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SESSION II – KM CHARGES FOR HEAVY GOODS VEHICLES

Preparation for a distance charge in the United Kingdom

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Preparations for a Lorry Road User Charge for the UK


Introduction

1. In November 2001 the UK Government issued a consultation document 'Modernising the Taxation of the Road Haulage Industry'. The consultation was concerned with the implementation of fair and efficient pricing for all goods vehicles using UK roads. Over the past two years work has continued assessing the options and certain principles have now been established. These are described in this paper.

Background.

2. Unlike some other European countries, transit traffic makes up a small share of total UK road freight traffic. This is explained by the relatively peripheral position of the UK and the absence of land borders, other than in Ireland. So for many purposes, for example when making forecasts of demand for new or expanded road infrastructure, international flows are not a major consideration. There are certain cases, such as the roads to East Coast and Channel ports, where forecasts of international traffic are a consideration when assessing the appropriate level of capacity, but these are the exceptions.

3. The majority of road freight from elsewhere in the EU with a destination in the UK is carried by vehicles registered outside the UK. There are a number of reasons for this including the composition of UK imports and exports. In general UK imports, such food and other perishable commodities, tend to be carried by road and be of higher bulk than UK exports. Moreover, the UK tends to import goods and export services, which again contributes to the imbalance in the road haulage sector.

4. This imbalance in the road haulage sector has significant financial consequences for the UK Treasury. Diesel fuel in the UK is taxed at a higher rate than elsewhere in the EU. The typical price per litre is at present around Euros 1.05 per litre. In order to avoid paying these high fuel prices, vehicle operators refuel vehicles bound for the UK before leaving mainland Europe. The majority of vehicles operating in the international sector have fuel tanks large enough to avoid refilling on most of the runs they will carry out within the UK. The consequence is a loss of revenue to the UK Treasury and an unfair basis for competition between UK and other European hauliers arising from this difference in fuel tax.

Proposals and Progress

5. The Government's plan is to introduce a lorry road user charge for all goods vehicles in excess of 3.5 tonnes. The charge would be paid by all of the 415,000 goods vehicles registered in the UK and all foreign registered vehicles operating on UK roads. The charge will ensure that all users of UK roads pay for the costs that they impose, irrespective of where the vehicle is registered or where they have purchased fuel.

6. The objectives of the charge are two-fold;
   - To ensure fairness and efficiency, so that all users contribute equally and at a level which reflects the costs they impose on the road network;
   - To deliver environmental and other benefits by setting the rates so as to reflect the environmental performance of the vehicle paying the charge.
The Structure of Charges

7. When setting a charge there is a trade-off between simplicity and potential efficiency. The information on the external costs of transport published in the study 'Surface Transport Costs & Charges - Great Britain 1998' shows that these costs vary significantly by time of day, road type and area type. In theory there are good reasons for a structure of charges that reflects these differences. However, there is little information on how road users might respond to a complex structure of charges and hence how effective a complex system might be.

8. The Government proposes to start with a relatively simple structure of charges which succeeds in meeting the main objectives of the policy. It is anticipated that the charge vary according to:
   - distance travelled;
   - vehicle type
   - road type.

9. Varying the charge by distance travelled within the UK ensures that all vehicles contribute equally irrespective of their country of registration or where they last refuelled. Distinguishing by vehicle type ensures that the charge relates both to road damage costs and to environmental costs, with the heaviest vehicles with the fewest axles paying most and vehicles with more environmentally friendly emission standards paying less. The charge will also encourage operators to upgrade their fleets and make better use of their vehicles so as to reduce vehicle kilometres. Variation by road type further reflects the significant differences in costs between modern, high quality roads usually constructed to provide for freight traffic and other roads where road damage, environmental and safety costs are higher.

10. The proposed method for charging will allow for further variation to be implemented. There is likely to be the potential for varying the charge by time of day, so as to encourage operators to schedule their trips at times when they impose the lowest costs because the inter-urban network is less congested. A further option is a charge that varies by area type, to reflect the higher costs that heavy vehicles typically impose when operating in close proximity to people and their homes in urban areas. Both these options are unlikely to feature in the system when first implemented. The aim is to ensure that it is sufficiently flexible for it to be enhanced later.

Analysis of the Options

11. The options for charging were narrowed down using the Department for Transport's National Transport Model. Full details of this model are given on the Department's website at: http://www.dft.gov.uk/stellent/groups/dft_control/documents/contentservertemplate/dft_index.hcst?n=8613&l=2
12. The main aim of the modelling was to establish whether an option which restricted the charge to motorways alone or to motorways and other main roads would lead to diversion to less suitable routes. There was a good reason for analysing an option which charged only on these roads since they account for around two thirds of all goods vehicle traffic and significantly more of the long distance international traffic. And restricting the charge to motorways and other roads with limited access would make it feasible to adopt microwave technology in place of the GPS based system which would be required to support a system which applied to all roads.

