooperationsgemeinschaft, formed in 1986) a cooperative agreement between 13 German tank-haulage companies, aimed at load sharing and empty trip reduction through electronic data interchange.

IDS (International Distribution Systems, founded in 1988), an association of 16 Dutch international hauliers cooperating likewise on the basis of electronic data interchange, but offering their services all over Europe.

Sometimes the alliance permits the smaller operator to gain entry to the market in cases where this would not otherwise be possible, for example, where the smaller operators are unable without assistance to fulfil the financial conditions for entry or where national restrictions result in alliances with foreign operators in countries with more liberal regimes.

In France one-third of road hauliers sub-contract at least 10 per cent of their business, and are responsible for over nine-tenths of all sub-contracting in the sector⁹³. In Portugal fewer than 400 hauliers out of a total of some 5,500 operate directly more than two-fifths of all vehicles for hire or reward, and at the same time sub-contract some 70-80 per cent of their traffic⁹⁴.

Many of the larger firms are active in freight forwarding, and there is no clear distinction between this activity and sub-contracting proper. In Italy, as noted above, some 1 per cent of haulage firms enjoy one-half of total receipts in the sector, but by far the most important of these are in fact freight forwarders as opposed to hauliers.

In Denmark some one-half of all hauliers engaged in international operations co-operate on a long-term basis with freight forwarders. The largest international hauliers (over 25 international authorisations) and some nine out of ten of medium-sized operators (8-25 international authorisations) negotiate individual contracts, but more than one-half of the smaller sized operators use the fixed freight forwarders' agreements⁹⁵.

Large operators and freight forwarders can also have contractual arrangements with, for example, vehicles suppliers, ferry companies and oil companies whereby

they can obtain favourable rates. These relationships can also result in subcontractors being obliged to make use of additional services offered by the freight forwarder.

Unauthorised and Illegal Operations

The range of possible illegal operations is very wide, covering operations without an authorisation to minor infringements of traffic regulations, and with the possibility of individual hauliers operating in both the authorised and unauthorised markets.

In Portugal it has been estimated that about one-fifth of operations by own account operators is in fact for hire or reward (i.e. about one-half of total domestic professional operations in terms of tonne-kms), and that about one-half of own account vehicles are overloaded⁹⁶. In Denmark in 1990 the Politidirektoren i København estimated that between 2,000 and 3,000 vehicles (some one-tenth of the fleet) were operating without authorisations. In Italy in 1991 a major multinational found on investigation that over one-quarter of the vehicles used by the professional hauliers it engaged, although having an authorisation, did not have one for the type of work being undertaken. The large discrepancies between various data sets in Italy suggest that the number of vehicles operating without any authorisation is substantial - the usual estimate is 20-25 per cent⁹⁷.

In Spain it has been suggested⁹⁸ by transport associations that 30 per cent of all operations in the sector are unauthorised.

Official figures in Germany indicate that of the almost 600 thousand vehicles controlled in that country in 1992 (of which almost one-half were foreigners),

93 *Op. cit.*, Commissariat Général du Plan, 1993, p.8.

94 *Op. cit.*, ANTRAM.

95 *Danske Vognmaend.*

96 *Op. cit.* ANTRAM, 1993, p.III-8, 9.

97 See note 15 of *La situation des entreprises de transport routier en Europe du Sud: Quelles solutions?* GATRIES, Palaiseau, March 1992.

98 "La Vanguardia", 19 December 1993.

some 20 per cent of domestic and some 19 per cent of foreign vehicles contravened regulations relating to drivers⁹⁹. According to a 1991 French control survey of 300 thousand vehicles, one-sixth contravened the regulations in some form, of which one-half related to infringement of social regulations¹⁰⁰.

It has also been suggested that freight forwarders and primes contractors may be contributing to the problem by setting targets for sub-contractors that could lead to the latter operating illegally.

Summary

Although in all Member States a large number of very small professional hauliers predominate in terms of operator numbers, it is a relatively small number of large hauliers that command a major part of total operations, both directly through their own haulage operations and indirectly through their sub-contracting and freight forwarding business.

There is evidence that deregulation of dirigiste regimes can lead to an inflow of small operators, but in established liberal markets increased demand tends to result in growth in the size of undertakings. Liberal markets have shown remarkable stability in terms of operator numbers, which would suggest that the relatively large inflow of operators into newly deregulated markets is an adjustment process (see Section 6).

Small operators are prevalent in local markets and many act as sub-contractors to larger hauliers in all types of markets - local, domestic, international. International markets are principally the domain of the larger professional operators, together with their smaller sub-contractors.

Unauthorised operations are substantial in some Member States and are carried out both by hauliers with authorisations for other types of work and those with none at all; the authorised and unauthorised market are not discrete. Freight forwarders and prime contractors appear to be contributing to the problem by setting operating conditions for sub-contractors that can lead to the latter operating illegally.

⁹⁹ Figures provided by BAG.

¹⁰⁰ The official figures for Germany and France refer to illegal operations detected when vehicles were controlled. Other surveys have suggested that on account of action taken by firms to avoid detection the size of illegal operations could be appreciably higher. A study in Germany (*Survey of the Effects of Non-Compliance with EC Social Regulations Applicable to Road Freight Transport on the Competitive Position of the Railways*, Roland Berger Research Institute, Munich, 1985) indicated that some nine tenths of firms in that country broke the regulations and that some one quarter of all journeys involved non-compliance. Also a study (*Working Hours of European International Truck Drivers*, F. van Outerkerk, Stichting VEWO, 1988) of international operations of hauliers from six Member-States indicated that some four-fifths of drivers failed to observe regulations and that on average there was about one violation per driver per day. The actual position might be considered to be between a minimum given by the official figures and a maximum given in these two non-official studies.

6. Operations and Performance in Road Haulage

In the Introduction attention was drawn to a number of factors that have impacted on the transport sector in recent years, and some of these were considered in more detail in previous sections. However, in a situation which is both complex and subject to rapid change the exact impact of individual factors upon the performance of road haulage cannot be established with any certainty. In the following paragraphs some of the key output and financial variables are identified on both a comparative and individual Member State basis.

In the UK the proportion of loaded kms in total kms improved during the whole of the last decade for both public and own account operators¹⁰¹. There is, however, also evidence of some overcapacity in professional haulage between 1989 and 1991, but this had been corrected by 1992 (see text below).

By contrast, some other Member States show traffic growing at a faster rate than capacity of the professional fleet. In Belgium, for example, carrying capacity increased by 80 per cent between 1980 and 1993, but between 1980 and 1991 (the last year for which figures are available) tonne/kms worked by professional operators rose by 118 per cent¹⁰². In Germany between 1986 and 1990¹⁰³ capacity utilisation (measured in 1,000 tonne/kms per tonne carrying capacity) rose from 27.2 to 29.0¹⁰⁴. In France between 1984 and 1991 traffic grew at a faster rate than capacity¹⁰⁵; and although

in Spain capacity grew faster than traffic between 1985 and 1987 the position was reversed between 1987 and 1991¹⁰⁶.

Labour costs are a major element of operating costs in all Member States, but their relative importance in total operating costs varies enormously according to their absolute levels. In the Netherlands, for example, they comprise about a half of operators' costs, but in Portugal the proportion is less than one-fifth (see Figure 7 below).

