

Review of Road Freight Regulation in Britain

Occasional Paper

The desirability of de-regulating road freight has long been a subject of discussion and action by governments in Australia. A recent visit to the United Kingdom by Dr K.W. Ogden provided an opportunity for a brief study of the impact of de-regulation of road freight in Britain. The paper examines the effect of the regulations currently in force in Britain and also examines several aspects of road freight regulation in Britain which may be relevant to freight policy in Australia.

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Review of Road Freight Regulation in Britain

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FOREWORD

The desirability of de-regulating road freight has long been a subject of discussion and action by governments in Australia. A recent visit to the United Kingdom by Dr K.W. Ogden provided an opportunity for a brief study of the impact of de-regulation of road freight in Britain.

As a consequence, this paper was prepared for the Bureau of Transport Economics by Dr Ogden of the Department of Civil Engineering, Monash University.

The paper examines the effect of the regulations currently in force in Britain and also examines several aspects of road freight regulation in Britain which may be relevant to freight policy in Australia.

The BTE does not necessarily accept the findings of the consultant's report but considers that the information will be of value to many people concerned with road freight regulation in Australia.

(R.H. Heacock)
A/g Assistant Director
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CHAPTER 1 - INTRODUCTION

Intrastate road freight transport in most Australian States has been, until quite recently, closely and consistently regulated. Typically, such regulation allowed freight to travel by road only where the distance involved was small, as for example with freight movement within towns and cities, or between farm and railhead. For longer distance movements, systems of applications, permits, fees and the like had been developed.

Although there are several factors contributing to the development and evolution of intrastate road freight regulation in Australia, it is probably fair to say that the main reason had to do with protecting the various State-owned railway systems from road freight competition. Typically such regulation dates from the early 1930s, when the technological development and increasing availability of the motor truck began to threaten the dominant position enjoyed by rail.

Over recent years, the close regulation of road freight has come to be questioned. Technological developments in both the road and rail modes have meant that the roles which each play are increasingly complementary rather than competitive. The rural road network has improved to the extent that diversion of extra traffic to road is probably capable of being absorbed without undue resultant road damage; the accelerating railway deficits have caused rail management and Governments alike to look to shedding uneconomic rural services, and the demands for higher standards of service in terms of shipment frequency, speed and door to door delivery from rural consignees have all contributed to the pressure for diversion of freight from rail to road.

In 1980, for example, Western Australia published a document outlining a new Land Freight Transport Policy, based 'on recognition that Western Australia needs effective transport at minimum real cost to maintain its essential economic development. ... To achieve a cost-effective system, transport users will be given more freedom to choose between competing providers of transport services whose full costs are reflected in their charges. Such competitors must themselves become as free as possible from regulation of transport so that their response to user demand will not be unduly prohibited (but)

regulation or subsidies will prevail where a community cannot generate sufficient traffic to support a competitive system, or where there are environmental or other social requirements to be met' (Western Australian Government 1980).

Similarly, in Victoria, the Government began moving in 1976 towards a less closely regulated road freight industry. The development by Vicrail of a system of regional freight centres throughout the State is a response to this; between 1976 and 1980 the number of country stations serving general freight reduced from 550 to 35. Although details of a new road freight policy have not to date been spelled out, the Government in a statement of April 1979 reaffirmed 'its determination to deregulate road freight transport to country Victoria in order that there should be an effective freedom of choice to use road transport or the integrated rail/road transport system established through freight centres' (Ministry of Transport 1979).

In other States, South Australian road legislation was liberalised in the 1960s, New South Wales in the early 1970s, while Tasmania still has restrictions on entry to and operations of the industry. Regulation on road freight in Queensland has long been less restrictive than in other States. The situation in New South Wales is currently in a state of flux because although all road haulage operations are required to be licensed, the recent McDonnell (1980) enquiry commissioned by the New South Wales Government found on the one hand that long distance hauliers do not meet their equitable share of road track costs, and on the other recommended that rail should rationalise its freight services by divesting itself of uneconomic activities.

Nor are moves towards road freight deregulation confined to Australia. In particular, there are commitments to a reduction of road freight regulation to interstate trade in the United States as well as in several of the States (for example see Kahn 1979).

It should perhaps be noted in passing that Australian interstate freight transport is, because of High Court interpretation of the Australian Constitution, completely unregulated in an economic sense; regulations do of course exist in relation to loading and other safety requirements (for example see BTE 1980).

However, the country which has gone further than any other in rationalising its domestic freight services and deregulating its road freight sector is Britain. A series of reforms of both the rail and road sectors in the 1960s has led to a situation whereby Britain's domestic freight now operates in a strictly commercial position; each mode (supposedly) has the full costs reflected in the charges. There are no restrictions or obligations related to particular traffics, and each mode (and any road operator) is free to compete in any market. Thus, on the road freight side, since 1968 there have been no 'quantity' licensing restrictions on the movement of goods by truck. However, there are extensive 'quality' licensing provisions affecting the road freight operator, particularly in relation to road safety and environmental protection.

Because of the contemporary interest in road freight deregulation in several Australian States, and in view of the relatively lengthy British experience with a deregulated freight sector, it was thought that a review of the British situation was timely. This paper therefore presents a review and appraisal of the existing British situation, and in particular discusses (where possible) the effects of the 1968 legislation which abolished the 'quantity' licensing regulations and introduced the 'quality' licensing arrangements. Current issues, in particular certain issues related to environmental controls on trucks, are also addressed. Finally, some comments are made about the application and relevance of British experience to Australian conditions.

In Chapter 2, the development of British road freight regulation from the early 1930s until the late 1960s is outlined. Chapter 3 reviews the operators licensing system introduced in 1968, while in Chapter 4 the effects of the introduction of this system are analysed.

Chapter 5 reviews the various aspects of environmental regulations affecting the road freight industry, including such aspects as truck routes, vehicle design and use regulations, and controls on vehicle operating centres. The London experience in connection with environmental controls on truck traffic is reviewed in some detail.

In Chapter 6, some of the important current issues in relation to domestic British freight are reviewed. In particular, the findings and recommendations

of a 1978 Committee of Enquiry into operators' licensing (the Foster Committee) are presented, and the principal issues to be addressed by a current board of enquiry into 'Lorries, People and the Environment' are discussed.

Finally, in Chapter 7, certain implications for Australian transport of the British experience are made, since there are several aspects of freight regulation there which have relevance to freight policy in this country.

CHAPTER 2 - THE DEVELOPMENT OF ROAD FREIGHT LICENSING IN BRITAIN

The development of road freight licensing in Britain may be broadly divided into three periods:

- a period, prior to 1933, in which there was virtually no regulation, apart from vehicle licensing;
- a period from 1933 to 1968 during which time the carriage of goods by road was closely regulated; and
- the period since 1968, in which there has been no 'quantity' licensing, but extensive 'quality' licensing provisions.

THE ROAD AND RAIL TRAFFIC ACT 1933

The *Road and Rail Traffic Act* 1933 followed from a Royal Commission on Transport, 1928 to 1930. The Commission, in its final report, contrasted the highly regulated and organised character of the railways with road goods transport, which 'is in a condition which lacks all unity and is operated by a number of independent firms and individuals who, while endeavouring to compete with other forms of transport, are at the same time engaged in bitter and uneconomic strife with each other.'

The Commission's recommendations that road carriers be licensed was bitterly opposed by the industry, and it was not until 1933 that legislation to implement them was introduced. However, when finally passed, the legislation established a regulatory system which remained essentially unchanged until 1968(1).

Under this system, road freight operators were issued with one of five types of licence.

(1) For a more detailed history of licensing over this period, refer to Geddes (1965) and Foster (1978).

- The public carrier's or A licence, which entitled the operator to use the authorised vehicles for the carriage of goods for hire or reward, valid for two years. The only condition was that the operator, while permitted to use his authorised vehicles for the carriage of goods in his business as a carrier or for incidental activities such as storage or warehousing, could not carry goods in them for any other trade or business of his. The applicant for an A licence had to make a declaration of the main work he intended to do with those vehicles and which became known as his 'normal use'. The licensing authority required this information to decide the need for a new licence in the light of existing transport facilities.
- The Contract A licence, which entitled the operator to operate a vehicle or vehicles under exclusive contract to one customer for at least one year, and was valid for the period of the contract only.
- The limited carrier's or B licence, which entitled the operator to use the authorised vehicles for the carriage of goods either for his own trade or business or for hire or reward, subject to conditions about the type of goods carried, the clients and the operating area. This licence was valid for one year.
- The private carrier's or C licence, which entitled the holder to use the authorised vehicles for the carriage of goods for his trade or business only, and was valid for three years.
- The C Hiring licence, which, in an emergency, allowed the holder of a C licence to use an authorised vehicle for the carriage of goods for any person to whom he let the vehicle, provided that the needs of that person could not otherwise be met from other sources.

GEDDES COMMITTEE REPORT, 1965

By 1963, although detailed amendments had been made (for example, A and C licences were valid for five years, and B licences for two years), and the system had acquired a great deal of case law which made it quite complex and legalistic, the statutory basis of the licensing system was essentially unchanged. In that year, the (Conservative) Government appointed a committee, chaired by Lord Geddes, to conduct an enquiry into road freight regulation, with the following terms of reference:

'In the light of present day conditions, to examine the operation and effect of the system of carriers' licenses first introduced by the Road and Rail Traffic Act 1933 and as subsequently amended by Statute; and to make recommendations'.

The reason for the establishment of the Geddes Committee had to do with the radical re-organisation of nationalised transport in 1962, the continuing decline of rail and canal freight, and the rationalisation of the rail system which involved, inter alia, the closure of substantial lengths of the railway system, and the abandonment of the railways' common carrier obligation.

The Committee, perhaps not surprisingly given the history and development of the legislation, could find no explicit objectives for the licensing system. Hence it inferred them, and decided that there were five possible objectives of Government policy for the regulation of road transport, as follows:

- . the promotion of safety;
- . the promotion of efficiency in road transport operations;
- . the reduction of any harmful effects of road transport on amenity and environment;
- . the promotion of the railways; and
- . the reduction of road congestion.

The findings of the Committee in respect of each of these implied objectives may be summarised as follows.

- . *Safety.* The licensing system had no significant bearing on safety. Although in principle certain regulations (eg use of unsafe vehicles, excessive driving hours, and restrictions on competition) might be thought to influence safety, in practice this had not happened.
- . *Efficiency.* The licensing system reduced efficiency by restricting the number of operators and vehicles, which led to increased freight rates. Moreover, the Committee found that the distinction between hire or reward and ancillary operators contributed to inefficiency by the prohibition on the latter taking backloads.
- . *Amenity.* Although there were environmental problems with heavy trucks, the licensing system had a minimal role to play in solving these problems.

- . *Railways.* The licensing system had not assisted the railways, which had seen a declining market share even with regulation of the road freight industry. This situation could only be reversed by the introduction of 'an inordinately large complex administrative machine' and by 'placing a heavy burden on industry and trade'. Other measures (in particular, taxation and improving the attractiveness of rail) were likely to be more effective policy instruments than licensing. However, 'the Committee was not persuaded that it was in the interest either of the national economy or of the consumer for traffic to be transferred' (Foster, 1978).
- . *Congestion.* Again, the Committee concluded that licensing had not contributed towards this objective. Indeed, controls on truck usage may have led to a larger truck fleet than necessary, with possible adverse effects on traffic congestion.

In short, as the Foster Committee (see Chapter 6 below) was to summarise fifteen years later, 'the Committee's general conclusions were that after 30 years of evolution the carriers' licensing system had become an elaborate and effective process of regulating what lorries might carry but was absolutely ineffective as a means of controlling the quantity of road goods transport, the maintenance standards of vehicles, overloading, drivers' hours, and for protecting the railways, or indeed for achieving any of the objectives the Committee held to be in the public interest'.

The Geddes Committee concluded that the only objective of road freight industry licensing should be road safety. In keeping with this, it recommended that all regulations not having to do with this should be removed, and that measures should be introduced to enable licensing to contribute to the safety objective. Specifically, it made four recommendations.

- . The abolition of all restrictions on the capacity of the road haulage industry and on the work for which a truck might be used. (The effect of this would be to allow ancillary operators to ply for hire or reward, and to allow unrestricted entry to the market).

- The introduction of a system of permits to ply as a carrier of goods, whether for hire or reward, or on own account, or both. (The revocation of a permit as a result of unsafe operation would, if enforced, be a contributor to safety). The introduction of a system of carriers' permit plates, one for each truck. (This would overcome the problem of identifying the unlicensed operator).
- The use of measures other than carrier licensing to pursue any other policy aims (eg direct controls for environmental protection, quotas for the shift of traffic from road to rail, taxation for congestion control, etc).

Reactions to the Geddes Committee Report

The Government reaction to the Geddes Committee came in 1967 in the form of a White Paper on the Transport of Freight. Notwithstanding the change of Government in the interim, the White Paper broadly accepted the *Geddes Report*. Some further alterations were proposed, although not all of these were subsequently incorporated into the legislation in the *Transport Act* 1968 (see below).

Industry reaction, not surprisingly, was quite hostile. Road hauliers would have preferred the retention of a regulated industry with some modification of the carriers' licensing system. They also sought control of entry to the industry through both professional entry qualifications and financial entry qualifications. Since the Geddes recommendations, if implemented, would expose the industry to virtually unchecked competition, including competition from the ancillary operators, the road hauliers were vociferous in their opposition to the proposals.

On the other hand, organisations representing the shippers' interests (in particular the powerful Freight Transport Association) were strongly in favour of the proposals. They reasoned that a more highly competitive road freight sector, and more competition between road and other modes, was in their interests. Similarly, the opportunity for ancillary operators to enter hire or reward activities was seen to be in the shippers' interests.

THE TRANSPORT ACT 1968

Notwithstanding the opposition from the road haulage industry, the Government introduced legislation resulting in the *Transport Act* 1968 which accepted the main thrust of the Geddes Committee recommendations. It thus had the effect of removing most (but not all) restrictions on the capacity of the road haulage industry, it enabled ancillary operators to ply for hire or reward (especially in seeking back loads), and it introduced a system of operators' licences (see Chapter 3).

There were some departures from the Geddes Committee recommendations however. The main differences were as follows.

