Consultation on reform of Vehicle Excise Duty to ensure a cleaner environment

H M Treasury November 1998

A consultation paper

Contents

1 INTRODUCTION

PURPOSE

1.1 The Government's overall transport strategy was set out in the White Paper *A New Deal for Transport* which sets the framework for a transport system which is safe, efficient, clean and fair. Achieving a sustainable transport system in the longer term will require a change in our attitudes about the way we travel.

1.2 Cars are a significant source of

a. **greenhouse gas emissions,** which cause climate change, and of

b. **local air pollutants,** which can damage our health and make life on our towns and cities unpleasant.

The Government recognises that tax can and should be used to promote environmental objectives, such as curbing the growth of emissions, although this must be done in a fair way. For many people, especially in isolated areas, car ownership is not a choice but a necessity.

1.3 In his March Budget, the Chancellor announced a significant reform of Vehicle Excise Duty (VED) to encourage smaller, cleaner cars. In particular, he announced that, from next year, VED for the cleanest and smallest cars would be cut by £50. In the meantime, current VED rates were frozen. ***The purpose of this document is to seek views on proposals to bring this policy into effect.***

VED GRADUATION

1.4 VED is one of a number of instruments available to the Government for giving clear signals to vehicle purchasers and manufacturers about the environmental consequences of their decisions. However, the present single-rate structure for cars offers no incentive for purchasers to buy, or manufacturers to produce, cleaner vehicles.

1.5 Research suggests that the fuel efficiency of a vehicle (which is linked to the rate at which it emits the greenhouse gas carbon dioxide, CO_2) is not usually one of the main factors influencing car purchase choices. VED graduation based principally on the rate at which a vehicle emits CO_2 would provide a clear and easily understandable additional signal to purchasers and manufacturers. It would complement the existing fuel duty escalator and the European Union strategy to reduce CO_2 emissions from new cars.

1.6 In addition to the need to address the risk of climate change by tackling emissions of CO_2, it is also important to reduce emissions of the pollutants which affect local air quality and damage health. The proposals in the document suggest ways of introducing an additional air quality signal into the VED system, although there may be trade-offs between the two objectives, particularly in view of the different patterns of emissions from petrol and diesel engines.

1.7 This consultation is aimed mainly at cars, although some other types of vehicle are considered in the "Other issues" section starting on page 17.

1.8 This document does not consult on rates of VED, which will be announced in the next Budget. Implementation of the new scheme will begin during 1999, following the passage of the Finance Bill.

RESPONSES

1.9 Although views would be welcome on all aspects of the Government's proposals, some specific questions are set out in the body of this document so that they can be seen in context. Those questions are collected in a form in Annex D (starting on page 30). ***It would greatly ease analysis if the responses were made on the form in Annex D*** and reached the Driver and Vehicle Licensing Agency (DVLA) by ***31 January 1999.*** The address to which to respond is

ENVIRONMENTAL VED CONSULTATION
B1
DVLA
Longview Road
Swansea
SA6 7JL
Fax 01792 782056

1.10 Email responses to

vehpol.dvla@gtnet.gov.uk

would be welcome. More welcome still would be, responses over the internet using the electronic version of this document at

http://www.open.gov.uk/dvla/dvla.htm

1.11 ***Please note that***

a. although responses to this document will be considered carefully, responses will not be acknowledged individually;

b. responses, and the names of respondents, may be quoted and made available to the public. You can, however, say that you do not wish this information to be made available in this way.

Q1. Are you prepared to allow your response or name to be quoted, or made available to the public?

A1.a Yes ☐

A1.b No ☐ *(tick one)*

2 BACKGROUND

2.1 This section provides some information to help explain the proposals and to put them into context. It sets out briefly the main types of emission from car engines, discusses the qualities of diesel and touches on VED in other EU member states.

EFFECT ON THE ENVIRONMENT

2.2 Vehicle emissions are associated with two major environmental problems: climate change and local air pollution.

Climate change

2.3 The risk of climate change is one of the main environmental challenges facing us today. Following the Kyoto Climate Change Summit in December 1997, the UK has a legally binding target of reducing emissions of the six main greenhouse gases by 12½% over the period 2008 to 2012. The UK also has a domestic aim of cutting emissions of carbon dioxide (CO_2), the main greenhouse gas, by 20% by 2010 relative to 1990. The transport sector accounts for 23% of total carbon dioxide emissions in the UK, of which 85% comes from road traffic. Estimates of the growth in transport emissions vary, but the most recent figures suggest an increase of 5% above 1990 levels by 2000.