The substantial range in labour costs both between Member States and between the Union and third countries is shown in Figure 8 below.

A study conducted by a Dutch institute (NEA) in 1992 provides total relative cost information for hauliers on specific hauls of varying length based on the Netherlands.

The calculation was for a 40 tonne gross weight vehicle working on hauls varying between 500 kms and 1500 kms in relation to the following countries: Netherlands, Germany, France, Italy, Spain, Poland, Hungary.

The cost comparisons are shown in Figure 9 below.

Although substantial wage differences exist between some of the countries, the impact on total operating costs is less marked due to the smaller proportion of labour costs in total costs in low wage countries compared with high wage ones.

101 Department of Transport.

102 Ministère des Communications et ITR - see *Evolution de la Conjuncture et Prévisions Economiques dans le Secteur du Transport Professionnel Routier de Marchandises*, ITR, June 1993, pp. 4 and 9.

103 After 1990 figures are not comparable as the new Länder are included.

104 In 1986 and 1990 the respective tonne/km figures were 76,232 m and 87,437 m, and the corresponding professional fleet capacities 2,800,000 t and 3,010,000 t. It is not possible to provide uniform figures after 1990 as the old and new Länder are combined after that year. (Source of capacity figures - ECMT: Germany is the only Member State for which a series is available from this source.)

105 GATRIES, *La situation des entreprises de transport routier en Europe du Sud: Quelles solutions?*, 1992, p.13.

106 *Ibid*, p.13.

Figure 7 Structure of Operating Costs in Professional Road Transport

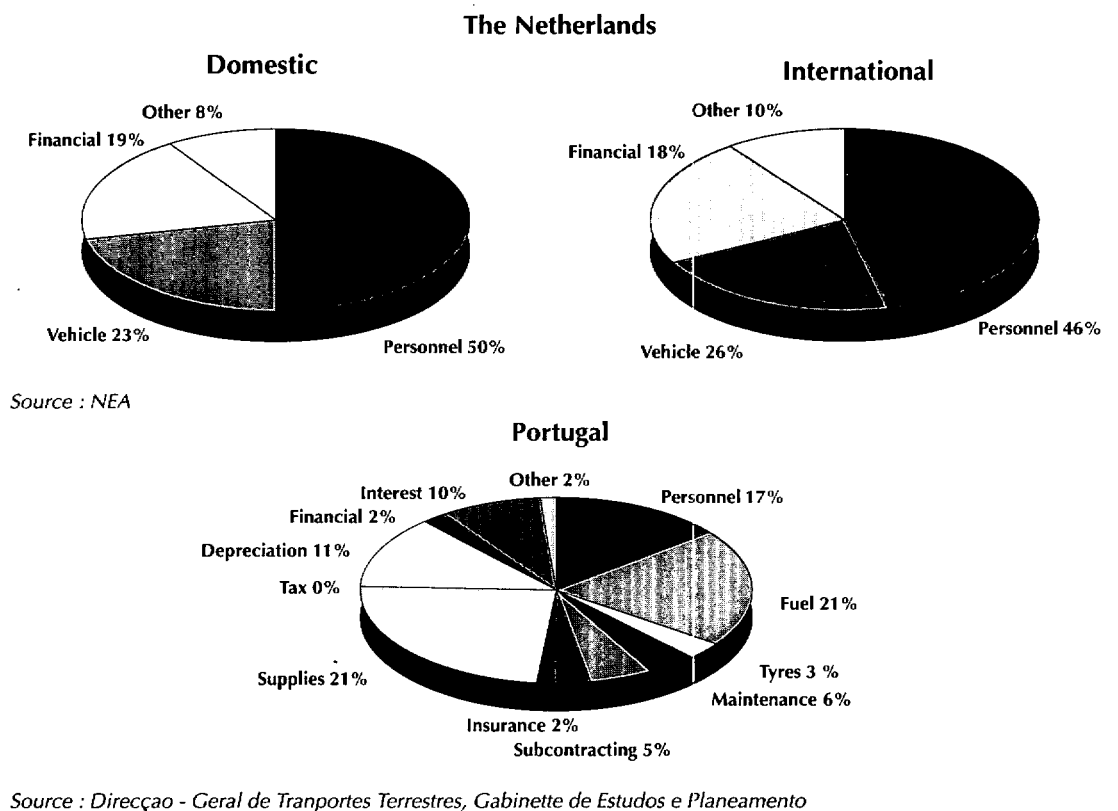
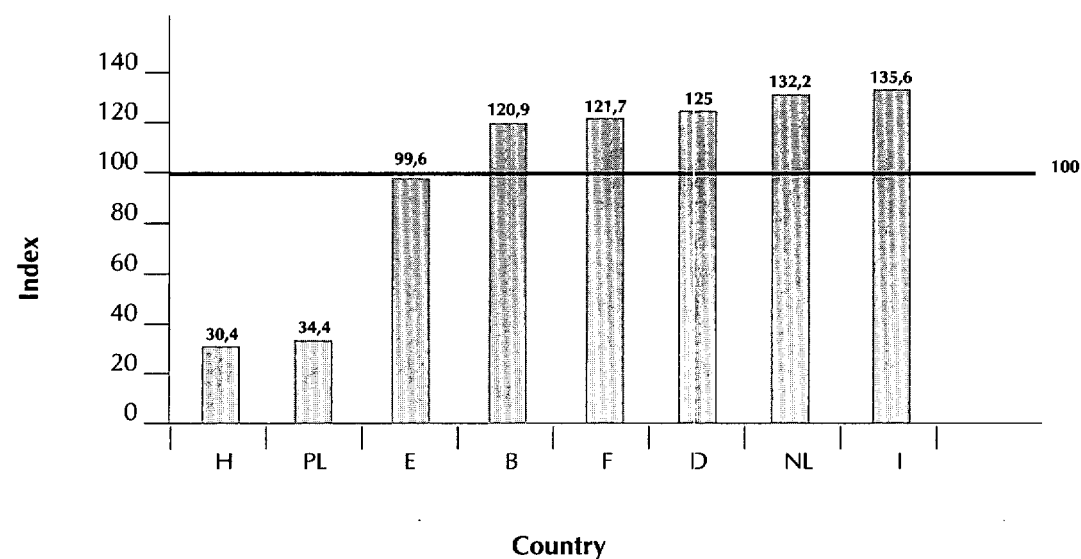
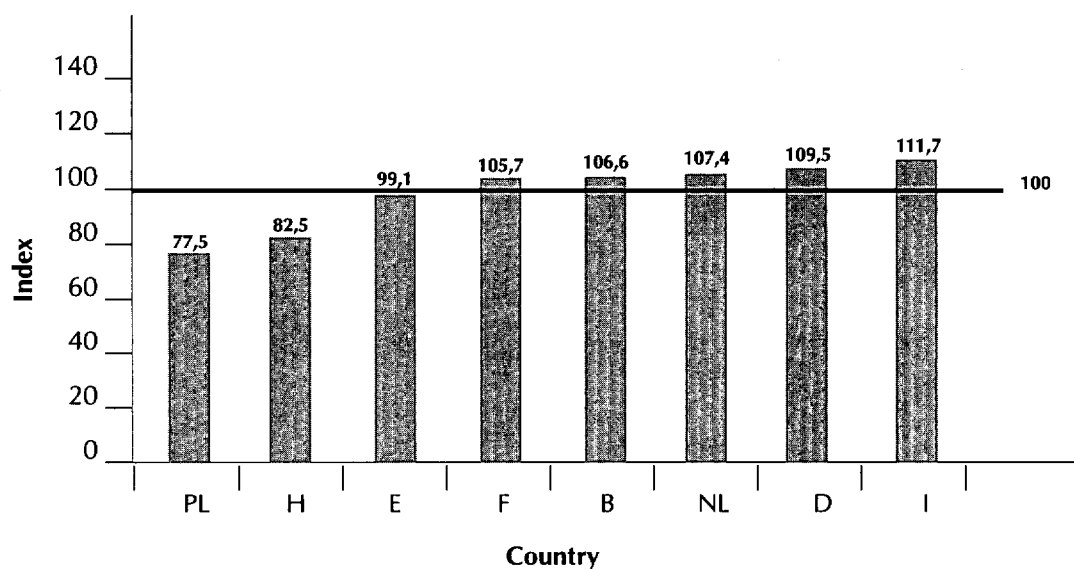