- The legislation put a qualitative restriction on entry to the industry by requiring an applicant for an operator's licence to satisfy certain criteria. These will be outlined later in Chapter 3.
- All vehicles below 3.54 tonnes (3.5 tons) unladen weight were exempt from operators licensing. The reason for this exemption was that it was considered that it would enable safety inspection and enforcement to be concentrated on the larger vehicles. At the time, some 900 000 vehicles out of a total of 1 500 000 vehicles were exempt.
- The Committee's recommendation regarding the fitting of easily visible permit plates was not implemented.

In addition, the Act did not remove all restrictions on capacity, since it provided for the introduction of a system of quantity licensing in respect of trucks exceeding 16 tons (16.25 tonnes) gross vehicle weight (gvw) carrying more than 11 tons (11.18 tonnes) over 162 km (100 miles) or more, or trucks carrying certain prescribed bulk or extracted commodities. This provision was intended to help protect the railways, but this part of the legislation was never proclaimed - partly because rail had a virtual monopoly in these traffics anyway, and partly because of the administrative problems involved in operating such a scheme (Gwilliam & Mackie 1975).

There have been minor legislative changes since 1968. The most significant of these was the implementation in 1977 of certain EEC regulations relating to entry to the industry. This had the effect, as will be seen in Chapter 3, of reintroducing a distinction between hire or reward and ancillary operation. However, these changes apart, the 1968 legislation is still in force today.

Before discussing the effects (Chapter 4) of what was a major regulatory change, a brief description of the operation of the licensing system will be presented in the next chapter.

CHAPTER 3 - THE OPERATORS' LICENSING SYSTEM⁽¹⁾

For the purposes of administration, Britain⁽²⁾ is divided into eleven Traffic Areas. Each has its own Licensing Authority, and an operator has to have a separate licence for each Traffic Area in which he has an 'operating centre'. The Licensing Authority and some of the enforcement agencies are responsible to the Minister of Transport.

The essence of the licensing system is that any person using a vehicle (not specifically exempted from licensing) for the carriage of goods is required to hold an operator's licence. Exempted vehicles include those under 3.5 tonnes gvw, and prescribed vehicles exceeding 3.5 tonnes gvw, such as farm vehicles, emergency vehicles, buses, etc - essentially vehicles which do not carry freight.

Until 1977, there was only one grade of licence, but since then, as a result of the implementation of EEC regulations, there have been two grades. The first, a standard operator's licence, applies to hire or reward operators including ancillary operators who wish to ply for hire or reward. The second, a restricted licence, applies to ancillary operators who do not wish to ply for hire or reward.

CRITERIA FOR THE ISSUE OF A LICENCE

An applicant for a restricted licence must satisfy the Licensing Authority that (Foster 1978):

- . he is a fit person to hold a licence, having regard to his activities in carrying on a business in the course of which any vehicles are operated, and to his convictions for certain traffic or other offences relating to the operation of goods vehicles;

(1) A more detailed description is provided by Foster (1978).

(2) The system in Northern Ireland is slightly different, but will not be described here.

- . he will provide satisfactory arrangements for ensuring that provisions in the *Transport Act* 1968 relating to the limits on drivers' hours will be complied with;
- . he will provide satisfactory arrangements for ensuring that his vehicles will not be overloaded;
- . he will provide satisfactory facilities and arrangements for maintaining his vehicles in a fit and serviceable condition and his operating centre will be a suitable one; and
- . the provision of such facilities and arrangements will not be prejudiced by his having insufficient financial resources.

An applicant for a standard licence must additionally satisfy certain other requirements, in practice the main one being the need to satisfy the Licensing Authority that he is professionally competent himself, or employs a transport manager who is.

The Licensing Authority is obliged to grant a restricted licence if the applicant meets, to the Authority's satisfaction, the prescribed requirements. Similarly, it is obliged to refuse an application for a standard licence unless it is satisfied that the additional requirements have been met.

In applying for a licence, an applicant must state which grade of licence he is seeking, whether it is to include international working, and the registration numbers of the vehicles and trailers involved⁽¹⁾. The applicant must also make certain declarations regarding his intent to comply with laws regarding overloading, driving hours and records, and maintenance. He must also provide the addresses of his operating centres and details regarding parking arrangements, information on his financial standing, and a list of traffic convictions in the previous years. Additionally, Licensing Authorities are empowered to seek a wide range of extra information.

(1) There is a facility to allow a licence to include extra vehicles not yet owned by the applicant.

Foster (1978) has provided a review of the way in which the Licensing Authorities tend to interpret the fulfilment of the requirements. These are summarised below.

- . *Fit person.* In practice, the only way in which this is assessed is in relation to the list of convictions furnished by the applicant himself; the police are not obliged to provide the Authorities with details of any convictions. There is no provision for disclosure of previous bankruptcies, or even for referees statements.
- . *Drivers hours and records.* The Authority can do no more than satisfy itself that a satisfactory system for ascertaining and keeping records has been devised.
- . *Overloading.* The Authority has no way of ensuring that the applicant will honour his undertaking.
- . *Maintenance.* The Authority can ensure that a satisfactory system has been devised for the regular inspection of vehicles, rectification of faults, and the keeping of maintenance and inspection records. If the applicant has an arrangement with a garage, the Authority can approve the terms of the contract; if the applicant intends to perform his own servicing the Authority's engineering support staff can inspect the maintenance facilities.
- . *Financial standing.* Relevant financial statements can be produced in the case of renewal applications, but for first applicants, the establishment of financial standing is more difficult. Licensing Authorities vary in their approach, but may require such things as evidence of cash in the bank, or a demonstration that the applicant has guaranteed work in the future (as for the pre-1968 A licence). Additionally, many Authorities question applicants about their forecast costs, rates, workload, depreciation etc in order to assess the applicants' appreciation of the financial management of a truck firm.

- . *Professional competence.* An applicant for a standard licence must demonstrate 'professional competence'. There are three ways in which this can be done. Firstly, the applicant can sit for an examination the passing of which results in the award of a 'Certificate of Professional Competence'. Secondly, the requirement is satisfied if the applicant is a member of a prescribed professional institute, such as the Chartered Institute of Transport or the Institute of Traffic Administration. Thirdly, as a phasing-in measure, a person who held an operator's licence before January 1975, could, until January 1980, claim 'grandfather rights'.
- . *Operating Centre.* Licensing Authorities vary in their interpretation of this requirement. Some, for example, will not issue a licence unless vehicles can be parked off the street. This is not overtly a measure related to environmental protection (a decision of the Transport Tribunal found that Licensing Authorities had no power to refuse an application on environmental grounds⁽¹⁾), but is justified on the argument that safety standards cannot be maintained if the vehicle is vulnerable to vandalism or cannot be subjected to a daily inspection.

LICENCE APPLICATIONS

Having received an application for a licence, the next step is for the Licensing Authority to list it in a regular fortnightly publication. At this point, objections to the issue of a licence may be lodged, within 21 days. The only agencies able to object are the local authorities, the police, or a registered trade association or trade union. (In fact very few objections are lodged).

The Licensing Authority has considerable discretion as to how to treat an application and objection, if any. It may hold a public enquiry (though less than 10 per cent of applications are thus treated), it may interview the applicant, or it may grant a permit. Similarly, the Authority has wide powers

(1) The issue of the refusal of an operator's licence on environmental grounds is an important one and will be taken up again later in Chapter 5.

to vary or place conditions on the licence, eg a lower number of trucks, a period of less than five years, a requirement to notify changes of management, etc.

There is also a system of appeals, by either the applicant or objector, to the decisions of the Licensing Authority. These appeals are heard by the Transport Tribunal, a quasi-judicial body which in fact sits only rarely because of the very small number of appeals lodged (only 15 in 1977, for example). There is also recourse to courts of law on matters of legal interpretation.

Having satisfied all the requirements, a successful applicant is then issued with an operator's licence for each vehicle specified. The licence is normally valid for five years. Subsequent changes (eg increases in the number of vehicles on the licence, renewal at the end of five years, etc) are made in the same way as the initial application.

ENFORCEMENT

Enforcement is carried out by teams of vehicle examiners and traffic examiners based in each of the Department of Transport's eleven traffic areas. The former are responsible for technical inspections of operators' premises, facilities and maintenance records, and for roadside random roadworthiness checks. The latter's duties include weighing of vehicles for overloading, inspection of drivers' log books and licences, ensuring that the operator has an operator's licence for the vehicle, etc. These duties are again carried out both at premises and at roadside checks. Both traffic and vehicle examiners have other duties apart from enforcement of heavy goods vehicle and operator licences. Police also sometimes take part in enforcement and prosecution, particularly where roadside checks are involved.

This description of the system of operators' licensing in Britain has covered the essentials of the operation of the system; obviously there is a great deal more detail in the day to day working of the system. It has served to highlight the important features of the road traffic regulations in Britain, namely that there is no restriction on capacity for any route or commodity, very little distinction between hire or reward and ancillary operation (in

particular, that ancillary operators may ply for hire or reward), and that there are some qualitative, but no quantitative, controls on entry to the industry.

CHAPTER 4 - EFFECTS OF OPERATORS' LICENSING

Since the operators' licensing system as outlined above, and the almost totally unregulated road freight industry which it features, is virtually unique in developed countries, it is interesting to examine the effects of the introduction of the system on the way in which the freight task is undertaken in Britain. However, such an examination is not straightforward and cannot be comprehensive, for two reasons. Firstly, while comparisons can be made between the pre-1968 and post-1968 periods, it is impossible to identify those changes which are directly attributable to the introduction of operators' licensing. In particular, the economic downturn in Britain in recent years has had effects on the freight industry which may have been as significant as operators' licensing, and in any case, certainly cloud any identification of the effects of operators' licensing on the industry. Secondly, perhaps surprisingly, very few studies of the effects of operators' licensing have been made. Apart from one or two minor and detailed research programs (eg Bayliss 1973; Cooper 1978) the only major review has been the report of the Independent Committee of Enquiry entitled 'Road Haulage Operators' Licensing', chaired by Prof Foster (Foster, 1978)⁽¹⁾. Consequently, this brief review is based largely on these sources, together with published statistics from other sources, and interviews.

Broadly speaking, the effects of operators' licensing on the road haulage in Britain may be considered under five headings, as follows:

- . vehicles and vehicle use;
- . output of the road freight sector;
- . structure and management of the industry;
- . ancillary operation; and
- . road safety.

(1) This report and its recommendations and effects are reviewed in Chapter 6. A parallel but independent enquiry by the Price Commission (1978) is also discussed.

VEHICLES AND VEHICLE USE

Figure 4.1 shows the number of registered commercial vehicles in Britain at selected years from 1950 to 1978. It can be seen that light vehicles (less than 1.5 tons unladen weight) have increased steadily in numbers and now comprise some two-thirds of the total commercial vehicle fleet. The contribution of these vehicles to the freight task is however very small (less than 3 per cent of tonne-kilometres of road freight).

The fleet of larger vehicles (those exceeding 1.5 tons unladen weight) showed a steady increase up to 1967, and a steady decrease thereafter. At first sight then it might appear that one of the hopes of the Geddes Committee had been achieved, namely that increased vehicle productivity might occur as a result of increased flexibility of use. However, this conclusion is doubtful, because, as will be seen later, there has been a declining trend in tonnes lifted, and only a small increase in tonne-kilometres moved by road over the period since 1968. Moreover, the movement of ancillary operators into competitive haulage has apparently been slight. The reduction in the number of large vehicles on the register over the 1970s is explained largely in terms of increasing size and capacity of vehicles (Figure 4.1). There has been a threefold rise in the number of vehicles exceeding 8 tons, a rise (at least until 1973) in vehicles in the 5-8 ton range, but a steep decline in the number of vehicles in the 1.5-5 ton bracket (Table 4.1). Moreover, much of the increase in the largest vehicle group has been with articulated units, and, as Foster (1978) put it: 'although we have no statistics to prove it, we are sure that there has been growth in the number of semi-trailers, containers and demountable bodies which has made it possible for a given number of tractive units to do more work'. Thus, although the overall size of the fleet has decreased, it appears that it is more productive. The reason for this is partly due to the economies of scale of using larger vehicles, and also, as will be seen below, the increased opportunity to use larger vehicles as haul lengths have increased.

As a consequence, the heaviest trucks have increased their contribution to the freight task enormously, as shown in Table 4.2.

TABLE 4.1 - COMMERCIAL VEHICLES ON REGISTER, 1967-1978

Number of vehicles
('000)

Vehicle Size (Unladen Weight) (tons)	1967	1970	1973	1976	1978
Up to 1.5	937	975	1 083	1 162	1 141
1.5 - 5	546	451	407	359	321
5 - 8	101	135	147	132	119
Over 8	34	55	85	103	110
TOTAL	1 618	1 616	1 722	1 756	1 691

Source: Foster (1978). Table A1.

TABLE 4.2 - COMMERCIAL VEHICLE USE BY VEHICLE SIZE, 1967 AND 1977

Vehicle Size (Unladen Weight) (tons)	% of Vehicles		% of Tonnes		% of Tonne-Km	
	1967	1977	1967	1977	1967	1977
Up to 1.5	58.0	67.4	7.8	4.9	3.6	2.6
1.5 - 5	33.7	19.0	51.1	21.7	38.5	13.9
5 - 8	6.2	7.0	28.3	26.7	35.3	17.3
8	2.1	6.5	12.8	46.7	22.5	66.2
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

Source: Foster (1978). Tables A1, A8, A12.