13. The analysis suggested that if the charge was restricted to motorways or to all trunk roads, the likelihood of diversion to less suitable routes could not be ignored. It showed that heavy goods vehicles generally imposed lower external costs on other road users and on the rest of society when using motorways and high quality trunk roads than on any other part of the road network. Such findings were not unexpected since many of these roads were constructed or improved to facilitate the flow of long distance goods traffic and they continue to provide a good service for such traffic. Hence there was a good case for imposing a lower charge per kilometre on goods vehicles when using motorways than on other road types. The option for a lower motorway rate therefore will be considered further.

**Offsetting Tax Reductions.**

14. Lorry road user charging is not intended to increase the overall cost of road freight haulage for domestic operators in the UK. The aim is to reduce other taxes on UK road haulage so as to leave the overall costs broadly unchanged. There is little scope for reducing the annual tax on vehicle ownership (Vehicle Excise Duty) further. It is already highly graduated to encourage the purchase of environmentally friendly vehicles. For example, the annual VED for a 38 tonne 6 axle vehicle with a certificate of reduced pollution is set at the equivalent of euros 360 and for an equivalent 44 tonne vehicle at euros 1000.

15. While reductions in fuel tax provide a means of offsetting the lorry road user charge, such a reduction would give an unwarranted benefit to the owners of diesel-engined light goods vehicles and cars. There would be significant financial costs to the UK Treasury on account of the loss of fuel duty. In addition, the shift to diesel cars that would result from a large difference between diesel and petrol prices could increase the environmental costs of traffic in urban areas because of the higher pollution costs associated with the use of diesel vehicles, although reduced carbon emissions would in part offset this. So reductions in the duty paid on diesel fuel was soon rejected as an option.

16. UK users of diesel fuel for agricultural purposes are entitled to purchase untaxed fuel to which a red chemical dye has been added. It is illegal to use 'red' diesel for road haulage purposes and the addition of a dye to this fuel makes detection of the offence a relatively simple matter. The option was considered of adding a differently coloured chemical dye to diesel which was taxed at a lower rate and sold to road hauliers alone, while retaining uncoloured higher taxed fuel for diesel cars and vans. But it was concluded that this would be costly to implement, difficult to enforce and there were risks of genuine mistakes being made when refuelling vehicles.
17. The Government has therefore concluded that the best way to offset the charge is to repay part of the fuel duty paid by hauliers when they purchase fuel in the UK. Most fuel purchased by goods vehicle operators is either supplied directly to their depots or purchased in the course of a journey by drivers using special fuel cards. In both cases it would be a relatively simple matter for the suppliers of the fuel to claim a rebate from the tax authority and pass this on to the purchaser. There would also need to be arrangements whereby direct purchasers of fuel could claim back the tax against a receipt from an authorised service station. Checks would need to be made to ensure that goods vehicle operators were not claiming refunds of tax on fuel used in light vans and other non-qualifying vehicles.

Technology

18. The technology will be required to record the identity of the vehicle, how far it has travelled and the types of road used and, initially for verification purposes only, the time of travel. Two options have been considered;
   
   - microwave systems
   - a satellite based positioning system.

The conclusion that charging should cover all roads in the UK has ruled out microwave systems since these are only cost effective when charging on a limited number of roads. They require fixed antennae at all entrances and exits and so the cost increases in line with the scale of the system.

19. A satellite based system would require all vehicles to carry a special unit (the OBU or On Board Unit). It would be installed by authorised fitters, probably at the same garages as now install digital tachographs. The OBU would comprise a receiver, which records the position of the vehicle and hence the type of road being used. The receiver would be linked to the vehicle's tachograph to record the distance travelled and as a check on the distance recorded by the satellite. In addition, the OBU would incorporate a cellular telephone linked to the data processing and payments centre to which the charge is paid. All goods vehicles making regular use of UK roads would be required to register for the scheme and provide details of a bank account which could be debited with the charge and credited with the reimbursement of fuel duty.

20. Special provisions would be made for occasional users. Among the options being considered is a scheme whereby drivers book their journey on arrival in the UK and pay in advance by credit card. The scheme would have the facility to allow drivers to change their route after booking or after making part of the trip so as to accommodate changes in the schedule or in the requirements of the freight consignor.

Next Steps

21. The Government expects that implementation will take place within the next three to four years. The Chancellor has published two progress reports to date - these can be found on the HM Treasury website - and is committed to publishing a further report this year, setting out the detail of the scheme.
22. That timetable will partly depend on the reaction of the market when the procurement process begins - which we expect to happen later this year. We recognise the importance of ensuring that systems are technically and operationally robust.

23. That process will in turn reflect progress on developing the proposed Interoperability Directive, which, when adopted, will require Member States to meet criteria for technical and contractual interoperability of charging schemes. Following the political agreement on the Directive at the December Transport Council, work on developing the detail will be taken forward in a technical committee due to report by 1 January 2006.

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