Figure 8 Wages and Subsistence Costs



Note : 100 = average of 8 countries as at 1.1.91
 Source : NEA

Figure 9 Operating Costs by Country

Note : 100 = average of 8 countries as at 1.1.91
Source : NEA

Also, productivity in the higher labour cost economies is very much higher than in the lower labour cost economies. It has been estimated, for example, that value added per person in road haulage is approximately twice as high in France as in Spain¹⁰⁷, but this does, of course, also result from superior infrastructure for domestic operations.

Financial performance has varied not only across Member States but also between different markets in individual Member States, as the following examples demonstrate.

Since the deregulation of the domestic market in 1986 in France the level of traffic carried by road has, as noted earlier, increased at a faster rate than capacity, but profit margins¹⁰⁸ have nevertheless declined since that date. However, although this margin has de-

clined from over 24 per cent in 1986 to below 20 per cent in 1991, the fall between 1985 and 1991 is only about 1 percentage point¹⁰⁹.

This fall in profit margins has resulted from the fall in prices relative to costs that has occurred in the domestic long-distance and international markets since 1985. It is, however, important to note that in the long deregulated short-distance market, prices rose over the same period¹¹⁰.

Net operating surpluses, while remaining positive, in the Netherlands declined steeply between 1986 and 1992 in international traffics but have shown a greater level of consistency in domestic traffics¹¹¹, whereas in Denmark profit ratios and rates of return have risen between 1989 and 1993, and been better for international than for domestic transport¹¹².

107 *Ibid.*

108 *Gross operating profits/value added.*

109 *INSEE-OEST: Entreprise, 1992.*

110 *OEST-DTT.*

111 *Rentiliteitsonderzoeken, NEA.*

112 *Danske Vognmaend, based on Kobmandsstandens Oplysingsbureau A/S, CD-Direct, Sept. 1992 and August 1993.*

A survey¹¹³ in the UK showed that turnover had increased by approximately 60 per cent from 1983 to 1991. Return on total assets (ROTA) rose from an average for all sizes of firm of approximately 5 per cent in 1983 to peak at 8 per cent in 1988 (see Appendix Figure 5), then fell to almost 2 per cent in 1991 before rising again to almost 4 per cent the following year. In Belgium, by contrast, a limited study indicated that rates of return fell steeply between 1991 and 1992¹¹⁴. The pre-tax profit margin in the UK followed a similar cyclical pattern to ROTA, moving on average for all sizes of firm between 3 per cent in 1983 to 6 per cent in 1988, before returning to 3 per cent in 1991 and 1992. And, as was the case with ROTA, the smallest size category of firm has consistently been out-performed by the larger categories. Profit per employee has outpaced the Retail Price Index over

the whole period.

The recession has led to an increase in the level of bankruptcies in the profession: in the Netherlands, for example, the level increased from ca 1 per cent of operators in 1989 to ca 1½ per cent in 1991 and ca 1¾ per cent in 1992¹¹⁵; in Sweden between 1986 and 1992 the level increased from ca 1¼ per cent to 2⅔ per cent¹¹⁶.

Although such levels and increases underline the current difficulties faced by the sector, they do not compare unfavourably with other sectors; moreover, road haulage prices rose faster between 1990 and 1993 than industrial prices in general excluding construction - a rise of some 10 per cent, compared with some 3 per cent¹¹⁷.

113 Transport Studies Group, University of Westminster, *Performance Trends in Road Transport*, RHA Financial Services, 1993.

114 *Les Entreprises de Transport Routier de Marchandises*, la Chambre de Commerce et d'Industrie de Luxembourg belge et le Centre de Développement de Projets d'IDELUX, December 1993.

115 NIWO reported in *Rekenend Rijden Langs de Afgrond K.N.V.*, July 1993, p.15.

116 Sveriges Industriförbund, based on data from the National Central Bureau of Statistics. It is generally the case in Member States that road haulage is combined with all other forms of transport and communications in the bankruptcy figures, so that road haulage cannot be identified separately.

117 EU DG VII, *Market Observation Prices Report*, based on road haulage prices in seven Member States, and Eurostat.

Summary

The opening-up of international markets, both within the Union and with third countries, and deregulation in some domestic markets in the Union, has led to increased competition in the sector; while at the same time Europe has been in recession in recent years. This has led to a desirable, indeed necessary, improvement in the efficiency of many operations. Only in a limited number of cases has capacity increased at a faster rate than traffic - the opposite has in fact been more generally the case; but there is evidence of a deterioration in the financial position of firms in some market sectors. Any such deterioration is, however, not uniform: larger operators have performed better than smaller operators in the UK, domestic operations have given better rates of return than international operations in the Netherlands, while in Denmark the opposite is the case; in France prices have fallen in the long-distance market, deregulated in 1986, relative to costs, but have risen in the short-distance market which was not

regulated.

Bankruptcy levels have increased during the recession but where comparisons can be made they do not compare unfavourably with other sectors, and road haulage prices have risen faster than industrial prices since 1990.

The range of performance in the sector reflects the interplay of a wide range of factors that are currently impacting upon the industry. It is the differing impact of these factors in the different Member States that has resulted in these divergences.