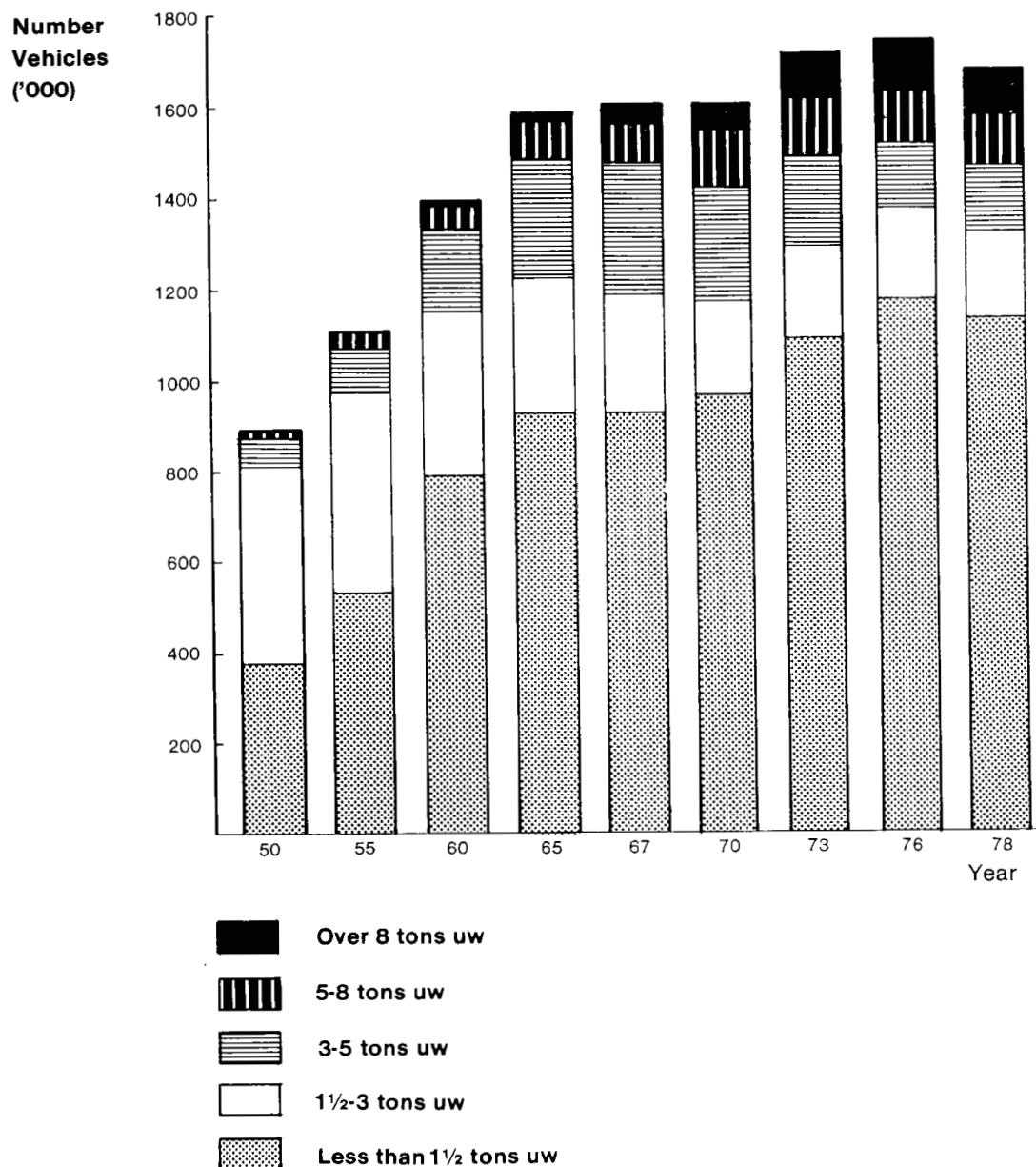


Figure 4.1
Commercial vehicles on register, 1950-1978

Source: Foster (1978). Table A1

TABLE 4.3 - MODAL SPLIT OF FREIGHT TRAFFIC, BRITAIN 1967-78

Mode	1967		1970		1973		1976		1978	
	Task	%	Task	%	Task	%	Task	%	Task	%
(a) Task in Thousand Million Tonne-km Moved										
Road	74.6	60.4	85.0	61.6	90.4	64.6	95.6	67.4	99.1	76.8
Rail	22.3	18.1	26.8	19.4	25.5	18.2	20.6	14.5	20.0	15.5
Shipping & Waterways	25.1	20.3	23.3	16.9	20.7	14.8	10.1	14.2	*	
Pipelines	1.6	1.2	2.9	2.1	3.4	2.4	5.7	4.0	9.9	7.7
Total	123.5	100.0	138.0	100.0	140.0	100.0	142.0	100.0	129.1	100.0
(b) Task in Million Tonnes Lifted										
Road	1651	84.9	1610	83.7	1672	84.6	1516	84.5	1494	82.7
Rail	204	10.5	209	10.9	199	10.1	176	9.9	171	9.5
Shipping & Waterways	57	2.9	56	2.9	51	2.6	49	2.8	60	3.3
Pipelines	32	1.7	47	2.5	54	2.7	53	2.9	82	4.5
Total	1944	100.0	1922	100.0	1976	100.0	1793	100.0	1807	100.0

Source: Transport Statistics for Great Britain, HMSO, various years.

* Redefinition of coastal shipping statistics in 1978.

OUTPUT OF THE ROAD FREIGHT SECTOR

The output of the road freight sector in Britain has been characterised in recent years by an increase in the share of the total freight market, an increase in the absolute level of the freight task measured in tonne-kilometre, a slight fall in the tonnage carried, and consequently an increase in the length of haul. However, these overall trends mask quite different performances in particular sub-sectors of the road haulage sector.

Table 4.3 shows trends in the modal share of transport in Britain for selected years from 1966 to 1978. It can be seen that the road mode has gradually increased its share of the market at the expense of other modes, particularly rail, while tonnage carried in the road mode has fallen slightly and tonne-kilometres performed has increased slightly.

These trends towards fewer tonnes being carried is largely explained by the reduction in the output of two major sectors, construction and mining (Table 4.4); indeed, total tonnes moved has actually increased if these two sectors are excluded.

TABLE 4.4 - GOODS MOVED BY ROAD, BY COMMODITY 1967 AND 1977

Commodity	1967	1977
	(m tonnes)	
Food, drink and tobacco	307	288
Timber, wood and cork	29	25
Fertiliser	21	13
Crude minerals	444	307
Ores	21	15
Crude materials	49	18
Coal and coke	141	72
Petrol and petroleum products	68	87
Chemicals	47	51
Building materials	225	143
Iron and steel products	63	74
Other metal products	32	12
Machinery and transport equipment	66	51
Miscellaneous manufactures	89	76
Other	75	189
TOTAL	1 651	1 422

Source: Foster (1978) Table B.17.

The increase in tonne-kilometre performed, and consequently in the average length of haul is also partly explained by this shift in traffic towards commodities with a longer haul. More important than this however have been changes in industrial and warehouse location, and changes in patterns of distribution, which have tended towards fewer centres at consequently greater separations.

The changing market share is also partly a result of deliberate policy decisions taken by the railways to move away from unprofitable small consignments and short hauls; for example the proportion of British Rail's freight in tonnes attributable to full train load consignments has risen from 31 per cent in 1968 to 80 per cent in 1978.

It is unlikely that the introduction of operators' licensing has made any significant contribution to these trends. The only way in which it could have had an effect on the aggregate demand for freight is through its effect on industrial location, and there is no evidence to suggest that there has been any such effect. There could however have been an influence on modal use, though it is not likely that this would have been significant; because road so dominates the total freight task, any changes here would be of second-order only (eg even if all the other modes had held their 1967 tonnage road freight in 1976 would have been only 1.8 per cent less than its actual value). An effect which could, potentially, have been more significant was a switch from public hauliers to ancillary operation; this is discussed later in this paper.

STRUCTURE AND MANAGEMENT OF THE INDUSTRY

Operators

The structure of the industry is characterised, in Britain as in Australia, by a large number of small firms. In 1976, there were 138 000 operators' licences on issue. Since some operators had a licence in more than one Traffic Area, the number of operators was less than this, at about 124 000. Over one-half of these operated only a single truck, while fully 88 per cent had fleets of five vehicles or less. Thus nearly 40 per cent of the total licensed truck fleet in Britain is attributable to owners with five or fewer

vehicles. On the other hand, industrial fleets of over twenty vehicles accounted for only 2.5 per cent of the operators, but 38 per cent of the vehicles (Foster 1978, Thompson 1977).

Fragmentation

There does not appear to be a strong trend towards increasing 'fragmentation'. The aforementioned 1976 figure of 88 per cent of operators having five or fewer vehicles is comparable with that in 1964 (88 per cent) and 1969 (86 per cent). Similarly in 1976, 54 per cent of operators had only one vehicle, compared with 54 per cent and 53 per cent respectively in the earlier years. Thus, operators' licensing could not be said to have contributed towards further fragmentation of what traditionally is a fragmented industry.

Employment

Employment in the industry is not well-documented, since many persons employed in ancillary operation are classified by the industry in which they work. Statistics show some 197 000 persons working in road haulage (hire or reward) in 1976, of whom an estimated 120 000 were drivers. The Price Commission (1978) estimated total employment, including owner-drivers, etc, in hire or reward at 275 000 persons, of whom up to 200 000 were drivers. Foster (1978) broadly agreed with these estimates, but thought that in addition, there were some half-million employed in transport related activities in ancillary operation. Thus, some 700 000 out of a total British workforce of 20 million in 1976 was involved in road freight.

Ownership

The type of ownership within the non-ancillary industry varies with the size of the fleet (Price Commission 1978). Larger firms - those with over 100 trucks - are mostly owned as subsidiaries of other companies (eg horizontally integrated trucking firms, shipping companies, trading companies, etc). Medium sized companies, with 20-100 trucks, tend to be managed by the owner. Smaller companies are mostly either managed by the owner, or operate as owner-driver concerns. 'Small operators, in addition to driving a vehicle,

quite often carry out all or most of their own maintenance and their accounting procedures ... It is quite common for owners to have interests outside road haulage, such as farming, property ownership, garage ownership, or vehicle dealings'. (Price Commission 1978). This seems to be a fair description of the ownership characteristics of more than half of the British road transport fleet.

Stability

One of the major concerns expressed at the time of the passage of the 1968 Act was the effect on the stability of the industry, both in terms of a 'flood' of new entrants and a high rate of bankruptcy, and the entry of ancillary operators who would be free to ply for hire or reward. The recent enquiries of the Price Commission (1978) and the Committee of Enquiry (Foster 1978) both examined this situation, and determined that apart from the very small operator, perhaps including those for whom transport was a sideline, the industry was fairly stable.

The average length of involvement by trucking firms in the industry was surprisingly long, at 22 years. Even for single vehicle fleets (owner-drivers) the average was 10 years, although over one-half of these had entered the industry in the previous six years. Foster (1978) also examined in detail a sample of firms which had left the industry because of financial difficulties, and found that two-thirds had gone broke, and one-third had been compulsorily liquidated. Eighty-five per cent of these had five or fewer vehicles, and 60 per cent had had a licence for under four years. Foster commented that 'these results are strikingly similar to those of the Geddes Committee'. Foster went on to conclude that 'though, as in any healthy industry, some failures must occur, the impression we formed was that the industry was surprisingly stable'. The Price Commission reached somewhat similar conclusions, but added that 'at the level of the small operator, it may be that the industry is fairly volatile with new entrants balanced, at least in part, by exits'.

Overall, it would appear that the industry (with the possible exception of small operators, for many of whom transport is but a sideline anyway) is reasonably stable, and has not become any less so as a result of operators' licensing.

Competition

Another fear expressed at the time of the Geddes Report, not unrelated to the above, was that the absence of quantity licensing would lead to a situation of over-competition, with consequent depressed earnings, declining level of service, and instability. The industry still complains of this; Thompson (1977)⁽¹⁾ in a review of the industry concluded baldly that 'road haulage is too competitive ... while on the surface this fierce competition produces low rates, it is clearly not providing an overall service which satisfies industry at large'.

The Price Commission examined the degree of competition within the industry, and found that while it was in many respects highly competitive, tendencies towards over-competition were tempered to a significant extent firstly by the segregation of the industry into increasingly specialised branches (bulk tankers, tippers, parcels, removalists, refrigerated transport etc) and secondly by geographic segmentation.

Perhaps more importantly, the Commission found that for the great majority of firms, their work and their clients were regular, with genuinely casual trade rarely providing more than 5 to 10 per cent of revenue. The desire for stable customer-haulier relationships was, the Commission found, reciprocated by the users: 'many users seem to have a small number of hauliers whom they use regularly and it is unusual for them to go to another haulier unless a special job is involved or they are dissatisfied with the service offered by the usual suppliers'.

Moreover, an industry which suffered from over-competition would be likely to be characterised by aggressive marketing; the reverse is apparently the case. The Price Commission found that 'one of the most striking features of the market ... was the general lack of interest among all but the largest firms in the positive promotion or selling of their services'.

(1) Mr Thompson was speaking as Chief Executive of the National Freight Corporation.

Thus, although there are some areas such as general cartage and sub-contracting where competition is fierce, overall the industry is a relatively stable one, with established user-haulier relationships, and customer satisfaction based on service as much as price. Nevertheless, the relatively free entry of new competitors ensures that the industry remains competitive; the effects of this on service and on earnings will be examined later. It is clear therefore that the introduction of operators' licensing has stimulated competition, in some areas more than others, but whether the overall effects of this have been helpful (as the Price Commission appears to conclude) or deleterious (as the industry still maintains) depends very much on the point of view of those making the assessment.

Pricing

The Price Commission (1978) examined the basis of pricing of services by hire or reward operators and found that either a periodically negotiated rate or an actual contract was most prevalent. This basis of charging was used predominately by all sizes of firm, but particularly by the larger ones. Spot pricing and the use of published scales were far less common, but the Commission noted that the former 'can for many operators be vital to profitability'.

In setting prices, the Commission found that the hauliers own costs were the primary factor considered, though (as would be expected in a competitive industry) competitors' charges were also of importance, particularly among the smaller operators. However, the Commission, again not surprisingly, found that accurate knowledge of costs and accounting varied considerably with larger firms generally being more aware of their true costs. Smaller firms' knowledge of cost was found to be often rudimentary, with many operators thinking 'less in terms of profit in a business sense and more in terms of a living or income'. The Commission concluded that 'looked at in this way, rate-cutting by smaller operators may be as much due to their imperfect understanding of costs and lower expectations in terms of return, than any conscious attempt to undercut deliberately on price'.

The effect of operators' licensing on the method of pricing is difficult to judge, and has not been examined explicitly by any of the investigations of

the industry. On the one hand, the rather higher degree of competition associated with freer entry might have been expected to cause a greater consideration for competitive pricing, though this may be offset to an extent by users' concern for service factors. On the other hand, the introduction of examinations for Certificates of Professional Competence, and similar means of quality licensing, might have had the effect of improving hauliers' awareness of their costs, since costing is one of the subjects of the examination.

Capital

Costs in the industry, and particularly the costs of new equipment, have been rising much faster than general cost increases, and certainly much more than road freight prices (Thompson 1977). In an industry where the major capital asset, the vehicles, are relatively short lived, this situation can result in a shortage of capital for the purchase of replacement vehicles. The Price Commission concluded that 'the industry is experiencing increasing difficulty in funding the purchase of new vehicles. Many firms are having to spend an increasing proportion of funds on vehicles simply in order to maintain the status quo ... the squeeze on cash flow is a serious one which could have important repercussions in the medium to long term'.