2.4 Carbon dioxide makes up a significant proportion of a car's exhaust emissions, arising directly from the combustion of the fuel. CO_2 emissions are directly proportionate to the amount of fuel burned. Although greenhouse gas emission targets are in place nationally and internationally, there are currently no regulations limiting CO_2 emissions from specific sources. Recently, a voluntary agreement has, however, been concluded between the European Commission and car manufacturers to reduce average emissions from new cars to 140 grammes of CO_2 per kilometre by 2008, a cut of about 25% on the current average.

Air pollution

2.5 Emissions from cars have been the subject of increasingly stringent emission limits, set at a European level, for more than twenty years. However, road transport continues to be a major cause of local air pollution, particularly in urban areas. Two of the local pollutants which vehicles emit in significant quantities and are of particular concern are fine particles (PM_{10}) which have a demonstrated link with respiratory and cardio-vascular disease, and oxides of nitrogen (NO_x), which can damage lungs and play a part in summertime smog episodes.

2.6 Unlike carbon dioxide, emissions of these pollutants are not directly linked to fuel consumption. Emission levels are more dependent on vehicle technology and, in the case of petrol cars, on whether a catalytic converter is fitted. Other factors, such as driving conditions and style, whether the engine is in tune and ambient temperature also affect emissions. All new passenger cars must meet the same EU emission standards, with different standards for petrol and diesel cars.

2.7 The Government is convinced that action to reduce harmful emissions must continue. Its approach to tackling air pollution is set out in the National Air Quality Strategy. This sets out national standards for the main air pollutants together with specific air quality objectives to be achieved by the year 2005. It identifies the action required at a national and international level, and the contribution industry, transport and local government can make to ensure objectives are met. A review of the Strategy is currently taking place to look for ways to deliver improvements in air quality more effectively and more rapidly.

2.8 The pollutants and their effects are described in more detail in Annex A (page 22) and the EU standards are summarised at Annex B (page 23).

DIESEL ENGINES

2.9 Although diesel produces about 15% more CO_2 per litre than petrol, diesel engines on the whole produce less CO_2 per km because the diesel engine is inherently more efficient than the petrol one. But diesel-fuelled vehicles emit around ten times the fine particles and up to twice the oxides of nitrogen (NO_x) of comparable petrol-fuelled vehicles. Black smoke is a significant factor in public perceptions of air quality and this, too, is a particular feature of diesel fuelled vehicles. 94% of black smoke in London comes from vehicle exhausts. The balance of policy needs, therefore, to reflect the impact on local air quality and global climate change issues, recognizing that fuels have different benefits and disadvantages.

2.10 In the Budget, the Chancellor announced that he intends to adjust the structure of duties on road fuels, over time, to achieve two broad objectives:

a. to move towards a fairer treatment of petrol and diesel, when calculated on an energy or carbon basis. This means that the tax on a litre of diesel should be higher than that on petrol, to reflect the higher levels of carbon and energy in a litre of diesel;

b. to encourage all users of diesel to switch to ultra-low sulphur diesel, the use of which cuts particulate emissions significantly (up to 40% in the case of cars, and even further in the case of lorries fitted with a particulate trap).

WHY HAVE VED?

2.11 A question that is frequently asked is why not simply abolish VED and raise the equivalent from fuel duty. There are several reasons:

a. Even without VED, it would still be necessary to maintain a vehicle record and pay for a system for enforcing the requirement to register vehicles. It is doubtful whether any alternative system would be as effective;

b. VED is also an invaluable aid in ensuring compliance with MOT and insurance certification;

c. It ensures all motorists contribute to the fixed costs incurred in maintaining and policing the road network;

d VED plays a part in reducing congestion and parking problems by discouraging people from owning second cars;

e. There are also some costs of road use that are not captured adequately by road fuel duty. For example, the damage done by heavy goods vehicles depends on the weight they carry and how that weight is distributed. Lorry VED is designed to reflect this, at least in part.

f. To load the full burden of motoring taxes onto fuel duties would hit groups such as hauliers and bus operators. It would also disadvantage disabled drivers, who do not pay VED.