APPENDIX

Table 1
Inland Freight Transport in the EU (billion tonne/kms)

Member State	Rail						
	1970	1975	1980	1985	1990	1991	1992
D	70.50	54.34	63.80	62.96	61.40	* 79.70	69.80
F	67.58	61.25	66.37	55.78	51.53	51.48	50.37
I	18.07	14.89	18.38	17.97	21.22	21.68	22.18
NL	3.71	2.73	3.40	3.27	3.07	3.00	2.76
B	7.88	6.81	8.04	8.28	8.35	8.15	8.07
L	0.76	0.66	0.67	0.65	0.71	0.71	0.67
UK	24.50	20.94	17.64	15.37	15.80	15.30	15.51
IRL	0.55	0.56	0.62	0.60	0.59	0.60	0.63
DK	1.85	1.84	1.62	1.76	1.79	1.86	1.87
GR	0.69	0.93	0.81	0.73	0.68	0.56	0.50
E	10.34	11.08	11.30	12.08	11.61	10.80	9.56
P	0.78	0.75	1.00	1.31	1.59	1.76	1.87
Total	207.21	176.78	193.65	180.76	178.34	* 195.60	183.79
Road							
	1970	1975	1980	1985	1990	1991	1992
D	78.00	96.00	124.40	132.20	169.80	* 202.70	-
F	66.30	81.00	98.10	84.50	114.80	117.20	120.00
I	58.70	62.80	119.60	144.13	177.95	182.75	184.93
NL	12.40	15.44	17.67	18.43	22.89	23.34	24.61
B	13.09	16.52	18.31	22.11	32.05	34.11	-
L	0.14	0.22	0.28	0.21	0.40	0.56	-
UK	85.00	93.00	91.10	100.80	132.90	127.20	123.60
IRL	5.00	5.00	5.01	4.52	5.13	5.14	-
DK	7.80	9.50	7.85	8.34	9.35	9.03	9.41
GR	6.96	10.75	8.00	10.35	11.50	11.93	-
E	51.70	76.70	89.50	110.50	150.00	157.20	162.00
P	10.00	11.00	11.80	11.00	10.92	10.76	-
Total	395.09	477.73	591.62	647.09	837.69	* 881.92	
Inland Waterways							
	1970	1975	1980	1985	1990	1991	1992
D	48.81	47.57	51.44	48.18	54.80	* 55.97	56.00
F	12.73	10.70	10.87	7.59	7.17	6.83	6.91
I	0.35	0.22	0.20	0.20	0.12	0.09	0.06
NL	30.74	29.60	33.48	32.79	35.66	34.76	33.00
B	6.73	5.12	5.85	5.06	5.45	5.23	5.00
L	0.30	0.30	0.33	0.30	0.34	0.33	0.33
UK	0.30	0.40	0.40	0.40	0.20	0.20	0.20
IRL	-	-	-	-	-	-	-
DK	-	-	-	-	-	-	-
GR	-	-	-	-	-	-	-
E	-	-	-	-	-	-	-
P	-	-	-	-	-	-	-
Total	99.96	93.91	102.57	94.52	103.74	* 103.41	101.50

Note : * = change in series due to inclusion of the former GDR
 Figures in italics : DG VII assumptions in order to obtain EU totals
 Source : ECMT
 See notes on pages 69

Table 2
Intra-Union Professional + Own Account Road Freight Transport by Nationality of Haulier (Million tonne-kms).

Nat. of vehicle	Years	Internat. bilateral	Cross-tr. comm.qu.	Cabotage	Total internat.	National	National + internat.
D	1986	19888	106	0	19994	103089	123083
	1987	20640	89	0	20729	104880	125609
	1988	21558	125	0	21683	110847	132530
	1989	22476	158	0	22634	115123	137757
	1990	21431	177	20	21628	120169	141797
	1991	23137	141	74	23352	145072	168424
	1992	24206	170	70	24446	158816	183262
F	1986	16446	616	0	17062	78400	95462
	1987	18538	800	0	19338	84200	103538
	1988	22894	1153	0	24047	93800	117847
	1989	24497	1554	0	26051	98200	124251
	1990	28745	2125	26	30896	98021	128917
	1991	29188	3124	110	32422	100184	132606
	1992	31147	3486	98	34731	101794	136525
I	1986	16071	40	0	16111	98445	114556
	1987	..	35	0	..	..	..
	1988	..	48	0	..	..	..
	1989	14276	54	0	14330	115066	129396
	1990	18993	65	17	19075	115785	134860
	1991	17021	71	62	17154	116283	133437
	1992	19662	83	71	19816	122284	142100
NL	1986	19591	1164	0	20755	18981	39736
	1987	21350	1587	0	22937	19935	42872
	1988	23869	1919	0	25788	21856	47644
	1989	25626	2449	0	28075	21757	49832
	1990	27005	2465	38	29508	22581	52089
	1991	29030	2611	128	31769	23036	54805
	1992	30468	3697	202	34367	25270	59637
B	1986	12474	877	0	13351	10834	24185
	1987	13624	1879	0	15503	10958	26461
	1988	15811	1315	0	17126	12375	29501
	1989	17211	2508	0	19719	12513	32232
	1990	18644	2775	42	21461	12616	34077
	1991	19925	3380	139	23444	13500	36944
	1992	..	3428	142	..	..	..
L	1986	684	338	0	1022	239	1261
	1987	..	484	0	..	..	..
	1988	..	773	0	..	..	..
	1989	..	1193	0	..	..	..
	1990	..	1588	15	..	..	..
	1991	1415	1926	48	3389	250	3639
	1992	..	3268	66	..	..	..
UK	1986	5788	88	0	5876	102582	108458
	1987	6769	93	0	6862	109899	116761
	1988	7294	135	0	7429	126682	134111
	1989	8306	170	0	8476	134292	142768
	1990	9668	236	3	9907	132969	142876
	1991	10282	335	33	10650	127206	137856
	1992	10695	475	34	11204	123565	134769

Nat of vehicle	Years	Internat bilateral	Cross-tr commqu	Cabotage	Total internat	National	National + internat
IRL	1986	783	53	0	836	4200	5036
	1987	790	99	0	889	3985	4874
	1988	844	122	0	966	3948	4914
	1989	1103	156	0	1259	4044	5303
	1990	995	126	6	1127	3877	5004
	1991	770	108	13	891	4205	5096
	1992	..	128	8	..	..	..
DK	1986	3839	90	0	3929	8825	12754
	1987	3976	134	0	4110	8808	12918
	1988	4163	195	0	4358	9057	13415
	1989	4580	317	0	4897	9214	14111
	1990	5146	363	15	5524	9352	14876
	1991	5872	481	58	6411	9027	15438
	1992	6384	550	69	7003	9407	16410
GR	1986	1973	0	0	1973	12539	14512
	1987	2006	2	0	2008	13064	15072
	1988	2589	4	0	2593	12354	14947
	1989	2783	10	0	2793	13844	16637
	1990	2118	4	0	2122	12486	14608
	1991	1984	7	0	1991	11929	13920
	1992	2732	4	0	2736	9756	12492
E	1986	13209	25	0	13234	74144	87378
	1987	14667	38	0	14705	84751	99456
	1988	14744	55	0	14799	89661	104460
	1989	11992	71	0	12063	104969	117032
	1990	12271	77	2	12350	97262	109612
	1991	13086	107	5	13198	74660	87858
	1992	14188	116	13	14317	75226	89543
P	1986	1746	4	0	1750	8225	9975
	1987	2096	15	0	2111	8636	10747
	1988	2162	31	0	2193	9462	11655
	1989	3944	77	0	4021	10127	14148
	1990	4741	100	0	4841	10978	15819
	1991	6583	96	3	6682	11783	18465
	1992	6027	77	3	6107	10663	16770
EUR 12	1986	112492	3401	0	115893	520503	636396
	1987	..	5255	0	..	..	..
	1988	..	5875	0	..	..	..
	1989	..	8717	0	..	..	..
	1990	..	10101	184	..	..	..
	1991	158293	12387	673	171353	637135	808488
	1992	..	15482	776	..	..	..
EUR 12 -D-I-L-E	1986	62640	2892	0	65532	244586	310118
	1987	69149	4609	0	73758	259485	333243
	1988	79626	4874	0	84500	289534	374034
	1989	88050	7241	0	95291	303991	399282
	1990	97062	8194	130	105386	302880	408266
	1991	103634	10142	484	114260	300870	415130
	1992	..	11845	556	..	..	..