It is difficult to isolate the contribution of operators' licensing to this situation. The greater competitiveness arising from freer entry must have contributed. The industry appears to see it this way; problems of capitalisation were one of the main reasons given by Thompson (1977) in his calls for the introduction of tariffication on the American model and control of entry. However, the generally depressed economic climate of recent years, and the significant quality-differential between old and new vehicles (acknowledged by Thompson) must have made a significant contribution - perhaps even a dominant one.

Financial

The more general question of the financial state of the industry has also been addressed by several commentators. The industry viewpoint (Thompson 1977) is that it is in an unsatisfactory state (due, again, to lack of price

control, unrestricted entry to the industry, and lack of quantity licensing). The independent enquiries generally agreed with this assessment: 'about a quarter (of operators or more than 20 vehicles) were earning a reasonable 'real' rate of return, while half of the firms earned negative real returns in 1977' (Foster 1978). However, it was cautioned that 'we must not forget that this is a phenomenon that has applied to other sectors of British industry during the depressed conditions of the last few years'.

Perhaps more important than the extent to which this situation may or may not be attributable to operators' licensing is the general philosophy of whether the regulatory environment should be concerned with the profitability of the industry. Clearly, in this sector as elsewhere, the industry would like to see itself and its profits protected from 'unfair competition' in the interests of 'orderly marketing' or 'quality of service'. On the other hand, Foster (1978), concluded that 'the objective of the licensing system could not be to protect operators' profits as such (since) if the operator served (the consumer) well, one would expect that a normally efficient operator would make sufficient profit to stay in business'.

ANCILLARY OPERATION

One of the main changes introduced by the *Transport Act* 1968 was to remove the restriction on ancillary (own-account) operators plying for hire or reward. Since this restriction still applies elsewhere (and in particular throughout Australia), it is interesting to document the effects of this aspect of de-regulation.

Trucks owned by ancillary operators have always been much more numerous than those owned by hauliers. In 1965, 86 per cent of licensed vehicles were operating under a 'C' licence (ancillary operation), while in 1977, an estimated 89 per cent of commercial vehicles were in this category (Edwards and Bayliss 1972, Foster 1978).

Similarly, the bulk of licences are held by ancillary operators - 55 per cent in 1965 and an estimated 67 per cent in 1977 (Price Commission 1978).

However, since most ancillary operators have very small fleets, and often only have a commercial vehicle for the convenience of catering for the occasional load, the distribution of vehicles and licences is not of great importance. What is more important is the distribution of work done, and in particular, changes since 1968.

Table 4.5 shows the division of the freight task, in tonnes and tonne-kilometre for selected years 1966 to 1978. These trends are shown diagrammatically in Figure 4.2. It can be seen that in terms of tonnes lifted, ancillary operation showed a marked decline, and public haulage an increase, between about 1968 and 1973. Since then, the situation has reversed, with public haulage going into decline and ancillary operation rising sharply. In terms of tonne-kilometre, public haulage grew steadily until about 1973, and has grown only slightly since, while hire or reward, after going into decline between 1972 and 1974, has grown sharply since. (In both cases however, it should be noted that the 1978 results are abnormal, because of a national truck drivers' stoppage).

The reasons for these trends are not easy to deduce, but almost certainly are due to a mix of influences - regulatory, economic and structural. Some of the more important of these are discussed below.

- . There has been a decline, as noted previously, in the movement of certain bulk commodities, notably coal and building materials. This has affected both ancillary operation and public hauliers.
- . Large vehicles, which as noted earlier contribute an increasingly large portion of the total freight task, are more heavily represented in public haulage. This trend may well continue, as the cost of a truck today represents a major capital investment, which a non-transport firm may be reluctant to undertake.
- . Ancillary operation is, to a greater extent than public haulage, involved in multi-drop delivery work, with the result that less productive time is available (Cooper 1978).

TABLE 4.5 - FREIGHT TASK, BY HIRE OR REWARD AND ANCILLARY OPERATION, 1967-78

Mode	1967		1970		1973		1976		1978	
	Task	%	Task	%	Task	%	Task	%	Task	%
(a) Task in Thousand Million Tonne-km Moved										
Hire or										
Reward	44.3	59.4	51.0	60.0	58.2	64.4	60.1	62.9	60.8	61.4
Ancillary	30.3	40.6	34.0	40.0	32.2	35.6	35.5	37.1	38.3	38.6
TOTAL	74.6	100.0	85.0	100.0	90.4	100.0	95.6	100.0	99.1	100.0
(b) Task in Million Tonnes Lifted										
Hire or										
Reward	742	44.3	773	48.0	898	53.7	798	52.6	736	49.3
Ancillary	909	55.7	837	52.0	774	46.3	718	47.4	758	50.7
TOTAL	1651	100.0	1610	100.0	1672	100.0	1516	100.0	1494	100.0

Source: Department of Transport 1979. *Transport of Goods by Road in Great Britain*.

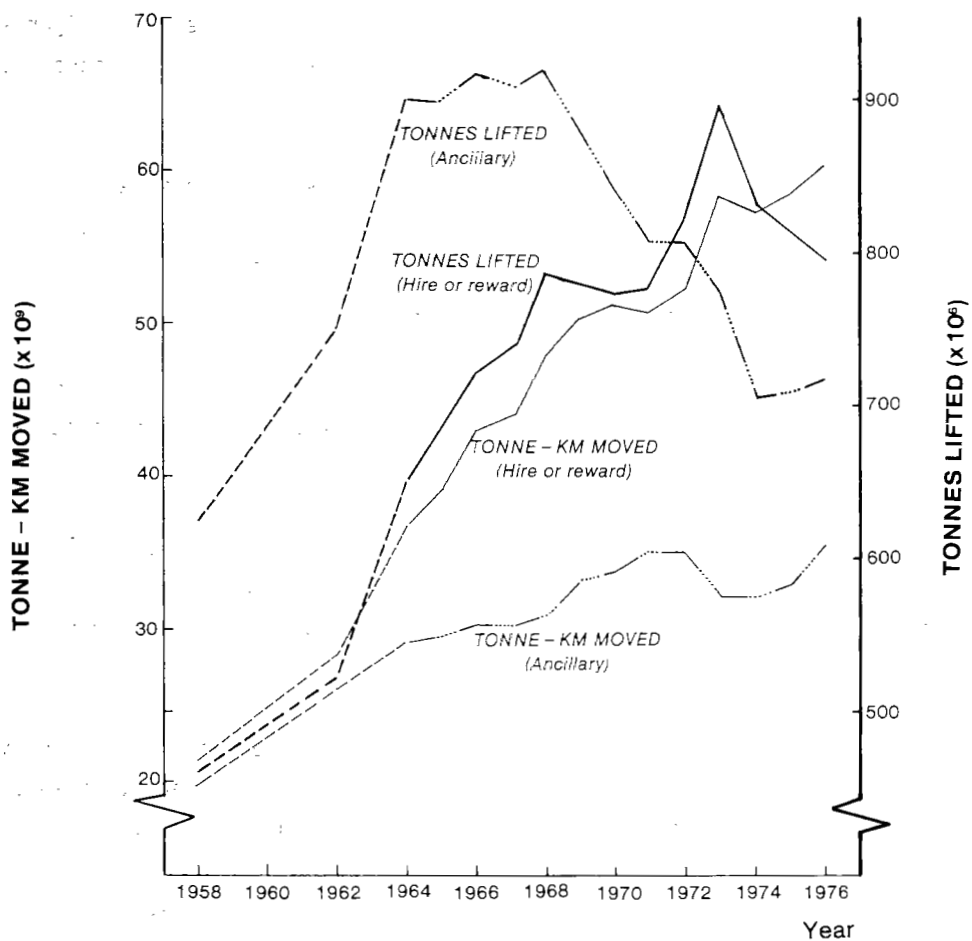


Figure 4.2
Freight task, by hire or reward and
ancillary operation, 1958-1976

Source: Department of Transport (1979) "Transport of Goods by Road in Great Britain"

- Since ancillary operators can ply for hire or reward, the above figures may actually understate the amount of hire or reward work undertaken, as loads tend to be categorised by a truck ownership criterion.
- The growth of specialist distribution firms in some sectors (eg confectionary, groceries) has meant that shippers of these products are guaranteed a high level of service by public hauliers, removing the incentive to carry out their own distribution.
- The rationalisation in depots and distribution centres has meant that tonne-kilometre moved by ancillary operators has increased although tonnes lifted has fallen.
- There has been a move, following the 1968 Act, towards operational autonomy of formerly ancillary operation, such that a separate company has evolved to carry both the parent firms' goods as well as compete for other traffic.
- Similarly, there has been a trend towards the fragmentation of formerly ancillary operations into self-employed owner-driver concerns, often still working exclusively for the original parent company (Cooper 1978).
- Some firms are reluctant to employ staff in fringe activities such as ancillary trucking, since it is now harder for them to withdraw from these activities because of more stringent staff redundancy requirements.

These influences may be present to a greater or lesser extent at different times and in different firms, but they appear to be the main factors producing changes in the relative importance of public haulage and ancillary operation. It can be seen that regulatory factors are important, but not overwhelmingly so.

Similarly, firms which operate their own ancillary fleet do so for a number of reasons. The Committee of Enquiry (Foster 1978) investigated these, and 'the striking result was that the reasons given most weight were reliability and control. It is significant that financial reasons score very modestly compared with service considerations'.

The Foster Committee also found that even among such firms, use of public hauliers was common. Two-thirds of such firms used public haulage, and about one-third did so regularly.

An important factor in the discussion of the effects of de-regulation on public hauliers is the extent to which ancillary operators actually compete for traffic on the market. This aspect is of obvious concern to the hire or reward industry, which fears that ancillary operators, seeking return loads at their marginal cost, will take away lucrative business. In practice, this does not seem to have happened to a significant extent. In an early study, Bayliss (1973), concluded that in 1970 less than 2 per cent of ancillary operators' tonnage was attributable to traffic that the pre-1968 regulations would have prohibited. A similar study, using 1976 data, produced an estimate of 2.7 per cent (Cooper 1978). The Foster Committee (1978) and the Price Commission (1978), in a joint survey, produced a somewhat higher figure, but in any case, the latter concluded that 'hire or reward is a very small part of the total activities of most own-account operators'.

Overall then, it would seem that the hope of the Geddes Committee that eliminating the distinction between hire or reward and ancillary operators would lead to efficiency has been realised. Some ancillary operators have entered into hire or reward activities, with consequent improvements in overall system utilisation, but not to the extent that the road freight industry is seriously threatened. Perhaps more importantly, the reduction of controls has enabled new types of firms, specialising in all aspects of distribution, to evolve.

ROAD SAFETY

It was noted above that the Geddes Committee recommended that the sole objective of road transport licensing should be safety. Since Geddes' recommendations were virtually accepted in full, it can be inferred that this objective remains the main objective of the current British licensing system. It is thus instructive to examine its efficacy.

Figure 4.3 shows the trends in injury accident involvement rates for three classes of vehicle (heavy trucks over 1.5 tons unladen weight, light trucks,

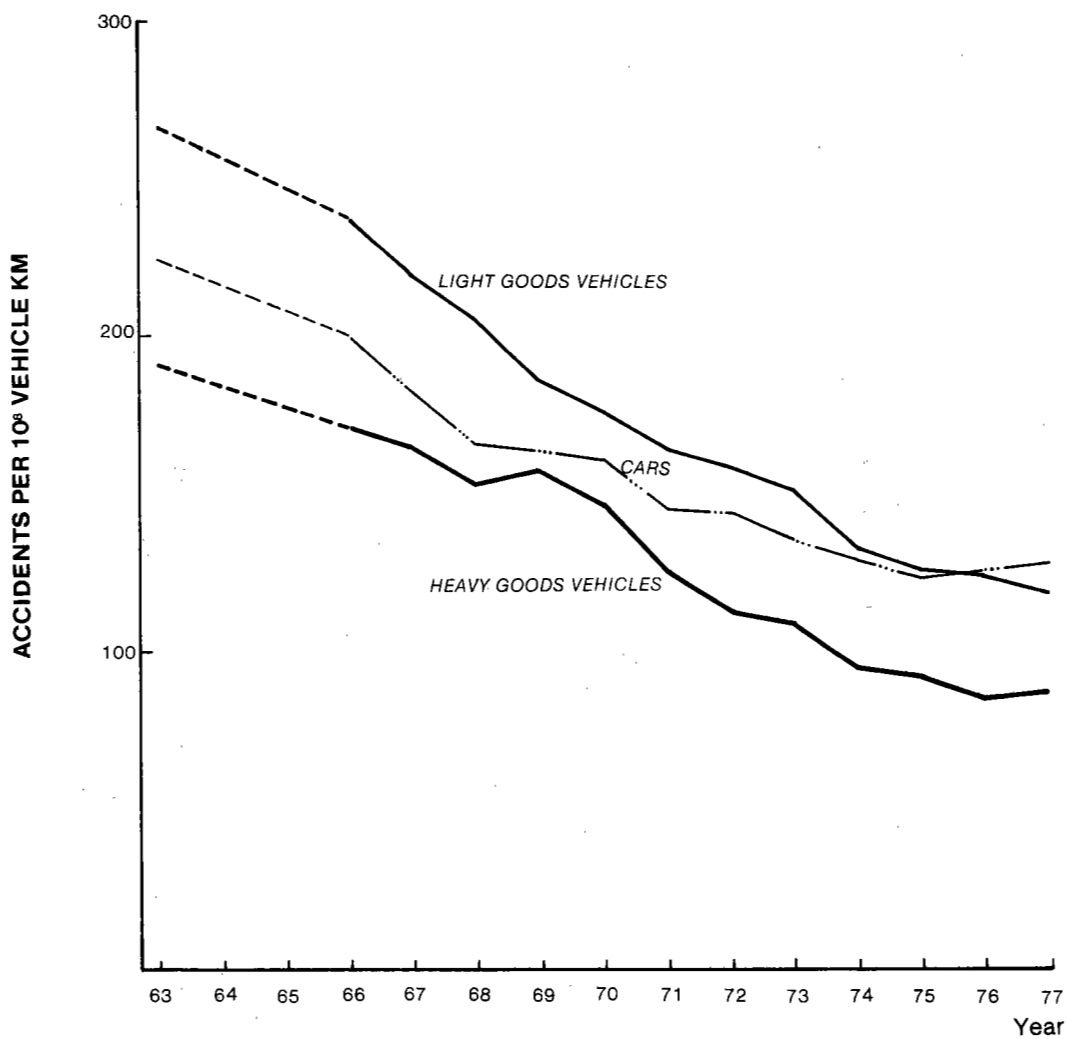


Figure 4.3
Injury accident involvement rates,
by vehicle class, 1963-1977

Source: Foster, (1978). Table A18

and cars) for the years 1963-77. It can be seen that for heavy vehicles - those subject to operators' licensing - the involvement rate fell from 190 accidents per 100 million vehicle kilometres in 1963 to 88 in 1977, and further that there was a noticeable decline in the years immediately following the introduction of the licensing system in 1968.