VED IN OTHER EU MEMBER STATES

2.12 The United Kingdom is unique in Europe in not charging VED on cars by reference to some characteristic of the vehicle. Taxes related to such measures as engine capacity, power output, weight, age and fuel type are found in all other EU member states. The following table illustrates different approaches in different countries:

Table 1: Different approaches to VED in other countries (1996)

Country	Small petrol	Medium petrol	Large petrol	Very large petrol	Small diesel	Medium diesel	Large diesel
Ireland	£95	£240	£330	£680	£195	£425	£505
Italy	£50	£120	£150	£325	£350	£440	£555
Luxembourg	£30	£55	£70	£110	£50	£70	£90
Netherlands	£200	£410	£520	£690	£480	£815	£980
Portugal	£10	£30	£80	£130	£10	£20	£30
Belgium	£80	£160	£235	£450	£190	£345	£580
Denmark	£250	£335	£435	£605	£250	£435	£605
Germany	£95	£150	£185	£280	£240	£320	£400
Greece	£55	£90	£200	£265	£90	£200	£265
UK	**£150**	**£150**	**£150**	**£150**	**£150**	**£150**	**£150**

3 THE PROPOSED SYSTEM

SUMMARY

3.1 Much of the value of a graduated system will come from the signal that it sends to people, so an important consideration is to ensure that any new system is based on well understood principles.

3.2 It is proposed that the main factor to determine VED rates in the future should be CO_2 emissions (which are directly related to fuel consumption). It is proposed that different approaches be taken for **new** cars and for **existing** cars:

a. For **new cars,** actual CO_2 emission rates will be used as the main basis for determining VED;

Several factors coincide to present a good opportunity to use VED to help achieve environmental objectives:

- detailed information about CO_2 emission performance (in terms of grammes of CO_2 produced per km driven) is now readily available for new cars. Recent EU legislation requires that, from the beginning of 2000, this information is collected for new cars;
- the Driver and Vehicle Licensing Agency (DLVA) in Swansea is installing a new, more flexible, computer system. In Northern Ireland, Driver and Vehicle Licencing Northern Ireland may also need to develop a new system to implement the new VED scheme; and
- in future, most new vehicles will be registered for the first time by new automated electronic links between manufacturers and DVLA.

b. As CO_2 data is not readily available for most **existing cars,** it is proposed to use **engine size (cc)** instead, as a proxy for fuel efficiency and carbon dioxide emission rates.

3.3 While a VED system could be based solely on CO_2 emissions (or proxies) it is worth considering the extent to which other damaging emissions should be taken into account in the VED system. There are two main ways in which this could be done:

a. according to **fuel type**, to reflect the different emissions of those pollutants by different types of engine;

b. according to ability to meet progressively tighter EU **engine emission standards.** For new cars, the ability to meet these emission standards could be rewarded. For existing cars, vehicle age could be used as a proxy for ability to meet such standards. For example, the introduction of the Euro-I standard at the end of 1992 had a dramatic effect on emissions of carbon monoxide and oxides of nitrogen. (See Annex B, page 23, for further details of these standards.)

3.4 Finally, VED rates should be set in **bands** or could be structured on a **continuous** sliding scale.

3.5 These options are elaborated below for cars. Further vehicle types are discussed in the “other issues” section starting on page 17.

FOR NEW CARS

VED graduation based upon rate of emission of carbon dioxide (in terms of grammes of CO_2 emitted per km driven).

3.6 There is some evidence that car buyers do not take full account of possible savings in fuel cost when deciding which models to buy. Graduation of VED according to a car's rate of CO_2 production[1] would provide a new incentive (alongside the existing fuel duty escalator) for car buyers to take into account the fuel consumption of a car.

3.7 Although CO_2 production rate is not as familiar a measure as fuel consumption, it is a more direct way of targeting production of CO_2. This transparency also means that different fuel types could in principle be compared directly with each other. Thus if CO_2 figures became available for natural gas and liquid petroleum gas cars, for example, they could be placed in the same framework as those using more conventional fuels.

3.8 CO_2 production rate is also a more reliable way of measuring environmental impact than engine size. For example, some technologies which can improve fuel consumption (eg, direct injection spark ignition) can significantly improve fuel consumption for a given engine size.

3.9 Detailed CO_2 emission rate information is already collected. Full details for all new cars are available in *New Car Fuel Consumption Figures* available from the Vehicle Certification Agency, 1 The Eastgate Office Centre, Eastgate Road, Bristol BS5 6XX.

Q2. Should CO_2 emission rate (grammes of CO_2 per km) be used as the basis for VED for ***new cars?***

A2.a Yes ☐

A2.b No ☐ *(tick one)*

Q3. If VED for ***new cars*** *should* ***not*** *be based on CO_2 emissions rate (ie, you answered "no" to the previous question),on what should VED for new cars be based?*

A3.a Engine capacity ☐

A3.b Euro engine emission standard ☐

A3.c Other (specify) .....

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[1] As measured according to EC Directive 93/116/EC.