Source : EU Commission
See notes on pages 69

Table 3
Intra-Union Professional + Own Account Road Freight Transport
by Nationality of Haulier (1986 = 100 ; 1991 = 100 for Cabotage).

Nat. of vehicle	Years	Internat. bilateral	Cross-tr. comm.qu.	Cabotage	Total internat.	National	National + internat.
D	1986	100.0	100.0	0.0	100.0	100.0	100.0
	1987	103.8	84.0	0.0	103.7	101.7	102.1
	1988	108.4	117.9	0.0	108.4	107.5	107.7
	1989	113.0	149.1	0.0	113.2	111.7	111.9
	1990	107.8	167.0	27.0	108.2	116.6	115.2
	1991	116.3	133.0	100.0	116.8	140.7	136.8
	1992	121.7	160.4	94.6	122.3	154.1	148.9
F	1986	100.0	100.0	0.0	100.0	100.0	100.0
	1987	112.7	129.9	0.0	113.3	107.4	108.5
	1988	139.2	187.2	0.0	140.9	119.6	123.4
	1989	149.0	252.3	0.0	152.7	125.3	130.2
	1990	174.8	345.0	23.6	181.1	125.0	135.0
	1991	177.5	507.1	100.0	190.0	127.8	138.9
	1992	189.4	565.9	89.1	203.6	129.8	143.0
I	1986	100.0	100.0	0.0	100.0	100.0	100.0
	1987	..	87.5	0.0	..	..	..
	1988	..	120.0	0.0	..	..	..
	1989	88.8	135.0	0.0	88.9	116.9	113.0
	1990	118.2	162.5	27.4	118.4	117.6	117.7
	1991	105.9	177.5	100.0	106.5	118.1	116.5
	1992	122.3	207.5	114.5	123.0	124.2	124.0
NL	1986	100.0	100.0	0.0	100.0	100.0	100.0
	1987	109.0	136.3	0.0	110.5	105.0	107.9
	1988	121.8	164.9	0.0	124.2	115.1	119.9
	1989	130.8	210.4	0.0	135.3	114.6	125.4
	1990	137.8	211.8	29.7	142.2	119.0	131.1
	1991	148.2	224.3	100.0	153.1	121.4	137.9
	1992	155.5	317.6	157.8	165.6	133.1	150.1
B	1986	100.0	100.0	0.0	100.0	100.0	100.0
	1987	109.2	214.3	0.0	116.1	101.1	109.4
	1988	126.8	149.9	0.0	128.3	144.2	122.0
	1989	138.0	286.0	0.0	147.7	115.5	133.3
	1990	149.5	316.4	30.2	160.7	116.4	140.9
	1991	159.7	385.4	100.0	175.6	124.6	152.8
	1992	..	390.9	102.2	..	..	..
L	1986	100.0	100.0	0.0	100.0	100.0	100.0
	1987	..	143.2	0.0	..	..	..
	1988	..	228.7	0.0	..	..	..
	1989	..	353.0	0.0	..	..	..
	1990	..	469.8	31.3	..	..	..
	1991	206.9	569.8	100.0	331.6	104.6	288.6
	1992	..	966.9	137.5	..	..	..
UK	1986	100.0	100.0	0.0	100.0	100.0	100.0
	1987	116.9	105.7	0.0	116.8	107.1	107.7
	1988	126.0	153.4	0.0	126.4	123.5	123.7
	1989	143.5	193.2	0.0	144.2	130.9	131.6
	1990	167.0	268.2	9.1	168.6	129.6	131.7
	1991	177.6	380.7	100.0	181.2	124.0	127.1
	1992	184.8	539.8	103.0	190.7	120.5	124.3

Nat. of vehicle	Years	Internat. bilateral	Cross-tr. comm.qu.	Cabotage	Total internat.	National	National + internat.
IRL	1986	100.0	100.0	0.0	100.0	100.0	100.0
	1987	100.9	186.8	0.0	106.3	94.9	96.8
	1988	107.8	230.2	0.0	115.6	94.0	97.6
	1989	140.9	294.3	0.0	150.6	96.3	105.3
	1990	127.1	237.7	46.2	134.8	92.3	99.4
	1991	98.3	203.8	100.0	106.6	100.1	101.2
	1992	..	241.5	61.5	..	..	..
DK	1986	100.0	100.0	0.0	100.0	100.0	100.0
	1987	103.6	148.9	0.0	104.6	99.8	101.3
	1988	108.4	216.7	0.0	110.9	102.6	105.2
	1989	119.3	352.2	0.0	124.6	104.4	110.6
	1990	134.0	403.3	25.9	140.6	106.0	116.6
	1991	153.0	534.4	100.0	163.2	102.3	121.0
	1992	166.3	611.1	119.0	178.2	106.6	128.7
GR	1986	100.0	..	..	100.0	100.0	100.0
	1987	101.7	..	..	101.8	104.2	103.9
	1988	131.2	..	..	131.4	98.5	103.0
	1989	141.1	..	..	141.6	110.4	114.6
	1990	107.3	..	100.0	107.6	99.6	100.7
	1991	100.6	..	100.0	100.9	95.1	95.9
	1992	138.5	..	100.0	138.7	77.8	86.1
E	1986	100.0	100.0	0.0	100.0	100.0	100.0
	1987	111.0	152.0	0.0	111.1	114.3	113.8
	1988	111.6	220.0	0.0	111.8	120.9	119.5
	1989	90.8	284.0	0.0	91.2	141.6	133.9
	1990	92.9	308.0	40.0	93.3	131.2	125.4
	1991	99.1	428.0	100.0	99.7	100.7	100.5
	1992	107.4	464.0	260.0	108.2	101.5	102.5
P	1986	100.0	100.0	0.0	100.0	100.0	100.0
	1987	120.0	375.0	0.0	120.6	105.0	107.7
	1988	123.8	775.0	0.0	125.3	115.0	116.8
	1989	225.9	1925.0	0.0	229.8	123.1	141.8
	1990	271.5	2500.0	0.0	276.6	133.5	158.6
	1991	377.0	2400.0	100.0	381.8	143.3	185.1
	1992	345.2	1925.0	100.0	349.0	129.6	168.1
EUR 12	1986	100.0	100.0	0.0	100.0	100.0	100.0
	1987	..	154.5	0.0	..	..	..
	1988	..	172.7	0.0	..	..	..
	1989	..	256.3	0.0	..	..	..
	1990	..	297.0	27.3	..	..	..
	1991	140.7	364.2	100.0	147.9	122.4	127.0
	1992	..	455.2	115.3	..	..	..
EUR 12 -D-I-L-E	1986	100.0	100.0	0.0	100.0	100.0	100.0
	1987	110.4	159.4	0.0	112.6	106.1	107.5
	1988	127.1	168.5	0.0	128.9	118.4	120.6
	1989	140.6	250.4	0.0	145.4	124.3	128.8
	1990	155.0	283.3	26.9	160.8	123.8	131.6
	1991	165.4	350.7	100.0	174.4	123.0	133.9
	1992	..	409.6	114.9	..	..	..