Impressive as this result appears at first sight, it must also be pointed out that the involvement rate for the other classes of vehicle fell by a similar amount over the same period, and in fact a large part of the difference in the involvement rates for the various classes of vehicle is explained by the higher proportion of the travel of heavy vehicles undertaken on the much safer motorway system. Moreover, since collisions involving heavy vehicles tend to be much more severe, the involvement rate for all three classes of vehicle in fatal plus serious accidents is very similar (30, 32 and 34 accidents per 100 million vehicle kilometres for heavy trucks, light trucks and cars respectively). Further, for fatal accidents alone, heavy vehicles have almost twice the involvement rate of the other classes of vehicle (4.9, 2.8 and 2.7 respectively).

The Foster Committee, not surprisingly, was considerably interested in the effects of operators' licensing on safety. However it was inevitably quite unable to isolate the effects of this change from the many other changes introduced since 1968 which have a bearing on truck safety (eg local and general improvement in the road system, increased length of motorways, improvement in vehicle design, increased use of seat belts, drink and driving measures, annual testing of vehicles for roadworthiness, driving tests for professional drivers, limitations on drivers' hours, roadside checks of roadworthiness, overloading regulation enforcement, etc). However, it did conclude that the mechanical condition of heavy trucks had improved; in the 1960s, an average of 9.4 per cent of such vehicles subject to spot checks were defective, while in recent years, the figure has dropped to 4.3 per cent. It also concluded that 'provided existing mechanical standards are maintained, the improvement of driving behaviour is far more likely to have substantial effects on accident rates than the improvement of maintenance standards'.

Nevertheless, the Committee concluded that 'operators' licensing does contribute to road safety' and that 'operators might give a lower priority if there were any reduction in the vigilance of the system'. This conclusion was one of the major reasons for the Committee's recommendation that the operators' licensing system be retained (see Chapter 6).

CHAPTER 5 - ENVIRONMENTAL REGULATION AFFECTING TRUCKS

As noted in Chapter 1, a notable characteristic of freight regulation and control in Britain is a concern for the environment. This concern is hardly surprising in a country which is compact, densely populated, highly industrialised, and with a population distribution and road network which often directs heavy traffic flow through residential and environmentally sensitive areas. Moreover, by comparison with other major European nations and North America (but not with Australia), the length of purpose-built high-quality arterial roads in Britain is quite small.

Regulatory and control mechanisms directed towards ameliorating the adverse effects of trucks on the environment fall into three quite distinct categories, as follows:

- . measures involving truck routes;
- . measures related to the vehicle design and use; and
- . measures related to the vehicle operating centre.

TRUCK ROUTING

National lorry route network

The Department of the Environment (1974) published a consultation paper which proposed the establishment of a 'national lorry route network'. It was envisaged that this network would comprise some 5000 km of high quality roads forming a primary road network, but generally avoiding major population centres. The network was to be mandatory for all trucks above a given size, although no firm proposal was made as to what size that should be, and diversion from the network was to be permitted only for access to pick up or delivery points. Only some 2700 km of the proposed network existed in 1974, and the full network was not to be completed until the early 1980s.

The proposals contained in the consultation paper were not well received, the principal objections being that the network was so sparse that considerable exemptions would have to be granted (thus largely defeating the

purpose of the network), that enforcement would be difficult and costly, and that co-ordination with local plans would be necessary. In the event, although the proposal was later modified to include a greater length of road, the network was not implemented. The concept has not however, been officially abandoned; the last White Paper on transport issued by the previous (Labour) Government noted only that 'a national network of roads specifically designated as lorry routes would not be practicable for some time'.

The new Government's policy does not seem to be at variance with this. In a Ministerial statement of 17 July 1979, the new Minister indicated that the road investment program would be oriented particularly towards routes carrying heavy industrial traffic, routes serving export trade (such as roads to ports and the M25 orbital route around London), and to other schemes designed to relieve towns and villages of congestion and environmental damage.

In this last respect, the policy is clearly for a continuation of the program of providing bypasses for country towns and villages on heavily trafficked routes - a program which had at least part of its origins in the 1974 proposals for a 5000 km National Lorry Network by the early 1980s.

Notwithstanding the virtual abandonment of the network concept, the bypass program would appear to be worthwhile, and has substantial public support; of the 530 towns in Britain with a population over 10,000, only a quarter have bypasses (Foster 1978).

In retrospect, the national route concept for heavy trucks appears somewhat naive. On the one hand, since clearly a relative meagre network of 5000 km cannot serve every generator of truck traffic directly, a great deal of movement by way of 'access' would still occur. This would not only reduce any environmental benefit, but also lead to substantial enforcement problems. On the other hand, it could be argued that heavy truck operators utilise the high standard road network to the maximum feasible extent anyway; in 1977, 65 per cent of the distance travelled by vehicles exceeding 28 tonnes gvw was on motorways and rural trunk arterial roads, with less than 20 per cent occurring in urban areas (Department of Transport 1979). Moreover, the cost of a lorry route program, while never estimated in detail, could be considerable, both as a result of reduced vehicle productivity, and increased congestion on the designated routes.

The Dykes Act

The Dykes Act was intended as a complement to, and was in anticipation of, the National Lorry Route Network. The Act, the official title of which is the *Heavy Commercial Vehicles (Controls and Regulations) Act 1973* was a private members bill introduced by Mr Hugh Dykes, MP, (hence the common title), and subsequently supported by the Government. It amended the *Road Traffic Regulations Act 1967*, to 'make new provisions governing the construction and use of heavy commercial vehicles, and to control the movement and parking of such vehicles'.

Although the passage of the Act produced much interest and activity at the time, in reality it neither provided local authorities (the counties) with significant new powers, nor placed significant new requirements upon them. The 1967 Act empowered local authorities to make traffic orders on a variety of grounds, including 'amenity' - the specific objective of the Dykes Act. In fact, subsequent to 1973, some counties have continued to take action under the powers provided by the 1967 Act, rather than under those provided by the Dykes Act (Department of Transport 1979). Specifically, the main features of the Act are noted below. Of these, only the first two may be considered as significant new powers or responsibilities (Department of Environment 1973).

- . *Duty to survey and prepare proposals.* It placed a duty on the county authorities to survey their area and to prepare written proposals for the control of heavy commercial vehicles on the basis of the survey and after consultation with representatives of appropriate bodies. This was to be carried out as soon as possible after 1 April, 1974.
- . *Traffic Regulation Orders.* Authorities were to publish not later than 1 January 1977 at least one traffic regulation order for the use of roads in their area by heavy commercial vehicles so as to preserve or improve amenity.
- . *Denying access on grounds of amenity.* A new power was given to local authorities to make traffic regulation orders so as to deny access to premises by heavy commercial vehicles for up to 24 hours a day on grounds of amenity. This power was subject to the consent of the Secretary of State if access was to be denied for more than 8 hours in 24, and in view

of the very strong justification needed for making such stringent orders, consent was not often sought.

- . *Through routes.* Authorities were permitted to specify through routes for heavy commercial vehicles. Any traffic regulation order intended for this purpose would have to include, among other provisions, one for prohibiting such vehicles using other routes.
- . *Parking on verges.* The Act made it an offence to park heavy commercial vehicles wholly or partly on footways or verges, where this was not necessary for emergency reasons, or for essential loading or unloading.
- . *Overloaded vehicles.* The Act gave authorities extra powers to deal with dangerously overloaded vehicles.

These requirements, combined with the attitude of environmental sensitivity prevalent at the time, and with a general ignorance about freight in general and how to control it under the terms of the Act in particular, produced much activity. Central Government, although not required to vet or approve orders made under the Act, was closely involved initially, particularly in research and advice.

Although necessarily conducted in some haste, some research was conducted in an attempt to establish guidelines as to the circumstances under which traffic orders under the Act would be beneficial. This particularly sought to identify the costs and benefits of particular schemes (Searle 1975). Case studies were undertaken, with a view to establishing how best to implement such schemes (eg Transport and Environment Studies 1975). The advisory process primarily took the form of so-called *Lorry Plans Advice Notes*, which were issued to local authorities. The five principal such notes were as follows, their titles are self-explanatory:

- . vehicle operating costs for the evaluation of lorry plans;
- . signs;
- . the environmental and road safety effects of lorry plans;
- . survey techniques for lorry plans; and
- . legal powers.

The reaction of local authorities has varied. Some have used their new authority with vigor - perhaps the outstanding example being Berkshire County

Council in the case of Windsor. Others, as noted above, have continued to utilise powers under the 1967 Act rather than under the Dykes Act, while others have complied with only the minimum requirements of the law, and have not utilised the power which it gives them. (Freight Transport Association 1979b; Christie, Hounzee and Zammit 1978).

In any event, by 1 January 1977, the date by which county councils were required to have published at least one Traffic Regulation Order under the Act, 201 such orders had been published. Since that date, and up to mid-1979, a further 200 orders have been published.

The controls available to local authorities, under both the Dykes Act and the Road Traffic Regulation Act, are quite wide. They include prohibition of access (though Ministerial approval is required if this exceeds eight hours per day), mandatory routes and parking controls, and may apply to individual streets, designated areas, or even whole towns. Vehicles affected may be designated by mass (eg 2.5 tonnes unladen), length (e.g. 12.2 m) or width (eg 2 m), (Freight Transport Association 1979c).

Central Government's role in connection with heavy vehicle controls is somewhat limited, following the demise of the national lorry route proposal. It was closely involved, as mentioned above, in the period following the introduction of the regulations in a research and advisory sense, but has a minimal on-going function. It does however, administer the annual supplementary transport grant and loan sanction under the Transport Policies and Programs procedure (see Wells 1979, for a review of this procedure), and 'an authority's proposals for dealing with the lorry will form a natural part' of the TPP (Department of Environment 1973). Central Government is also responsible for many of the main trunk roads, and as such is empowered to prepare Traffic Regulation Orders. However, simply by virtue of the fact that these are arterial roads, traffic would not normally be restricted on amenity grounds; there has been only one case where this has been done - the A58 route north of Leeds (Freight Transport Association 1979b).

Effects of truck controls

It was noted earlier that when the Dykes Act, the national lorry route proposals, and similar actions were put forward, there was much uncertainty as to what the effects of these would be. Consequently there was both an exaggerated expectation in some minds and an exaggerated fear in others when the Dykes Act was promulgated.

Since then however, there has been considerable experience with the application of truck controls, and a program of research into the effects of such controls. It is probably fair to say that the freight industry has accepted the new situation; the vast majority of controls are relatively minor, quite sensible, and unobjectionable. Only a handful of Traffic Regulation Orders (such as Windsor and the A58 referred to previously) have been strongly resisted. On the other hand, the 'environmental' lobby is probably dissatisfied - largely because its expectations were too high, and in the light of experience it is now realised that the feasibility of improving amenity through truck controls is limited. Very often, improvements can only be achieved if a satisfactory bypass route is constructed, but the groups that do not like trucks often do not like road construction either.

Much of the research on the effectiveness of truck controls has been conducted by the Transport and Road Research Laboratory. An appraisal of such controls, based upon a review of TRRL's research program, has recently been published (Corcoran and Christie 1979). The conclusions will not be presented in detail, but a brief summary of the main results is as follows.

- . For small towns, 80-100 per cent of heavy trucks are through vehicles, while for towns of around 100 000 population the proportion is typically 30-50 per cent.
- . For small and medium towns, the effect of a control scheme depends critically upon the nature of the road network in and around the town. If the town has an environmentally insensitive internal diversion (a rare situation), a 'no entry except for access' control applied to the streets within the diversion is effective. If a town has no such internal network, but has a suitable external bypass, the effectiveness of a 'no entry except

for access' control applied to the whole town depends critically upon the proportion of bypassable traffic; if it is substantial, a 'modest' reduction in environmental nuisance at low cost to vehicle operators is achievable.

- For towns with neither an internal nor external environmentally insensitive network, only local controls will be worthwhile - and then only if suitable alternatives to the local controls exist. In practice, few roads are entirely environmentally insensitive, and gains for some people can only be achieved by losses to others. Only when the gains vastly exceed the losses can it be certain that there will be a net benefit.
- In small and medium towns, 'no entry' controls without an exemption for access are very expensive and generally ineffective in reducing overall environmental nuisance.
- In large cities, where the proportion of bypassable traffic is small, area controls are generally not effective because they simply shift vehicles from one part of the urban network to another.
- In such cities, truck routes are generally not effective in practice, because they concentrate truck nuisance onto routes which almost inevitably have some environmentally sensitive stretches, and they worsen traffic congestion.
- In the longer term, an internal truck route network may be achievable if new or improved roads are built, and if environmentally sensitive activities are relocated away from the network.
- 'No entry' controls over certain areas of large cities can be effective if alternative routes exist. Operators requiring access to the protected area will however be faced with significant extra cost. The vehicle mass limit chosen for the control is critical; if it is significantly below that normally used by truck operators it will have the effect of increasing costs significantly, or having little environmental benefit (there is little benefit in replacing large vehicles by a greater number of small ones), and perhaps causing businesses to leave the affected part of the city, with consequent economic and employment implications.

- Controls over short stretches of environmentally sensitive streets can be effective at low cost if alternative routes exist.
- Enforcement of schemes, particularly of the 'no entry except for access' variety can be expensive. However, such schemes are well-obeyed if no extra time is involved in using the favoured route, and if the controls are well signposted and simple to follow.
- The vehicle population subject to control will vary from place to place depending upon the local conditions. However, a common result is that 16 tons gvw (the maximum weight for a 2-axle vehicle - about 5-6 tonnes unladen weight) produces worthwhile environmental benefits at acceptable cost.

In general summary, it might be said that modest environmental gains can be achieved at acceptable economic cost by well-designed plans and controls, but that badly conceived plans or very rigorous controls are likely to have high costs, or produce only small environmental benefits, or both.