3.10 To provide some feel for numbers:

a. the majority of current new vehicles produce 150-250g of CO_2 per km; the average is about 185g/km.

b. The current EU aim is to reduce average fleet emissions rate to 120g/km by 2010, a cut of about 35%. It is being pursued through a strategy which includes a voluntary agreement with car manufacturers, a fuel efficiency labelling scheme and fiscal incentives. Manufacturers are offering as part of the voluntary agreement to make 120g/km models available by 2000 (no car currently meets this target) and to reduce the EU fleet average for new cars to 140g/km by 2008 (a few new cars currently meet this standard). Manufacturers envisage an interim target of 165–170g/km by 2003, about 10% below 1995 levels.

3.11 Under the proposed new system, VED could be structured in one of two broad ways:

a. a fixed amount per gramme (or per 10g) of CO_2 per km, rounded to the nearest £5 – referred to below as the **continuous** approach; or

b. by means of emission rate **bands**, for example:

Example 1: Example emission rate bands

Band	Emission rate
A	Up to 150g CO_2/km
B	151 – 170g CO_2/km
C	171 – 200g CO_2/km
D	Over 200g CO_2/km

3.12 Some advantages of a banded, over a continuous rate, structure are:

a. it could be simpler to administer;

b. it allows slightly more flexibility in setting rate relativities;

c. the steps at band boundaries could provide more of an incentive for manufacturers of vehicles falling close to a boundary to reduce emissions.

3.13 Some disadvantages of banding are that:

a. there is less incentive for manufacturers of cars which are not close to a band boundary to improve their environmental performance;

b. two types of car falling on either side of a band boundary might be close in environmental performance but attract very different VED rates, which could be perceived to be unfair.

*Q4. As a matter of principle, should VED for **new cars** be charged on the basis of a continuous scale (ie, X pence per gramme of CO_2 per km),or should there be emission rate bands?*

A4.a Continuous ☐

A4.b Banded ☐ *(tick one)*

A4.c Comment, if you wish .....

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Q5. And if there should be bands,how many should there be and where should the breakpoints between the bands be?

A5.a There should be ☐ *bands*

A5.b First breakpoint should be at ☐ *grammes of CO_2 per km (eg, 150 in Example 1)*

A5.c Second breakpoint (if any) should be at ☐ *grammes of CO_2 per km (eg, 170 in Example 1)*

A5.d Third breakpoint (if any) should be at ☐ *grammes of CO_2 per km (eg, 200 in Example 1)*

A5.e Other breakpoints,if any: ☐ ☐

Taking into account other factors

Diesel cars

3.14 Because CO_2 emissions can be used to determine VED rates irrespective of the fuel used, it is arguable that the system described above should be applied equally to petrol cars and diesel cars. The effect would be that diesel cars would attract less VED than their petrol equivalents because of the slightly better CO_2 performance of diesel cars over petrol cars of the same engine capacity. As Annex B (page 23) shows, the standards for emissions of particulates and oxides of nitrogen are not, however, as tight for diesel cars as those for petrol cars. There is, therefore, a case, on air quality grounds, for reflecting this in VED by adding, say, 10% to the rate determined on the basis of CO_2 emission performance.

*Q6. Should there be a VED supplement for **new diesel cars** over new petrol cars,to reflect their more damaging impact on local air quality?*

A6.a Yes ❑

A6.b No ❑ *(tick one)*

A6.c Comment,if you wish .....

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Q7. If so, how much should it be (either as a percentage or as a fixed amount)?

A7.a ☐ *%; or*

A7.b £ ☐

Engine emission standards for new cars

3.15 Cars have been subject to increasingly tight engine emissions standards, agreed at EU level, for more than twenty years. The current standard, which came into force in 1996, is usually referred to as Euro-II. Tighter Euro-III and Euro-IV standards were agreed under the recent UK Presidency of the EU, as part of the "Auto-oil" process which has sought to achieve cost-effective reductions in emissions through controls on a variety of vehicle types and on fuel quality. Euro-III car standards will come into force from 2000 in the case of new models and 2001 for existing models. Still tighter Euro-IV standards will be applied from 2005/6. These standards are described in more detail in Annex B, page 23.

3.16 Since these EU standards set limits for the emission rates of the pollutants that they cover, there is, perhaps, less of a case for reflecting them in rates of VED. Nevertheless, such incentives could be used to encourage the earlier introduction of cleaner cars.

3.17 The simplest way of doing this would be to reflect the meeting of a Euro-standard in a straightforward discount to the VED rate. If a new car could meet a particular standard, it would qualify for the associated discount. The EU engine emission standards are described more fully in Annex B, page 23ff. (The way in which engine emission standards could be taken into account for existing cars is covered in the next section.)