Source : EU Commission
See notes on pages 69

Table 4
Intra-Union Professional Road Freight Transport by Nationality of Haulier :
Relative Importance of Professional Transport, in %
 (100 % = Professional + Own Account, as in Table 2).

Nat. of vehicle	Years	Internat. bilateral	Cross-tr. comm.qu.	Cabotage	Total internat.	National	National + internat.
D	1986	89.0	100.0	..	89.0	56.7	61.9
	1987	89.0	100.0	..	89.1	57.0	62.3
	1988	88.8	100.0	..	88.8	56.9	62.1
	1989	88.5	100.0	..	88.6	56.7	62.0
	1990	89.0	100.0	100.0	89.1	56.7	61.7
	1991	89.3	100.0	100.0	89.4	57.3	61.7
	1992	89.5	100.0	100.0	89.6	58.0	62.2
F	1986	95.1	100.0	..	95.3	66.0	71.2
	1987	95.1	100.0	..	95.3	67.3	72.5
	1988	95.1	100.0	..	95.3	69.2	74.6
	1989	95.1	100.0	..	95.4	71.1	76.2
	1990	95.1	100.0	100.0	95.5	71.5	77.2
	1991	95.6	100.0	100.0	96.1	71.0	77.1
	1992	94.9	100.0	100.0	95.4	71.7	77.7
I	1986	97.8	100.0	..	97.8	85.3	87.0
	1987	..	100.0	..	..	..	..
	1988	..	100.0	..	..	..	..
	1989	99.0	100.0	..	99.0	81.1	83.1
	1990	98.1	100.0	100.0	98.1	80.8	83.2
	1991	95.3	100.0	100.0	95.3	81.2	83.0
	1992	96.2	100.0	100.0	96.2	80.8	83.0
NL	1986	90.8	100.0	..	91.4	66.6	79.6
	1987	92.3	100.0	..	92.9	67.2	80.9
	1988	91.6	100.0	..	92.2	65.7	80.1
	1989	91.9	100.0	..	92.6	65.3	80.7
	1990	92.5	100.0	100.0	93.2	67.0	81.8
	1991	92.7	100.0	100.0	93.4	67.9	82.7
	1992	93.5	100.0	100.0	94.2	70.9	84.3
B	1986	65.8	100.0	..	68.0	46.9	58.5
	1987	66.9	100.0	..	70.9	48.2	61.5
	1988	68.1	100.0	..	70.5	49.9	61.9
	1989	70.0	100.0	..	73.8	52.8	65.6
	1990	69.2	100.0	100.0	73.2	52.3	65.5
	1991	69.5	100.0	100.0	74.1	51.8	65.9
	1992	..	100.0	100.0	..	..	..
L	1986	80.0	100.0	..	86.6	14.2	72.9
	1987	..	100.0	..	..	..	..
	1988	..	100.0	..	..	..	..
	1989	..	100.0	..	..	..	..
	1990	..	100.0	100.0	..	..	..
	1991	72.8	100.0	100.0	88.6	16.0	83.6
	1992	..	100.0	100.0	..	..	..
UK	1986	97.2	100.0	..	97.3	67.5	69.1
	1987	97.7	100.0	..	97.8	70.7	72.3
	1988	96.4	100.0	..	96.4	70.0	71.5
	1989	95.5	100.0	..	95.6	72.0	73.4
	1990	96.2	100.0	100.0	96.3	72.3	73.9
	1991	96.4	100.0	100.0	96.6	68.6	70.8
	1992	95.6	100.0	100.0	95.8	71.1	73.1

Nat. of vehicle	Years	Internat. bilateral	Cross-tr. comm.qu.	Cabotage	Total internat.	National	National + internat.
IRL	1986	92.6	100.0	..	93.1	38.4	47.5
	1987	89.7	100.0	..	90.9	40.4	49.6
	1988	88.7	100.0	..	90.2	42.2	51.6
	1989	93.8	100.0	..	94.6	50.0	60.6
	1990	95.6	100.0	100.0	96.1	55.8	64.9
	1991	93.6	100.0	100.0	94.5	60.3	66.3
	1992	..	100.0	100.0	..	..	..
DK	1986	91.0	100.0	..	91.2	74.1	79.3
	1987	90.5	100.0	..	90.8	74.3	79.5
	1988	91.0	100.0	..	91.4	74.0	79.7
	1989	91.3	100.0	..	91.8	73.9	80.1
	1990	91.8	100.0	100.0	92.3	73.4	80.4
	1991	91.7	100.0	100.0	92.4	73.4	81.3
	1992	91.6	100.0	100.0	92.3	75.5	82.7
GR	1986	100.0	100.0	..	100.0	69.7	73.8
	1987	100.0	100.0	..	100.0	66.0	70.5
	1988	100.0	100.0	..	100.0	56.0	63.6
	1989	100.0	100.0	..	100.0	69.6	74.7
	1990	100.0	100.0	..	100.0	70.0	74.3
	1991	100.0	100.0	..	100.0	69.9	74.2
	1992	100.0	100.0	..	100.0	72.0	78.1
E	1986	99.4	100.0	..	99.4	82.7	85.2
	1987	99.4	100.0	..	99.4	82.4	84.9
	1988	99.0	100.0	..	99.0	82.5	84.9
	1989	98.1	100.0	..	98.1	83.9	85.4
	1990	99.0	100.0	100.0	99.0	81.9	83.8
	1991	91.6	100.0	100.0	91.7	84.8	85.9
	1992	92.8	100.0	100.0	92.9	84.0	85.4
P	1986	100.0	100.0	..	100.0	28.5	41.1
	1987	100.0	100.0	..	100.0	28.5	42.6
	1988	94.2	100.0	..	94.3	29.5	41.7
	1989	97.2	100.0	..	97.2	31.0	49.8
	1990	100.0	100.0	..	100.0	32.4	53.1
	1991	96.9	100.0	100.0	96.9	30.3	54.4
	1992	100.0	100.0	100.0	100.0	35.4	58.9
EUR 12	1986	90.9	100.0	..	91.2	69.5	73.4
	1987	..	100.0	..	..	..	..
	1988	..	100.0	..	..	..	..
	1989	..	100.0	..	..	..	..
	1990	..	100.0	100.0	..	..	..
	1991	90.3	100.0	100.0	91.1	69.5	74.1
	1992	..	100.0	100.0	..	..	..
EUR 12 -D-I-L-E	1986	88.1	100.0	..	88.7	64.6	69.7
	1987	88.9	100.0	..	89.6	66.4	71.5
	1988	88.7	100.0	..	89.3	66.4	71.6
	1989	89.3	100.0	..	90.1	68.7	73.8
	1990	89.7	100.0	100.0	90.5	69.1	74.6
	1991	89.8	100.0	100.0	90.7	67.2	73.7
	1992	..	100.0	100.0	..	..	..

Source : EU Commission
See notes on pages 69

Table 5
Intra-Union Professional Transport by Nationality of Haulier :
 (1986 = 100 ; 1991 = 100 for Cabotage).