Truck controls in London

It is instructive to review in a little more detail the experience of London in its attempts to introduce truck routes and controls. It was contemporaneous with national efforts, but largely independent of it; environmental problems associated with trucks were as keenly felt in London as elsewhere; if not more so, and the Greater London Council (GLC) developed their own response to it.

Two features of the London experience are the quality of the technical work conducted by GLC staff (GLC 1976), and, possibly as a result of that, the early and continued involvement of affected parties. Recognising that industry itself has an important role to play in ameliorating the effects of trucks on the environment, and realising also that truck controls, if they are to be effective, must be widely supported, the GLC established the so-called 'London Freight Conference', (LFC). This conference comprised representatives of trade associations, employers, unions and 'amenity

organisations'. Working committees were set up, supported by survey and technical assistance from GLC staff, to prepare draft policies and recommendations for consideration by the LFC.

This method of policy-making 'enabled the two potentially opposing groups, the amenity groups and the freight industry, to react to each others viewpoints in working sessions, modify their views and reach an understanding on matters of fact and on most policy issues' (Hassell 1978).

As a result of this exercise, a series of policy proposals were developed. These policies covered four main areas, and their nature and subsequent fate are described briefly below (Hassell 1978) (GLC 1976).

- . *Overnight Parking Restrictions.* The overnight parking of trucks at the street-side is both an environmental and security problem. Restrictions on such parking, together with the provision of off-street public parks was proposed, and subsequently adopted. Today, overnight truck street parking is banned over most of London, and the control has been acknowledged as a success by both industry and amenity groups.
- . *Local Street Controls.* These controls were proposed, and subsequently adopted, for situations where trucks were using local residential streets to avoid congested main roads. Their effect is to physically prevent large vehicles from entering a street in situations where that will be an effective deterrent (where such point controls are not effective, an area control as described below, may be needed). The most successful type of control has been a width restriction which physically prevents the passage of vehicles over 2.1 m wide; this allows cars and vans to pass but effectively prevents heavy vehicles from entering.
- . *Truck Routes.* The most controversial policy proposal developed by the LFC was for a comprehensive network of truck routes to be declared for the London region as a whole. As with the proposed national network, heavy vehicles (those exceeding 16 tons gvw - roughly, those with 3 or more axles) were to be restricted to this network, except when they needed access to points off the network. A 680 km network (out of 2240 km of

main road in London) was selected, comprising those roads 'with the better physical standards, passing as near as possible to high generators of freight traffic and with lower levels of pedestrian activity'.

The proposal, together with associated information on its expected impact, was put out for public comment in April 1975. The result was the largest response to any single issue in GLC history - some 55 000 responses! Almost all of these expressed opposition to the designation of specific routes, mainly on the grounds of 'the physical conditions along the routes, and the effects of heavy lorry traffic on those living alongside' (GLC 1976).

In the light of this response, and because a relatively complete network was essential to the success of the truck route concept, the GLC decided not to implement the proposals.

The result of the London truck route proposal is interesting, and in many ways a microcosm of the national situation; although the prior technical work had shown significant environmental benefits to the non-designated roads, and the extra traffic on the designated roads would be barely noticeable (since traffic was so heavy to start with), local residents would not accept it. Significantly, 'there was a very large measure of support for lorry routing in principle, over 97 per cent of those responding to this issue agreed with the principle' (GLC 1976).

- *Area Controls.* The fourth type of control proposed was to limit access to designated areas by heavy goods vehicles. One such ban, applied to all vehicles over 12 m in length, was applied to the 16 km² area of central London in 1973. In this case, the perimeter routes were in commercial areas, and the extra vehicles (only some 4 per cent of the truck flow) were not noticeable on those routes, while their absence in the heavily pedestrianised central area was beneficial.

Following this success, the public consultation exercise in relation to the truck routes (see above) also sought a response to a proposal for an area control to be imposed on a much larger 320 km² area of inner London. The public response to this was favourable, so a detailed appraisal of

the costs and benefits was undertaken (Hassell 1978). In this further exploration, it became clear that, since the perimeter route was fronted by residential or retail development over much of the length, local borough councils would not support the control. Accordingly, since local support was essential, the GLC have not proceeded with the proposal.

However, notwithstanding the failure of this large area control, strategic bans, of the 'no entry except for access' type are being implemented. These bans are essentially local in nature, and largely under the control of the boroughs.

TRUCK DESIGN AND USE REGULATIONS

A second main strategy for reducing the environmental effects of trucks is to introduce and enforce regulations concerning their design and use. If, so it can be argued, trucks on the road were to be quieter, less smokey, produce less vibration, and perhaps smaller⁽¹⁾, they would be less intrusive.

In practice, there does not seem to have been an overt emphasis by authorities responsible for setting and policing truck construction and use regulations on the contribution which such regulations can make towards environmental improvement. The emphasis, it is probably fair to say, has been on economic and road safety issues. (The improvement of road safety could of course be said to be a tangible measure of environmental improvement, but the term is not usually used to encompass such benefits). Needless to say, the regulations affecting vehicle construction and use are very detailed and complex, and because of the tenuous link between them and the environment, only a very brief description of the relevant aspects will be presented here.

In Britain, the Central Government is responsible for these regulations, and they are expressed in the 'Motor Vehicles (Construction and Use) Regulations'. Considerable attention has been given by Government in recent years to ensuring that the vehicle which leaves the factory is designed and

(1) The question of vehicle size will be taken up in Chapter 6.

constructed to a high standard, and that it meets stated requirements, particularly in relation to safety. To this end, a 'type approval' scheme has been introduced for passenger cars, but this does not extend to goods vehicles - nor is there any intention to so extend it.

Vehicle design is one of many areas where Britain's own regulations are conditioned by EEC law. The objectives of the EEC regulations are to remove non-tariff barriers to trade by the 'harmonisation' of standards applicable to member-States. A member-state may allow a lower standard than the EEC regulations prescribes, but is not able to insist upon a more stringent regulation. In the design of goods vehicles, EEC regulations are in force which set standards for braking, vehicle noise, and smoke emissions.

Of more difficulty and effect than regulations concerning vehicle design and construction are regulations concerning vehicle use. The two are not completely unrelated of course; if a vehicle is built initially to a high standard, it is more likely to remain satisfactory over a longer period of time. However, the standard of maintenance and repair is the critical factor. In this, the EEC has not introduced regulations, though it would of course not be possible for a member-state to apply such severe use standards as to negate the EEC construction standards.

In Britain, all heavy goods vehicles (those exceeding 3.5 tonnes gvw - i.e. all vehicles requiring an operators' licence) are subject to annual inspection by Department of Transport (DTp) vehicle inspectors. The test is quite a stringent one, as evidenced by the failure rate; in 1976, some 21 per cent of vehicles failed their first test⁽¹⁾ (Foster 1978). In addition, DTp inspectors are empowered to undertake spot roadside checks, or to direct vehicles up to 8 km for detailed examination. The failure rate for these checks is also about 21 per cent, with about 5 per cent being 'dangerously defective'; however, these figures are not representative as 'examiners

(1) This figure should perhaps be viewed with some caution, as vehicles can be 'failed' for quite trivial faults, and also because some operators apparently use the annual inspection requirement as a type of 'check-up' to ascertain what faults there are with their vehicle.

naturally tend to pick out from the general traffic stream those which look ill-kept and unsound' (Foster 1978). Including their annual test, heavy goods vehicles are inspected on average 1.3 times per year.

There are of course, other regulations covering vehicle use, such as over-loading, securing of loads, transport of hazardous goods, speed limits, drivers' hours, etc, but these will not be addressed here. Because of their particular relationship to environmental issues, the current status of truck design and use in relation to braking, noise and fumes (all of which are subject to EEC regulation) will be briefly reviewed.

- . *Braking.* Although the EEC has standards for vehicle braking, current British policy is to seek an improvement in standards to 'achieve a further progressive improvement in the safety of heavy goods vehicles by matching standards of performance to advances in technology' (Department of Transport 1979). The current regulations are summarised in Table 5.1.

TABLE 5.1 - SUMMARY OF BRAKING STANDARDS

Vehicle type	Brake system	Deceleration
Two axle rigid vehicle	Service brake	0.45g
	Secondary Brake	0.20g
Multi axle rigid vehicle, and all articulated vehicles	Service brake	0.40g
	Secondary brake	0.15g

- . *Noise.* Technological advances in recent years have resulted in quieter trucks, with the result that increased truck sizes have not been associated with increased levels of noise. In fact, EEC noise regulations were made more stringent in 1977, largely through British pressure; the current regulations are summarised in Table 5.2.

Work is progressing on yet quieter vehicles. The TRRL in collaboration with industry is undertaking a Quiet Heavy Vehicle Project; this has established the technical feasibility of constructing trucks to a noise

standard of 81 dBA, though at the cost of 8-10 per cent increase in manufacturing costs. A 'general statement of intent' has been issued by EEC regarding a noise limit of 80 dBA for all vehicles by 1985.

TABLE 5.2 - SUMMARY OF NOISE STANDARDS

Vehicle mass (gvw)	Noise limit
Under 3.5 tonnes	81 dB(A)
Over 3.5 tonnes	86 dB(A)
Over 12 tonnes, with engine exceeding 200 HP	88 dB(A)

- *Fumes.* Over 98 per cent of heavy goods vehicles have diesel engines, diesel exhaust emissions are not toxic, but are unpleasant in terms of smoke and odour. These are covered by type approval procedures, and must comply with a British standard (BS AU 141a), and a comparable EEC directive.

The main problem with engine fumes however, is not with the new vehicle, but with the deterioration which takes place over time, and the associated problems of enforcement. A check on the density and colour of emissions is part of both annual and roadside checks, but at the moment, these are entirely subjective. However, agreement has been reached between the Government, vehicle manufacturers and vehicle users on systems to measure smoke emissions from vehicles 'in use'. Equipment to measure such emissions is currently being installed in Heavy Goods Vehicle Test Stations (Freight Transport Association 1979c).

ON CONTROLS OF VEHICLE OPERATING CENTRES

It is clear that the conditions relating to the centre from which vehicles operate can have a major influence on the way in which those vehicles affect the amenity of the local area, in terms of such aspects as the movement of vehicles to and from the centre, the parking of vehicles near the centre, and the access (or lack of it) to depots, garages, workshops, etc. Therefore,

controls relating to the operating centres are potentially powerful tools for environmental protection. These controls are exercised in two ways - through land use planning and development controls exercised by local planning authorities, and by the Operators' Licensing Authorities.

Land use planning controls are at their most powerful when applied to applications for planning permission; an authority can prevent development in an unsuitable location where there was no such previous use. However, it cannot prohibit, or attach conditions to, operations at premises already operating, or having 'established use' rights. Nor can it prevent the parking or maintenance of vehicles on such premises if these functions are consistent with their permitted or established use. Similarly, an operator can increase the number or size of vehicles operating from the centre without infringing planning control, unless these matters are governed by conditions imposed on the planning permit - the enforcement of which is difficult and time consuming.

A local planning authority thus has very little control over an existing operator operating from a centre in an environmentally sensitive area. Ultimately it does have the power of issuing a discontinuance order, but since compensation is payable to the user of the site, the use of this device is rare.

Moreover, planning authorities appear to have even less direct control over trucks operated by ancillary operators, or trucks delivering to or collecting from premises in environmentally sensitive areas. Change of function, perhaps still within the same land use 'zone' can produce quite different truck trip generation rates, but the planning authority has very little power to influence this. Also, of course, many planning authorities are strenuously attempting to encourage industrial development in run-down central areas, and face a clear trade-off between such development and the environmental problems which the trucks serving the development produce.

For these reasons, the use of the operators' licensing provisions as a means of environmental protection has been attempted. Although Geddes did not address this issue, and the *Transport Act* 1968 did not include it, by 1974 concern for the environment had reached such a level that amendments to the 1968 Act along these lines were introduced.

The 1974 amendment made it a requirement that, before a Licensing Authority could issue an operators' licence, it must be satisfied that 'the place which is to be the operating centre ... is suitable for that purpose'. At the time, this provision was intended to strengthen the case for local authorities to object to the issue of a licence on environmental grounds, and 'was aimed in particular at small operators who did not provide adequate off-street parking' (Foster 1978).

However, this intention was not fulfilled in total, owing to an appeal decision of the Transport Tribunal in February 1976, which ruled that the definition of an operating centre was 'the place from which an operator gives his orders which govern the manner in which goods are to be carried by his vehicles on roads' and not as the place from which the vehicles were physically operated. This ruling effectively nullified the apparent intention of the 1974 amendment, and thus the powers of the Licensing Authorities to take into account facilities for truck parking and handling is still small. However, in practice, some Authorities do apparently require undertakings from operators about vehicle parking provisions, either because they do not consider the Tribunal's ruling as binding, or because they consider that adequate parking facilities are necessary to prevent damage to vehicles and to enable satisfactory maintenance procedures to be followed.

Finally, it is interesting to note that the recently released Foster Committee Report (which will be discussed in Chapter 6) recommended that explicit power should be given to Licensing Authorities to take into account the environmental suitability of an applicant's premises. The Committee proposed that the term 'operating centre means in relation to any vehicles, a place where the vehicles are, or are intended to be:

- . normally garaged or parked when not in use;
- . maintained by the licence holder; or
- . normally brought for administrative purposes'.

The Committee further recommended that 'the conditions which the Licensing Authority should be empowered to impose to deal with environmental problems should, where appropriate, cover:

- . the number, type and size of vehicles operating from the centre;
- . the places where, and conditions under which, the vehicles operating from the centre will be parked;
- . the times during which the vehicles may be operated; and
- . the routes that may be used to obtain access to the operating centre'.

Industry response to this proposal has been to support it in principle, but to call for explicit protection of the established operator (who could possibly, if the committee's proposal was accepted, be refused a licence renewal with no compensation), and for much greater involvement by local authorities in finding and zoning alternative sites from which hauliers may operate (Freight Transport Association 1979c) (Road Haulage Association 1979).

A related issue to that of operating centres is that of overnight truck parking areas. As noted previously in this chapter, London (and certain other cities) have imposed bans on overnight truck on-street parking. The reason for these bans has to do with both the environmental degradation caused by large trucks parked in residential streets, and also the nuisance of them driving along such streets. However, the problem can only be tackled if there exists suitable off-street parking facilities. Again, the initiative in resolving this problem must be taken by local authorities, since only they have the power and resources to find and provide suitable off-street areas for overnight truck parking.