Q8. Should the ability to meet regulated pollution standards be reflected in the VED rate for ***new cars?***

A8.a Yes ☐

A8.b No ☐ *(tick one)*

A8.c Comment,if you wish .....

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Q9. If so, how much should be the benefit for cars meeting the

A9.a Euro II standard: £ ☐ *or* ☐ %

A9.b Euro III standard: £ ☐ *or* ☐ %

A9.c Euro IV standard: £ ☐ *or* ☐ %

FOR EXISTING CARS

VED graduation based upon engine capacity (cc)

3.18 The United Kingdom has around 27 million vehicles already on its roads. 22 million of these are in the present "Private and Light Goods" class. These have been constructed to a wide variety of mechanical and environmental standards over almost a century. For a large proportion of these individual vehicles, there is no readily available or usable information on carbon dioxide emissions or fuel consumption.

3.19 Fuel type and engine capacity information has, however, always been recorded at registration. As has already been noted above, engine capacity is one possible proxy for fuel consumption and therefore for carbon dioxide emission rate. In general, existing cars with larger engines use more fuel and so emit more carbon dioxide than cars with smaller engines.

3.20 As for new cars, a system of **bands** could be introduced. For example:

Example 2: Example VED bands for existing cars

Band	Engine capacity
A	Up to 1,250 cc
B	1,251 – 1,600 cc
C	1,601 – 2,000 cc
D	Over 2,000 cc

3.21 Alternatively, VED could be charged at a fixed rate per cc, rounded to the nearest £5, or equivalently at a fixed rate per 100cc. (This is referred to below as the **continuous** approach.)

*Q10. Should VED for **existing cars** be based on engine capacity?*

A10.a Yes ☐ *(and skip to Q12)*

A10.b No ☐ *(tick one)*

A10.c Comment, if you wish . . . . . .

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*Q11. If VED for **existing cars** should **not** be based on engine capacity (ie, you answered "no" to the previous question),on what should VED for existing cars be based?*

A11.a Age of vehicle ☐

A11.b Fuel type used ☐

A11.c Other (specify) . . . . . .

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Q12. If VED for existing cars should be based on engine capacity, should the amount be based on a rate per 100cc (a continuous approach),or should there be rate bands?

A12.a Continuous ☐

A12.b Bands ☐ *(tick one)*

A12.c Comment, if you wish . . . . . .

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Q13. If there should be rate bands, how many bands should there be and where should the breakpoints be?

A13.a There should be ☐ *bands*

A13.b First breakpoint should be at ☐ *cc (eg,1,250 in Example 2)*

A13.c Second breakpoint (if any) should be at ☐ *cc (eg, 1,600 in Example 2)*

A13.d Third breakpoint (if any) should be at ☐ *cc (eg, 2,000 in Example 2)*

A13.e Other breakpoints, if any: ☐ ☐

Taking into account other factors

Diesel cars

3.22 As for new cars, there is a case for applying the engine capacity-based system outlined above equally to diesel cars. The arguments are, however, slightly different.

3.23 Unlike for new cars, the VED system for existing cars cannot be based on objective emission information, so there is less of a case for using the same petrol bands or rates for diesel cars. Diesel engines are, however, typically much larger than petrol engines offering similar performance. If VED for existing cars is to be based on engine size it is, therefore, at least arguable that there is no need for an additional VED charge for diesel cars, despite the fact that diesel cars have a worse effect on local air quality than petrol cars.

3.24 Nevertheless, the existing VED database does record whether a vehicle is petrol- or diesel-engined. So it would be possible to levy a supplementary charge for existing diesel cars, just as it would for new ones.

Q14. Should ***existing diesel cars*** *be treated differently from existing petrol cars for VED purposes?*

A14.a Yes ☐

A14.b No ☐ *(tick one)*

A14.c Comment,if you wish .....

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Q15. If differently, what VED supplement should be charged?

A15.a ☐ *%; or*

A15.b £ ☐

Age

3.25 Just as for new cars, ability to meet the "Euro" engine emission standards could be reflected in VED by offering discounts on the basic rates. The case for doing so is, perhaps, less strong than for new cars since the existing cars have, by definition, already been purchased. Nevertheless, a discount could help to encourage people to use newer, cleaner cars.