Nat. of vehicle	Years	Internat. bilateral	Cross-tr. comm.qu.	Cabotage	Total internat.	National	National + internat.
D	1986	100.0	100.0	..	100.0	100.0	100.0
	1987	103.9	84.0	..	103.8	102.3	102.6
	1988	108.1	117.9	..	108.2	108.0	108.0
	1989	112.4	149.1	..	112.6	111.8	112.0
	1990	107.7	167.0	27.0	108.2	116.7	114.7
	1991	116.8	133.0	100.0	117.3	142.2	136.4
	1992	122.4	160.4	94.6	123.1	157.6	149.5
F	1986	100.0	100.0	..	100.0	100.0	100.0
	1987	112.7	129.9	..	113.4	109.5	110.5
	1988	139.2	187.2	..	141.0	125.5	129.2
	1989	149.0	252.3	..	152.9	135.0	139.3
	1990	174.9	345.0	23.6	181.5	135.4	146.4
	1991	178.5	507.1	100.0	191.6	137.5	150.4
	1992	188.9	565.9	89.1	203.8	141.1	156.1
I	1986	100.0	100.0	..	100.0	100.0	100.0
	1987	..	87.5	..	..	..	..
	1988	..	120.0	..	..	..	..
	1989	89.9	135.0	..	90.1	111.1	107.8
	1990	118.6	162.5	27.4	118.8	111.4	112.6
	1991	103.2	177.5	100.0	103.8	112.5	111.1
	1992	120.3	207.5	114.5	121.0	117.7	118.3
NL	1986	100.0	100.0	..	100.0	100.0	100.0
	1987	110.8	136.3	..	112.3	106.0	109.8
	1988	122.8	164.9	..	125.4	113.6	120.7
	1989	132.3	210.4	..	137.1	112.4	127.2
	1990	140.4	211.8	29.7	145.0	119.5	134.8
	1991	151.3	224.3	100.0	156.4	123.7	143.3
	1992	160.0	317.6	157.8	170.7	141.7	159.1
B	1986	100.0	100.0	..	100.0	100.0	100.0
	1987	111.0	214.3	..	121.0	104.1	114.9
	1988	131.3	149.9	..	133.1	121.5	128.9
	1989	146.9	286.0	..	160.3	130.1	149.4
	1990	157.3	316.4	30.2	173.1	129.9	157.6
	1991	168.8	385.4	100.0	191.2	137.7	172.0
	1992	..	390.9	102.2	..	..	..
L	1986	100.0	100.0	..	100.0	100.0	100.0
	1987	..	143.2	..	..	..	..
	1988	..	228.7	..	..	..	..
	1989	..	353.0	..	..	..	..
	1990	..	469.8	31.3	..	..	..
	1991	188.3	569.8	100.0	339.4	117.6	331.2
	1992	..	966.9	137.5	..	..	..
UK	1986	100.0	100.0	..	100.0	100.0	100.0
	1987	117.6	105.7	..	117.4	112.2	112.6
	1988	124.9	153.4	..	125.4	128.1	127.9
	1989	141.0	193.2	..	141.8	139.6	139.7
	1990	165.3	268.2	9.1	167.0	138.8	140.9
	1991	176.2	380.7	100.0	179.9	126.0	130.1
	1992	181.6	539.8	103.0	187.7	126.8	131.4

Nat. of vehicle	Years	Internat. bilateral	Cross-tr. comm.qu.	Cabotage	Total internat.	National	National + internat.
IRL	1986	100.0	100.0	..	100.0	100.0	100.0
	1987	97.8	186.8	..	103.9	99.8	101.1
	1988	103.3	230.2	..	112.0	103.2	106.1
	1989	142.8	294.3	..	153.1	125.3	134.3
	1990	131.2	237.7	46.2	139.2	134.1	135.8
	1991	99.4	203.8	100.0	108.2	157.2	141.2
	1992	..	241.5	61.5	..	..	..
DK	1986	100.0	100.0	..	100.0	100.0	100.0
	1987	103.0	148.9	..	104.1	100.1	101.5
	1988	108.5	216.7	..	111.2	102.5	105.6
	1989	119.7	352.2	..	125.5	104.1	111.7
	1990	135.2	403.3	25.9	142.4	105.0	118.2
	1991	154.1	534.4	100.0	165.3	101.4	124.0
	1992	167.4	611.1	119.0	180.5	108.7	134.1
GR	1986	100.0	..	0.0	100.0	100.0	100.0
	1987	101.7	..	0.0	101.8	98.7	99.2
	1988	131.2	..	0.0	131.4	79.1	88.7
	1989	141.1	..	0.0	141.6	110.2	116.0
	1990	107.3	..	100.0	107.6	100.0	101.4
	1991	100.6	..	100.0	100.9	95.4	96.4
	1992	138.5	..	100.0	138.7	80.4	91.1
E	1986	100.0	100.0	..	100.0	100.0	100.0
	1987	111.0	152.0	..	111.1	113.9	113.4
	1988	111.2	220.0	..	111.4	120.7	119.1
	1989	89.6	284.0	..	90.0	143.7	134.2
	1990	92.6	308.0	40.0	93.0	129.9	123.4
	1991	91.4	428.0	100.0	92.0	103.3	101.3
	1992	100.3	464.0	260.0	101.1	103.1	102.7
P	1986	100.0	100.0	..	100.0	100.0	100.0
	1987	120.0	375.0	..	120.6	105.0	111.7
	1988	116.7	775.0	..	118.2	119.0	118.6
	1989	219.5	1925.0	..	223.4	133.8	172.1
	1990	271.5	2500.0	0.0	276.6	151.7	205.1
	1991	365.2	2400.0	100.0	370.1	152.1	245.2
	1992	345.2	1925.0	100.0	349.0	161.0	241.3
EUR 12	1986	100.0	100.0	..	100.0	100.0	100.0
	1987	..	154.5	..	..	..	..
	1988	..	172.7	..	..	..	..
	1989	..	256.3	..	..	..	..
	1990	..	297.0	27.3	..	..	..
	1991	139.8	364.2	100.0	147.6	122.5	128.2
	1992	..	455.2	115.3	..	..	..
EUR 12 -D-I-L-E	1986	100.0	100.0	..	100.0	100.0	100.0
	1987	111.4	159.4	..	113.7	109.1	110.3
	1988	127.9	168.5	..	129.9	121.7	123.9
	1989	142.5	250.4	..	147.9	132.3	136.5
	1990	157.7	283.3	26.9	164.2	132.4	141.0
	1991	168.6	350.7	100.0	178.5	128.0	141.5
	1992	..	409.6	114.9	..	..	..

Source : EU Commission
See notes on pages 69

Table 6
Intra-Union Professional Road Freight Transport by Nationality of Haulier : (Million tonne-kms).