CHAPTER 6 - CURRENT ISSUES IN FREIGHT REGULATION AND CONTROL

To complete this review of road freight regulation in Britain, it is appropriate to summarise some of the important current issues related to freight, because they either reinforce the current situation as described above, or point to possible changes in it.

The road freight sector has been put under something of a microscope in recent times, in that no less than three important enquiries have been, or are being, conducted into aspects of it. These reviews are as follows:

- . an Independent Committee of Enquiry into 'Road Haulage Operators' Licensing' - the so-called Foster Committee;
- . a report on 'The Road Haulage Industry', by the Price Commission; and
- . an enquiry into 'Lorries, People and the Environment', currently in progress.

Of these three, the first and last are clearly of relevance to this report, and are discussed below; the Price Commission report is also briefly addressed.

ROAD HAULAGE OPERATORS' LICENSING - COMMITTEE OF ENQUIRY

The Committee of Enquiry into operators' licensing was appointed in December 1977, with broad terms of reference, reading in part:

'To consider the effectiveness of the operators' licensing system of road freight transport ... and to make recommendations for any changes in the system or its practical application which would improve the quality and efficiency of the road freight industry, bearing in mind Government policy for that industry as recently announced in the Transport Policy White Paper.'

The Committee of Enquiry comprised eight members, with Professor C.D. Foster as Chairman. Its report and recommendations were released in November 1978, but to mid 1980 there had been no official reaction to the report by the (new) Government.

In interpreting its terms of reference, and particularly the final clause, the Committee identified ten sets of objectives that merited discussion:

- . increasing safety;
- . protecting the environment;
- . reducing or control of wear and tear on the roads;
- . improving the quality and efficiency of the industry;
- . the protection of the operator;
- . the special protection of hire and reward operators;
- . the protection of the consumer;
- . the protection of road haulage employees;
- . the protection of the railways; and
- . the related issue of road track costs.

However, the Committee reached the conclusion that 'the purpose of operators' licensing should be to promote road safety, to help protect the environment from heavy goods vehicles, and to prevent undue damage to the roads'. That is, only the first three of the above list of objectives were considered as valid; the others were dismissed for a variety of reasons, either because they did not relate to operators' licensing as such (eg the protection of the operator), were not in the public interest (eg protection of the railways), or were better catered for in other ways than licensing (eg protection of employees).

In the light of this conclusion, the Committee came to the basic recommendation that the existing operators' licensing system is desirable and should remain, and in particular that no system of quantity licensing was justified.

The report itself contains some 91 separate recommendations, but in the light of the conclusion that there should be no fundamental change to the system, these recommendations have to do mainly with detailed changes, and particularly with enforcement. The changes, and the more stringent enforcement, are aimed at each of the three objectives outlined above; safety, the environment, and road damage.

Obviously all 91 recommendations cannot be discussed here, but it is of value to highlight a few which are of particular relevance to the current report.

- . *Vehicle Taxation.* The Committee recommended that a permanent independent committee should be set up to review track costs annually, and to make recommendations regarding the level of taxation for different classes of vehicle. This recommendation was intended to ensure that road transport met its full costs, with the result that an economically efficient modal split would ensue (Rec. 1).
- . *Applicability of Licensing.* The Committee recommended that certain classes of vehicle presently exempt from licensing should be included (at present exemptions apply essentially to vehicles which are not basically for the carriage of goods, such as agricultural vehicles, tow trucks, local authority vehicles, etc). Similarly, it recommended that vehicles below 3.5 tonnes should be progressively included if they were in fact goods vehicles. These recommendations were justified on safety grounds; all goods vehicles should be subject to similar inspection and certification procedures (Rec. 3-7).
- . *Drivers' Licences.* The Committee recommended that more attention should be given to offences concerning driver behaviour, and that applications for licences and licence renewals should be more rigorously treated (Rec. 9-10).
- . *Illegal Operators.* The Committee made several recommendations in connection with those operators who operate without a licence. In particular, the Licensing Authority should have the power to suspend a driver's licence or a manager's licence, to impound an illegal vehicle, or to disqualify the person concerned from applying for an operator's licence for a substantial period. These recommendations reflect the concern of the Committee and the industry about the 'cowboy' operator, and is aimed at all three objectives - safety, environment and wear and tear through overloading (Rec. 18-21).

- *Vehicle Maintenance Standards.* The Committee recommended that where an operator had a record of poor maintenance he should be required to submit his vehicles for inspection more than once a year, and also that Licensing Authorities should have the power to suspend managers' or operators' licences under such circumstances (Rec. 22-24).
- *Vehicle Operating Centres.* As noted in Chapter 5 of this paper, the Committee recommended that the statutory definition of a vehicle operating centre should be revised to ensure that the environmental conditions at such centres would be required to be taken into account in the granting of an operator's licence. Further, the Licensing Authority should have powers to impose conditions to the licence (eg number and size of vehicles), and that the right of appeal of local authorities should be strengthened (Rec. 25-29).
- *Smoke and Noise.* More research into objective ways of measuring these emissions was recommended, in order that enforcement would be strengthened (Rec. 30).
- *Quantity Licensing.* The Committee recommended in strong terms that 'the Government should resist as impracticable and misguided introducing quantity licensing to improve the quality and efficiency of the industry'. Similarly, it recommended that if any limitation were to be placed on the numbers of heavy vehicles on environmental grounds, this should be by taxation rather than by quantity licensing (Rec. 33-34).
- *Ancillary (Own-Account) Operators.* The Committee recommended that these should continue to ply for hire and reward, but that the restricted operator's licence be abolished (see Section 2 above). These conclusions related to the benefits of 'utilisation and efficiency' which resulted from the absence of restrictions on ancillary operators, but that as truck operators, they should be subject to the same requirements and sanctions as hire or reward operators (Rec. 35 and 41).
- *Criteria for 'Good Repute'.* The criteria for 'good repute', and the ability of the Licensing Authority to determine it, were the subject of a set of recommendations. These included the proposal that the Authority should

take into account offences involving dishonesty, fraud, forgery, conspiracy and evasion of vehicle taxation, as well as bankruptcy of the applicant or close relative. Changes in procedure to make it easier (or possible) for Authorities to have access to such information were recommended. The justification for these recommendations seems to be that a disreputable operator will be more likely to neglect maintenance, overload his vehicle, ignore driving hours limits, etc (Rec. 36-39).

Reaction to the Foster Committee Report

The Foster Report is a well-considered document, and although no Government reaction has yet been forthcoming, it seems likely that its essential emphasis will establish the direction of the British road transport sector for the next decade.

Interest group reaction to it has been mixed, but predictable. Shippers and ancillary operators have been pleased with the basic recommendations of the report which do not propose quantity licensing or other substantive controls on such operators. However, particular detailed recommendations have been criticised by such organisations as the Freight Transport Association. For example, the extension of licensing provisions to cover smaller vehicles, the recommendations regarding operating centres (see Chapter 5), and the proposal for annual review of road taxation have all been criticised. The Association also made the important point that with no less than 91 recommendations, some order of priority or importance should have been indicated, and that in any case no economic analysis of the worth of the proposed changes had been made (Freight Transport Association 1979c).

The road freight industry would have preferred to have seen recommendations for control of entry to the industry, quantity licensing, and so on, but as these have not been forthcoming, and as the industry has learned to live with the operators' licensing system, it will no doubt adapt. The Committee was clearly not sympathetic to arguments that the industry deserved or needed special protection. On more specific points, the industry (represented by the Road Hauliers' Association 1979) opposed the provisions related to vehicle operating centres (see Chapter 5 of this report), opposed the proposed annual review of road taxes, was concerned that there was no explicit provision for

special licences for firms carrying hazardous products, and thought that the proposed administrative changes would impose an unnecessary cost on the industry.

Environmental lobby groups, such as the Civic Trust and Transport 2000 were pleased with the emphasis given to environmental concerns, but disappointed that the recommendations did not, in their view, go far enough. They would have preferred strict restrictions on truck sizes and numbers, and licensing arrangements oriented towards shifting traffic from road to rail (Civic Trust 1979).

British Rail also 'welcomed' the report, but noted that the effectiveness of the recommendations it adopted would depend more upon the way in which they were implemented than on the administrative procedures as such. It also noted that the cost and staffing implications of the proposals had not been evaluated. However, the tenor of the report towards greater control and discipline over the road haulage industry was supported (British Rail 1979).

PRICE COMMISSION REPORT ON THE ROAD HAULAGE INDUSTRY

The Price Commission is a statutory authority established to monitor and advise on price control. It conducted an enquiry into the road haulage industry in 1977-78, reporting to Parliament in October 1978. (It will be seen that this enquiry was contemporaneous with the Foster Committee enquiry, and in fact the two enquiries conducted several joint surveys as part of their respective tasks).

The report and findings of the Price Commission are not directly related to the objectives of the present report, as they are not concerned with regulation. For completeness however, the essential conclusion of the report is worth mentioning. The Commission found that there was substantial scope for improving efficiency, especially in the field of modifying operating practices. It accepted that the rapidly rising price of replacement vehicles was a problem that the industry was facing, and that this could lead to higher charges, but it reasoned that these could be offset against productivity improvements. It thus expected that charges would 'rise no faster than the rate of inflation prevailing in the economy generally'.

The report has not been well-received by the industry, nor by the new Government. It makes a number of naive assumptions, and seems to indicate a lack of familiarity with the industry generally. In particular, its central argument that rising prices can be easily and immediately offset against productivity improvements is very doubtful, and based only on the exhortation that 'employers and unions ... get together at a national level to develop a suitable framework which will pave the way to area and individual negotiations over (such areas as) double-shifting, seven day working, scheduling of work, control systems and re-structuring of wages'.

ENQUIRY INTO 'LORRIES, PEOPLE AND THE ENVIRONMENT'

In July 1979, the Government announced the establishment of a one-man board of enquiry (Sir Arthur Armitage, Vice-Chancellor of Manchester University) with the following terms of reference:

'To consider the causes and consequences of the growth in the movement of freight by road and, in particular, of the impact of the lorry on people and their environment; and to report on how best to ensure that future developments serve the public interest.'

The enquiry, which is not yet complete, has been dubbed 'lorries, people and the environment'. It derives its main impetus from a need for a Government decision in relation to the introduction of EEC regulations concerning vehicle mass and dimensions. No such regulations exist at the moment, but a draft set have been prepared, and in time these matters will probably be 'harmonised' among EEC members. However, since the proposals, and most Continental regulations, allow for larger and heavier vehicles than current UK domestic limits, the British response to the draft regulations is critical. For that reason, the Government evidently decided on a wide-ranging review of vehicles and their effects on the environment, from which it would be in a better position to determine its attitude to the EEC draft regulations.

The Department of Transport in September 1979, issued a background paper which set out some of the main questions to which the enquiry might address itself as follows.

- Recognising that there is a conflict between economic benefits resulting from efficient road transport and environmental costs, how can this conflict be best resolved?
- What is the appropriate role of Government? In particular policies involving public expenditure, local authorities becoming more active in removing trucks from unsuitable roads, and county annual Transport Plans and Policies (TPPs) paying greater heed to freight movement.
- How best to tackle the problems resulting from inconsistent regulations amongst EEC members? In particular the desire of UK operators to run on the continent being restricted by the reluctance of other Governments to issue permits, in part in reaction to what is seen as restrictions on trade resulting from lower UK mass and dimension limits.
- What have been the results of successive UK Governments' policy not to subsidise freight movement by any mode? In particular, seeing as this policy has led to the dominance of the road mode, is there scope for modal change, and at what cost and benefit?
- Is there any way in which environmental damage caused by trucks can be quantified, so as to allow alternative courses of action to be compared?
- What are the costs of reducing environmental impact, and who pays?
- What procedures can be developed to allow tradeoffs to be made between proposals with different environmental costs and benefits? (eg rural bypass roads).
- What are the implications for road construction, road maintenance, energy use etc, of forecast increases in truck use?
- How sensitive are these forecasts to policies affecting land use, energy, etc?
- Are there feasible technological improvements affecting such aspects as safety, noise, fumes, vibration, energy use, etc?

- . Finally, what are the advantages and disadvantages (safety, economic cost, environmental impact) of adopting more liberal mass and dimension limits.

The EEC Dimension

The influence of the EEC on UK freight policy has been mentioned briefly above. For the purposes of this paper, it is relevant to briefly outline three EEC-related issues of current concern; vehicle mass and dimension limits, drivers' hours, and the introduction of the tachograph.

- . *Vehicle Mass and Dimension Limits.* The current mass and dimension limits in force in Britain, together with the EEC proposals, are shown in Table 6.1. It can be seen that the EEC proposals are, in almost every case, more liberal than the current UK limits. However, there is far more difference in the mass limit than the dimension limit.

The arguments and counter arguments which arise from this are fairly predictable. On the one hand, the environmental lobby takes the view that larger vehicles are undesirable; that the greater mass limit will divert yet more traffic to roads, resulting in greater truck traffic, that the larger vehicles will be less safe (many vehicles capable of carrying the EEC limits presently use British roads, since they are manufactured for both home and export markets - these could carry as much as an extra 7.6 tonnes if the proposal was adopted); and that since extra axles will be encouraged⁽¹⁾ the vehicles will appear more formidable.

On the other hand, the road lobby counters that the extra length would not be noticeable, that since the trucks have been built to meet explicit safety standards there is not an unacceptable safety problem, that significant mode changes would not occur since there is now only a limited scope for further diversion, but that the extra payload possible would reduce freight costs significantly (Freight Transport Association 1979a) (Road Haulage Association 1979).

(1) It can be seen that there is no advantage for a UK operator to use a larger vehicle than a 2-axle prime mover and a 2-axle trailer; under the proposals, larger vehicles would be likely.

TABLE 6.1 - COMPARISON OF UK MASS AND DIMENSION LIMITS WITH EEC PROPOSALS

Vehicle Type ^a	UK Limits		EEC Proposals	
	Mass (ton) ^b	Length (m)	Mass (tonne)	Length (m)
Two Axle rigid	16 (16.2)	11	No Proposal	
Three Axle Rigid	24 (24.3)	11	24	12
Four Axle rigid	30 (30.4)	11	30	12
Three Axle artic. (2+1)	24 (24.3)	15	24	15.5
Four Axle artic. (2+2)	32 (32.4)	15	35	15.5
Five Axle artic. (2+3)	32	15	40	15.5
Five Axle artic. (3+2)	32	15	42	15.5
Six Axle artic. (3+3)	32	15	44	15.5
Four Axle drawbar (2+2)	32	18	35	18
Five Axle drawbar (2+3)	32	18	40	18
Five Axle drawbar (3+2)	32	18	42	18
Six Axle drawbar (3+3)	32	18	44	18

- Notes:
- a. Figures in parentheses refer to number of axles on prime mover and trailer respectively.
 - b. UK mass limits are expressed in tons, for comparison, the metric equivalent is shown in parentheses.