3.26 The difficulty in introducing such a discount for existing cars is that the emission standard to which a car's engine was built is not currently recorded on the vehicle registration database. The most straightforward way of determining the ability to meet these standards would be by using the date at which the standard became mandatory as a basis on which to set environmental performance discounts. For example:

Example 3: Discount structure for meeting EU engine emission standards

Standard	Date of first registration	Discount
"Historic"	pre-1.1.1973	100%
pre-Euro-I	1.1.1973 – 30.6.1992	0%
Euro-I	1.7.1992 – 31.12.1995	X%
Euro-II	1.1.1996 – 31.12.1999	Y%

Q16. Should age (ie, date of first registration) of vehicle be a factor in determining VED rates ***for existing cars?***

A16.a Yes ❑

A16.b No ❑ *(tick one)*

A16.c Comment,if you wish .....

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3.27 Such a scheme would, of course, be imprecise because:

a. cars that met the standard early would not qualify. Such cars would, however, by definition, be older and, so probably more polluting (since cars tend to become more polluting as they age); and

b. cars which were manufactured to the old standard but sold after the new standard came into force, would qualify. (This effect could be minimised by bringing forward the qualification date by six months, or a year, say.)

More details about the Euro engine standards and the dates at which they came into effect are set out in Annex B, page 23.

Q17. If account should be taken of the age (ie,date of first registration) of vehicle,where should the registration date breakpoints be?

A17.a To determine pre-Euro I standard treatment ☐

A17.b To determine Euro-I standard treatment ☐

A17.c To determine Euro II standard treatment ☐

Q18. What should be the VED discount or supplement for cars qualifying for each type of treatment? (Indicate discount by a negative amount and supplement by a positive amount.)

A18.a Pre-Euro I standard treatment: £ ☐ *or* ☐ %

A18.b Euro I standard treatment: £ ☐ *or* ☐ %

A18.c Euro II standard treatment: £ ☐ *or* ☐ %

4 OTHER ISSUES

4.1 The main focus of this document is the graduation of VED for cars in pursuit of environmental objectives. There is also a range of ancillary and consequential issues on which the Government would also welcome views. These are set out in this section.

ENVIRONMENTAL IMPACT

4.2 Work on appraising the options for VED reform discussed here is continuing. An initial assessment, on which **comments are invited,** is set out in Annex C, page 28.

Q19. Comments are invited on the environmental appraisal set out in Annex C.

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ASSSESSMENT OF COSTS TO BUSINESS

4.3 This document has identified the main options to produce a fairer vehicle excise duty system to protect the environment. As part of the consultation, the Government would like to ensure that the (non-tax) costs to business of compliance with any proposed new systems are identified as fully as possible.

Q20. Describe and quantify any costs of compliance that you envisage.

A20.a First year costs .....

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A20.b Continuing costs .....

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A20.c Please explain .....

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VANS AND OTHER LIGHT GOODS VEHICLES

4.4 There are almost 3 million vans and other light goods vehicles in the current "Private and Light Goods" (PLG) VED class which currently attract the same £150 rate as cars. It is proposed that such vehicles should be treated as cars for VED purposes. Doing so would, however, lead to some variations:

a. There is no CO_2 data available for vans on a model by model basis and there are no current plans to require the testing of new vans to measure CO_2 emissions. However, manufactures could voluntarily test vans to the same procedure as passenger cars, i.e. Directive 93/116. Otherwise new vans could remain subject to the engine capacity regime proposed for existing cars and vans.

b. As shown in Annex B, page 23, the EU engine emission standards for vans and light goods vehicles were effective from different dates, and there are not, as yet, even indicative Euro-IV standards for these vehicles. This means that it would not be possible to offer a Euro-IV engine emission standard incentive.

Q21. Should vans and other light goods vehicles be treated in the same way as cars for VED purposes?

A21.a Yes ❑

A21.b No ❑ *(tick one)*

A21.c Comment,if you wish .....

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HEAVY GOODS VEHICLES AND BUSES/COACHES

4.5 In the March Budget, the Chancellor announced that VED rates for lorries and buses meeting low emissions standards would be reduced by up to £500 from 1 January 1999. He also announced that the system for setting VED rates for lorries would be reviewed to ensure that the environmental impact of lorries is properly reflected in their VED rates. That review is under way.

Q22. Views are invited on options for addressing the environmental performance of heavy goods vehicles and buses/coaches,particularly the smaller categories of these vehicles used more intensively in the urban environment.

A22.a HGVs . . . . . .

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A22.b Buses/coaches . . . . . .

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MOTORCYCLES

4.6 The present VED structure for motorcycles differentiates them by engine capacity, with bands covering up to 150cc (£15), 150-250cc (£40) and over 250cc (£60). These distinctions reflect former learner rider capacity limits (250cc) long since replaced. The learner limit is now 125cc with a maximum power output of 11kW.