Nat. of vehicle	Years	Internat. bilateral	Cross-tr. comm.qu.	Cabotage	Total internat.	National	National + internat.
D	1986	17694	106	0	17800	58432	76232
	1987	18379	89	0	18468	59779	78247
	1988	19134	125	0	19259	63096	82355
	1989	19888	158	0	20046	65316	85362
	1990	19063	177	20	19260	68177	87437
	1991	20665	141	74	20880	83094	103974
	1992	21665	170	70	21905	92080	113985
F	1986	15640	616	0	16256	51742	67998
	1987	17630	800	0	18430	56677	75107
	1988	21772	1153	0	22925	64952	87877
	1989	23297	1554	0	24851	69859	94710
	1990	27350	2125	26	29501	70058	99559
	1991	27913	3124	110	31147	71127	102274
	1992	29551	3486	98	33135	73003	103138
I	1986	15717	40	0	15757	83959	99715
	1987	..	35	0	..	..	..
	1988	..	48	0	..	..	..
	1989	14136	54	0	14190	93307	107497
	1990	18640	65	17	18722	93532	112254
	1991	16222	71	62	16355	94450	110805
	1992	18911	83	71	19065	98857	117922
NL	1986	17798	1164	0	18962	12650	31612
	1987	19712	1587	0	21299	13404	34703
	1988	21862	1919	0	23781	14365	38146
	1989	23555	2449	0	26004	14215	40219
	1990	24986	2465	38	27489	15118	42607
	1991	26925	2611	128	29664	15648	45312
	1992	28476	3697	202	32375	17920	50295
B	1986	8202	877	0	9079	5078	14157
	1987	9108	1879	0	10987	5286	16273
	1988	10767	1315	0	12082	6169	18251
	1989	12045	2508	0	14553	6604	21157
	1990	12903	2775	42	15720	6594	22314
	1991	13844	3380	139	17363	6992	24355
	1992	..	3428	142	..	..	..
L	1986	547	338	0	885	34	919
	1987	..	484	0	..	..	..
	1988	..	773	0	..	..	..
	1989	..	1193	0	..	..	..
	1990	..	1588	15	..	..	..
	1991	1.030	1926	48	3.004	40	3.044
	1992	..	3268	66	..	..	..
UK	1986	5627	88	0	5715	69246	74961
	1987	6615	93	0	6708	77665	84373
	1988	7030	135	0	7165	88673	95838
	1989	7932	170	0	8102	96652	104754
	1990	9303	236	3	9542	96088	105630
	1991	9915	335	33	10283	87266	97549
	1992	10220	475	34	10729	87798	98527

Nat. of vehicle	Years	Internat. bilateral	Cross-tr. comm.qu.	Cabotage	Total internat.	National	National + internat.
IRL	1986	725	53	0	778	1613	2391
	1987	709	99	0	808	1610	2418
	1988	749	122	0	871	1665	2536
	1989	1035	156	0	1191	2021	3212
	1990	951	126	6	1083	2163	3246
	1991	721	108	13	842	2535	3377
	1992	..	128	8	..	..	..
DK	1986	3493	90	0	3583	6535	10118
	1987	3597	134	0	3731	6540	10271
	1988	3790	195	0	3985	6701	10686
	1989	4180	317	0	4497	6805	11302
	1990	4723	363	15	5101	6863	11964
	1991	5382	481	58	5921	6624	12545
	1992	5847	550	69	6466	7102	13568
GR	1986	1973	0	0	1973	8740	10713
	1987	2006	2	0	2008	8624	10632
	1988	2589	4	0	2593	6913	9506
	1989	2783	10	0	2793	9631	12424
	1990	2118	4	0	2122	8738	10860
	1991	1984	7	0	1991	8338	10329
	1992	2732	4	0	2736	7023	9759
E	1986	13127	25	0	13152	61295	74447
	1987	14576	38	0	14614	69825	84439
	1988	14591	55	0	14646	74001	88647
	1989	11767	71	0	11838	88095	99933
	1990	12153	77	2	12232	79642	91874
	1991	11992	107	5	12104	63326	75430
	1992	13172	116	13	13301	63189	76490
P	1986	1746	4	0	1750	2345	4095
	1987	2096	15	0	2111	2462	4573
	1988	2037	31	0	2068	2790	4858
	1989	3832	77	0	3909	3137	7046
	1990	4741	100	0	4841	3558	8399
	1991	6377	96	3	6476	3566	10042
	1992	6027	77	3	6107	3776	9883
EUR 12	1986	102289	3401	0	105690	361668	467358
	1987	..	5255	0	..	..	..
	1988	..	5875	0	..	..	..
	1989	..	8717	0	..	..	..
	1990	..	10101	184	..	..	..
	1991	142970	12387	673	156030	443006	599036
	1992	..	15482	776	..	..	..
EUR 12	1986	55204	2892	0	58096	157949	216045
-D-I-L-E	1987	61473	4609	0	66082	172268	238350
	1988	70596	4874	0	75470	192228	267698
	1989	78659	7241	0	85900	208924	294824
	1990	87075	8194	130	95399	209180	304579
	1991	93061	10142	484	103687	202096	305783
	1992	..	11845	556	..	..	..

Source : EU Commission
See notes on pages 69

Notes on Tables 1-6

Table 1

This table is based on information from the annual ECMT leaflet "Trends in the transport sector, 1970-1992" and is the only source giving a 20 + year time series for the three modes. For rail and inland waterways the figures are the tonne-kilometres on each national network. In the case of road the figures are tonne-kilometres performed by national vehicles on the national network but there are many exceptions to this definition. A list of exceptions is given under Table 3.1.2b) in ECMT's "Statistical Trends in Transport, 1985-1989 (the most recent annual publication in this series).

Table 2-6

These tables are based on information from the Road Statistics Directive for international bilateral transport and national transport), the Community Quota Statistics (for cross-trades) and the Cabotage Quota Statistics (for cabotage). Data on cabotage for 1990 refer to the 2nd half year only; cabotage figures for I are rough estimates by DG VII.

Notes relating to data from the Road Statistics Directive :

- i) Because of changes in methodology, it has been necessary to modify F figures (for 1986 to 1989) and the international bilateral figures for UK (for 1986), DK (for 1986 and 1987), D (1988).
- ii) Data are missing for I (1987 and 1988) and L (1987 to 1990) while, at May 1994, data from B, L and IRL for 1992 have not yet been received by EUROSTAT; in any case other data for 1992 should be regarded as provisional.
- iii) There are also major breaks in the series for D, 1990 to 1991, due to the inclusion of former GDR data in D (this mainly affects national transport) and E (unstable series, especially the decline 1990 to 1991 for national transport).

These complexities together with the existence of large unauthorised markets in a number of Member States create problems in comparing different data sources.

Formal Hearings of the Committee

In the course of its enquiries, the Committee held formal hearings with representatives from industry, the road and rail sectors, and national administrations.

OCTOBER 1993.

Representatives from industry (shippers), from the road transport sector (small and large operators/forwarders) and from the truck manufacturing sector.

Evidence was sought on the current situation in the road transport sector (structure, type of operations, social and environmental issues, relationship to other modes of transport).

DECEMBER 1993.

- Representatives from Road Haulage Organisations in peripheral States of the Union (Denmark, Greece, Ireland and Portugal)

Evidence was sought on the particular situation of the road haulage sector in these four peripheral Member States.

- Representatives from the rail and combined transport sectors.

Evidence was sought on the relationship between rail/combined transport and road haulage, and on the potential for enhancing cooperation between them.

MAY 1994.

Representatives from national administrations, Road Haulage Organisations from the Union and third countries. Shippers and operators active in third countries.

Evidence was sought on policy towards third countries; on economic, social and infrastructure conditions in third countries; and on the experiences of Union operators/shippers in third countries and third country operators in the Union.

Copies of this report can be obtained from :

**European Commission
Directorate-General of Transport
rue de la loi, 200 B-1049 Brussels**

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