- *Drivers' Hours.* Harmonisation of drivers' hours among EEC members is more advanced than harmonisation of vehicle mass and dimension limits. The most recent change occurred on 1 July 1979, with a further modification to be introduced on 1 January 1981; these apply to all drivers of vehicles exceeding 3.5 tonnes. The limits are as follows:

	Before 1 Jan. 1979	Current	After 1 Jan. 1981
Max. continuous driving time (hr)	5.0	4.5	4.0
Max. driving day (hr)	9.5	9.0	9.0
Max. weekly driving time (hr)	57.0	54.0	48.0
Max. fortnightly driving time (hr)	112.0	106.0	92.0

- *Tachographs.* A tachograph is a mechanical device fitted to a truck to record automatically the speed at which the truck travels (including of course, time at rest) against time of day. They have long been standard on the Continent, and, notwithstanding freight industry reluctance and strong union opposition, the UK Government has been obliged to follow suit. They became compulsory equipment on all new vehicles exceeding 3.5 tonnes after 1 January 1980, and must be retro-fitted to the existing vehicle fleet by 31 December 1981.

Not surprisingly, both the reduction in working hours and the introduction of the tachograph have been of vital concern to both the freight industry and the unions. It is generally acknowledged that the existing regulations regarding drivers' hours and speed limits are widely ignored, but the introduction of the tachograph will make enforcement of both more effective. The influence on drivers' earnings could therefore be considerable. Consequently, the unions have attempted on the one hand to achieve wage increases on the basis of reduced driving time, and on the other hand to resist the introduction of the 'spy in the cab' tachograph. On the first issue they have been generally successful, particularly in view of the extended truck drivers strike in the winter of 1978-79. On the second, the threat of industrial action has been sounded, but at the present time it seems that the unions will settle for substantial wage increases in exchange for accepting the tachograph; perhaps this gives some indication of the extent of current malpractice. On both counts, however, they are assisted by the argument that if these

changes are a result of harmonising British practice with Continental practice, then logically there should be compatibility of wage levels too; Continental truck drivers' wages tend to be much higher than those of their UK counterparts.

The industry has had a somewhat ambivalent attitude. On the one hand, it is faced with extra costs (higher wages, capital cost of fitting the tachometer, administrative cost of using it), but on the other hand it recognises the tachograph as a powerful method of controlling the illegal activities of the so-called 'cowboy' operator, whom the industry regards as a threat to legitimate operators.

CHAPTER 7 - IMPLICATIONS FOR AUSTRALIAN TRANSPORT OF BRITISH EXPERIENCE

There are several aspects of road freight regulation in Britain which are relevant to freight policy in Australia. In particular, environmental concerns, road safety and economic regulation are issues which have parallels in Australia. Other issues, particularly international obligations *vis a vis* the EEC have no parallel.

However, policies and solutions which have been found to be appropriate in Britain cannot, or should not, automatically be thought to be applicable in Australia. There are many important differences between the two countries which mean that policies will inevitably vary.

Firstly, the governmental structure in Australia is quite different. Although Britain has a central government with strong county governments, the latter are entirely the creatures of the former, and their responsibilities and functions can be and are readily changed. By contrast, Australia is a federation with powers of the Commonwealth Government set down in the constitution, and with all residual powers residing with the States.

Moreover, virtually all powers in relation to freight transport are State powers, and it is quite conceivable (and common) for different States to adopt different policies in relation to similar issues. Thus to speak of 'Australian' policies is not particularly meaningful.

A further important constitutional aspect is the complete freedom from economic regulation of interstate freight, arising from a High Court interpretation in 1954 (the famed 'Hughes and Vale' decision). Thus the ability of governments to introduce 'policies' for interstate freight are severely limited.

Another vital difference between Britain and Australia is simply one of geographic size; England is approximately the area of Victoria. Policies relevant for a small, densely populated, highly industrialised island may be quite irrelevant for a large, thinly populated continent, or even a state thereof. Distances are longer, traffic on the network is less, modal advantages are different, etc.

Finally, a special extension of the previous point is that whereas in Australia there is a real and fundamental difference between 'urban' and 'non-urban' (intrastate or interstate) movement, such a distinction is virtually meaningless in Britain. Thus in Australia, an 'urban transport policy' is a valid concept, while in Britain a policy for urban areas distinct from a national policy is not particularly meaningful.

Thus any interpretation of the value of British experience in this field is most likely to be relevant to State governments (and may even vary from State to State), and must recognise the need to distinguish between urban and non-urban implications. It is perhaps also valid to suggest that now is an opportune time for such a discussion, in the light of issues such as the impending de-regulation of freight transport in Victoria and Western Australian, the rapidly growing railway subsidy, and the increasing concern with energy use in transport and with the environmental impact of urban truck traffic.

Discussion of the value of British experience in freight regulation falls into several areas as follows:

- . the importance of defining objectives;
- . the effects of economic de-regulation;
- . environmental considerations in urban areas; and
- . structural economic change and its effects on freight.

DEFINING OBJECTIVES

One very clear lesson to emerge from Britain's experience with the regulation of road freight is the importance of defining the objectives of the regulatory system. Only if this is done can rational decisions about systems of licensing be made. It is also important in the sense that debate about the licensing system can then focus on the objectives themselves, rather than having different parties with different conceptions about objectives becoming engaged in fruitless debate about details of the system.

The British experience is that having made the objectives of licensing clear in the *Transport Act* 1968, and having established clear government policies

for domestic freight in successive White Papers on transport, the industry knows where it stands. It might or might not like the policy or agree with the objectives, but at least it knows the 'rules of the game'.

It will be recalled that the Geddes Report, upon which the 1968 Act was based, proposed but a single objective of the licensing system - promotion of road safety. The 1978 Foster Committee Report extended the number of objectives to three, adding protection of the environment, and prevention of undue damage to roads. The formulation of such clear and relatively straightforward goals enabled the respective committees to go on to devise the details of a regulatory system which effectively and efficiently enabled these goals to be met.

There is another inference implicit in the respective contents of the Geddes and Foster reports, and that is that goals change over time. Road safety was a common interest, but protection of the environment was only just beginning to emerge as a matter of public concern in the mid-1960s. By the late 1970s it was not only a major concern, but that concern had been expressed in both amendments to the 1978 Act, and in government policy for transport as expressed in various White Papers. Thus, the Foster Committee concluded that not only was protection of the environment important, but also that it was a legitimate objective of road freight regulation.

This is not the place to argue whether or not the objectives of road freight regulation as postulated by Geddes or Foster are appropriate in Australia. Rather the implications of these arguments in the Australian context are firstly that constructive debate and rational decisions about road freight regulation can only occur if the objectives of such regulation are clearly set down, and secondly that periodic review of the objectives is necessary as conditions change.

EFFECTS OF DE-REGULATION

As noted earlier, it is the stated policy of some Australian State governments to move towards a less heavily regulated road freight system. Since Britain effectively removed economic regulations on its road freight industry over a decade ago, it is instructive to review the British experience, as it may provide some pointers to what may happen in this country.

Chapter 4 of this paper has reviewed in some detail the changes in the characteristics of road freight in Britain since 1968. While not all of these changes can be attributed to the introduction of a system of operators' licensing, they nevertheless indicate that an effective and efficient road freight industry, serving the needs of the community, can thrive in a de-regulated environment. To recapitulate briefly.

- Light vehicles (less than 1.5 tonnes unladen weight) and heavy vehicles (over 8 tonnes unladen weight) have increased in number, while vehicles in intermediate categories have declined.
- Road freight has increased its share of the market measured in tonnes lifted from 60.4 per cent in 1967 to 67.3 per cent in 1976. Its market share in tonne-kilometres moved remained virtually unchanged, varying from 84.9 per cent to 84.5 per cent over the same period.
- These market shares must be viewed in the light of commodity flows and changes in the British economy. The total tonnage moved by road has declined since 1968, largely due to reduced demand from the mining and construction sectors. However, the task in tonne-kilometres moved has increased, because of changes in distribution patterns.
- The industry is, and always has been characterised by a large number of small firms. In 1977, 88 per cent of operators had fewer than five trucks; over 50 per cent had only one. Larger fleets of over 20 vehicles comprised 2.5 per cent of the operators, but accounted for 38 per cent of the vehicles.
- The change in the licensing system has not affected this fragmentation. The proportion of operators with a single vehicle was 54 per cent in 1964, 53 per cent in 1969 and 54 per cent in 1976.
- The stability of the industry does not seem to have been affected by the introduction of operators' licensing. The average length of involvement by trucking firms in the industry in 1977 was 22 years, and even for owner-drivers it was 10 years. There is a high failure rate in the first few years of business, but this was also the case before 1968.

- . The industry is highly competitive; in the view of industry leaders it is too much so. However, geographic specialisation and market specialisation tempers the competitive situation. Moreover, most haulage firms have developed a regular clientele, with casual trade being fairly uncommon.
- . The industry is currently facing financial difficulties, particularly in finding funds for re-equipment. However, this is more of a reflection of the state of the British economy than being attributable to de-regulation.
- . The removal of restrictions on ancillary operators, permitting them to ply for hire or reward, has not had a marked effect. Less than 3 per cent of the tonnage carried by ancillary operators is work that the pre-1968 regulations would have disallowed. However, the removal of restrictions has enabled new types of firms, specialising in all aspects of distribution to evolve.
- . The safety of heavier vehicles has improved markedly since 1968, but the contribution of operators' licensing towards this improvement is impossible to quantify. Nevertheless, it seems to be agreed that it is at least partially responsible.

Overall, then, it would appear that most of the arguments advanced in the 1960s in favour of de-regulation have been shown to be valid and most of the arguments against, to be invalid, or at least 'not proven'. The industry does appear to be more efficient, more competitive, more responsive to market needs, and its vehicles are safer. Industry problems, particularly profitability, appear to be more related to the state of the economy, and not only indirectly attributable to the freer competitive environment.

ENVIRONMENTAL CONSIDERATIONS

Britain has tackled many of the environmental problems associated with trucks and road freight in cities in a more systematic and comprehensive fashion than most other countries. This is hardly surprising given that Britain is (at least compared with Australia) a small, densely populated country with many old and environmentally sensitive urban areas.

Although the regulatory system is but one of the tools of environmental protection, the British experience is that it can be an effective one if used sensitively. The main application of this tool is control of the centre from which trucks operate. By requiring that one of the conditions which must be satisfied before a licence is issued is that the 'operating centre' is environmentally suitable, intrusion is limited.

To date, this provision has applied particularly to the on-street parking of trucks; licences have been refused if the trucks cannot be parked off-street. However, it is possible that the terms of refusal on environmental grounds may be broadened in the future, and in particular to involve the local government authority more in the operators' licensing procedure.

Clearly, such changes which at this time are only just beginning to be discussed have potential difficulties; for example, the dangers of having the operators' licensing system become a *de facto* land use control mechanism, the problems of the established operator, and the trade-off between economic revitalisation of inner city areas and the need for access.

Nevertheless, the British experience to date, and the likely extension of current practice and law, is that the road freight regulatory system can make a contribution towards environmental protection, through the requirement that a road freight operator must have an environmentally suitable operating centre.

STRUCTURAL ECONOMIC CHANGE

The changes in the British road freight task in recent years show clearly the importance of economic change on road freight. As the demand for transport is a derived demand this could hardly be otherwise, but the changes in tonnes lifted, tonne-kilometres moved and commodities carried by the road freight sector are very largely attributable to structural economic change. These changes have been summarised in Tables 4.3, 4.4 and 4.5.

There are several aspects of structural economic change which are important from the viewpoint of freight de-regulation. First, as the economy and the products which it produces change, so the demand on the transport network

changes. In general, these changes tend to lead to specialisation, with market segmentation among different modes, different types of vehicle, and different operators. The British experience is that in a de-regulated environment, these specialisations evolve quickly and efficiently in response to market pressures. Thus the railways have emerged as specialist bulk carriers; certain commodities and industries have stayed within the sphere of ancillary operation; specialist road freight hauliers have developed to handle particular products, and new types of firms (e.g. co-operative haulage ventures between competitive manufacturers) have evolved to respond to particular market conditions.

Secondly, specialisation of industrial activity leads to greater movement of freight, as the achievement of economies of scale requires fewer manufacturing and assembly points. In the words of the Freight Transport Association (1979c), 'More freight movement, and greater expenditure on freight, has been the price of achieving greater overall economies in the total industrial process, with the objective of meeting consumer demand at minimum overall cost'.

Thirdly, the absence of restrictions on the road freight industry can itself lead to forms of structural economic change, and associated efficiencies in the economy. For example, the very substantial changes in the distribution sector in Britain, with a common pattern being for local distribution depots becoming consolidated into larger regional distribution centres, has been facilitated by the absence of controls on what a road truck fleet may or may not do. These trends towards regional distribution centres would probably have occurred even in a regulated road freight environment, but possibly the trend would have been somewhat less strong.

Finally, with specialisation and economies of scale have come an increasing awareness of the costs of holding stock. At both the retailing and manufacturing ends of the production-consumption process, firms are reducing the amount of stock held. The corollary to this is more frequent, more reliable transport; the weekly delivery to a store has become a daily delivery in many cases. Even within the distribution system itself, there are pressures to minimise the quantity of goods in transit, and thus reduce inventory costs. (On the other hand, in some industries, a few days supply

of goods or components 'in the pipeline' can be a useful buffer against such things as the effects of industrial disputes.) These tendencies have led to the development of more efficient, more capital intensive transport and distribution systems.

Associated with both of the factors discussed above is a further impression, and that is that the more competitive environment, and the tendency to regard freight as an integral part of a total distribution chain have produced in Britain a more highly skilled freight management. The introduction of Certificates of Professional Competence and the like as part of the requirement for the issue of an operator's licence has also contributed to this. Although, as noted above, the road freight sector is highly fragmented, the larger firms, in both the ancillary and hire or reward divisions, are highly professional, and are often managed by persons with a high degree of specialist education (as distinct from training) and experience.

Thus, freight de-regulation appears to contribute to improved economic efficiency, not only by producing a more competitive industry, but also by both permitting and facilitating structural economic change.

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