4.7 Motorcycles take up little space on the roads, but recent trends have shown increases in the number of large capacity and relatively fuel-inefficient machines. The number of machines in the middle band is only 10% of the total and declining.

4.8 There are currently no plans to collect environmental information from motorcycles, as there is no type-approval process. It will, therefore, be possible to base rates only on engine size. For the time being, it is proposed, therefore, to continue with a banded system, adjusted to reflect changes in the structure of the fleet. A possible structure could be:

Band	Current	Proposed
Low	up to 150 cc	up to 125 cc
Mid	151 cc – 250 cc	126 cc – 400 cc
High	over 250 cc	over 400 cc

Q23. Should a more environmentally-sensitive duty band structure be adopted for motorcycles?

A23.a Yes ☐

A23.b No ☐ *(tick one)*

A23.c Comment,if you wish .....

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ALTERNATIVE FUEL VEHICLES

4.9 Reductions in emissions could be achieved if petrol and diesel-fuelled vehicles were replaced by those using certain alternative means of propulsion. VED incentives for the development of alternative fuels have traditionally concentrated on electric-powered vehicles. Results have not been particularly encouraging. Most electric vehicles are milk floats.

4.10 The Government has favoured the use of road fuel gases (eg, compressed natural gas, liquid petroleum gas) through the fuel duty system and through VED concessions for lorries and buses, and by disregarding conversion costs in income tax system calculations. This is because such fuels produce no particulates or black smoke.

Q24. Should alternative fuel vehicles be treated in the same way as petrol-driven cars for VED purposes or is there a case for discounting the basic VED charge to reflect the benefits to local air quality of such fuels?

A24.a Yes ☐

A24.b No ☐ *(tick one)*

A24.c Comment,if you wish .....

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HISTORIC VEHICLES

4.11 Vehicles made before 1 January 1973 are exempt from VED. As part of the national industrial heritage, the 300,000 vehicles benefiting from this exemption merit separate consideration. While, in principle, the exemption of old vehicles from VED is not strictly compatible with an environmentally based VED system, it is accepted that many vehicles in the "historic" tax class are well-maintained and cover a low annual mileage and they consequently do not make a significant difference to overall pollution levels. It is proposed, therefore, to maintain the current exemption.

ANY OTHER COMMENTS

Q25. Do you have any other comments on the issues raised in this document?

A25 .....

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ANNEX A: MAIN ROAD TRANSPORT POLLUTANTS

CONTRIBUTION OF ROAD TRANSPORT TO AIR POLLUTION

The following table summarises the contribution of road transport to air pollution.

Table 2: Contribution of road transport to UK air pollutant emissions (1996)

	National emissions ('000 tonnes)	Road Transport as % of total	Road transport as % of London emissions (1995)
CO	4,645	71%	97%
NO_2	2,060	47%	75%
PM_{10}	213	24%	78%
Black Smoke	338	58%	94%
SO_2	2,028	2%	23%
VOC	2,111	30%	60%
Benzene	41	64%	82%
1,3 Butadiene	10	77%	97%
Pb	1	66%	N/A

THE MAIN POLLUTANTS AND THEIR EFFECTS

CO – Carbon monoxide reduces the blood's oxygen carrying capacity which can reduce the availability of oxygen to key organs.

NO_x – Nitrogen oxides. Exposure to high NO_x levels can have reversible adverse effects on lung function. Contributes to ozone formation and acidification. An indirect greenhouse gas.

PM_{10} – Particles smaller then 10 microns have the greatest likelihood of reaching the lungs and are associated with a range of respiratory and cardiovascular effects.

Black smoke – a major factor in perceptions of urban pollution.

SO_2 – Sulphur dioxide. Contributes to acidification and exposure can have adverse effects on health. Output from vehicles is small overall – 65% of emissions are from fossil-fuelled power stations – but combustion of diesel fuel makes a significant contribution in urban areas.

VOC – Volatile organic compounds. Contribute to ozone formation. Some kinds of VOCs can also be carcinogens and they are also indirect greenhouse gases.

Benzene – a human carcinogen. The main source in the air is combustion and distribution of petrol.

1,3 Butadiene – also a carcinogen. Formed in the combustion process of diesel and petrol engines.

Pb – Lead. Damages the nervous system, particularly in children.

ANNEX B: EMISSIONS BY FUEL AND ENGINE TYPE

EXHAUST EMISSION STANDARDS

B.1 The tables on the following pages describe the range of EU engine standards for different types of car and light goods vehicle. These determine **limit values,** the maximum amount of each type of pollutant that a vehicle is permitted to produce. (Annex A, starting on page 22, describes the pollutants and their effects.)

B.2 The standards form a family referred to as Euro-I, Euro-II, and so on, that has over time been tightened, as shown in the following table. This shows the emission of each pollutant relative to a pre-Euro I petrol car (diesel car for PM_{10}).

Table 3: Relative engine emissions by fuel and emission standard for a medium-sized car on an urban test cycle

Fuel	Standard	CO_2	CO	HC	NO_x	PM_{10}
Petrol	pre-Euro-1	100	100	100	100	5
Petrol	Euro-1	108	15	9	19	2
Petrol	Euro-11	96	10	4	9	2
Petrol	Euro-111	85	7	3	6	2
Petrol	Euro-IV	75	4	2	3	2
Diesel	pre-Euro-1	85	7	10	43	100
Diesel	Euro-1	85	4	4	29	55
Diesel	Euro-11	80	3	3	21	31
Diesel	Euro-111	75	2	2	13	20
Diesel	Euro-IV	70	2	1	7	10

B.3 The introduction of Euro-I standards effectively required the fitting of closed loop three-way catalytic convertors to all petrol-engined vehicles. This had a dramatic effect on emissions of carbon monoxide and oxides of nitrogen. Euro-II tightened up on the Euro-I standards and could be met by better control of engine parameters and modifications to catalytic convertors. Emissions are even more tightly controlled under the Euro-III and Euro-IV standards than under their predecessors, despite the higher limit values in some cases, because the test procedure is now more demanding. These standards will require advances in catalyst technology, including the introduction of start-up catalysts, electrically heated catalysts and other techniques to reduce the time taken for the catalyst to start working.

B.4 The **"type approval date"** in the following tables is the date from which a new vehicle type must have passed all the relevant requirements and is therefore approved for sale in the EU. Vehicles which have been type-approved before a change in standard can continue to be sold until the **"in use"** date.

CAR EXHAUST EMISSION STANDARDS

B.5 Exhaust emission standards for three different classes of car are set out in the tables below.

Table 4: Cars not exceeding 2½ tonnes unladen (most passenger cars)

Euro Standard	Number of seats	Fuel	Limit values (grammes per kilometre)					Implementation Dates		Directive
			CO	HC	NO_x	HC+NO_x	PM_{10}	Type Approval	In-Use	
Euro 1	up to 6	petrol	2·72	–	–	0·97	–	1 July 1992	31 Dec 1992	91/441
		diesel					0·14			
Euro II		petrol	2·2			0·5	–	1 Jan 1996	1 Jan 1997	94/12
		diesel	1·0			0·7	0·08			
		direct injection diesel				0·9	0·1			
Euro III	up to 9	petrol	2·3	0·2	0·15	–	–	1 Jan 2000	1 Jan 2001	To be agreed
		diesel	0·6	–	0·5	0·56	0·05			
			0·8		0·65	0·72	0·07	1 Jan 2001	1 Jan 2002	
			0·95		0·78	0·86	0·1			
Euro IV		petrol	1·0	0·1	0·08	–	–	1 Jan 2005	1 Jan 2006	
		diesel	0·5	–	0·25	0·3	0·025			

The Euro-III standard provides temporary concessions for diesel cars over 2.0 tonnes laden weight which are off road or have more than 6 seats. Emission limits for such cars of unladen weight between 1,206 kg and 1,660 kg are set out in the first shaded row and the limits for such cars unladen weight over 1,660 kg in the second shaded row. The concessions end on 31 December 2002.

Table 5: Heavy motor car more then 2½ tonnes laden or 7–9 seats, unladen weight 1·151–1·6 tonnes (e.g. the largest limousines and off-roaders)

Euro Standard	Number of seats	Fuel	Limit values (grammes per kilometre)					Implementation Dates		Directive
			CO	HC	NO_x	HC+NO_x	PM	Type Approval	In-Use	
Euro 1	up to 9	petrol	5·2	–	–	1·4	–	1 July 1992	31 Dec 1992	93/59
		diesel					0·19			
Euro II		petrol	4.0			0·6	–	1 Jan 1996	1 Jan 1997	96/69
		diesel	1·3			1·0	0·12			
		direct injection diesel				1·3	0·14			
Euro III		petrol	4·2	0·25	0·18	–	–	1 Jan 2000	1 Jan 2001	To be agreed
		diesel	0·8	–	0·65	0·72	0·07			
Euro IV		petrol	1·9	0·13	0·1	–	–	1 Jan 2006	1 Jan 2007	
		diesel	0·6	–	0·33	0·39	0.04			

B.6 Relatively few cars will be covered by **Table 5** as most cars carry a payload of between 450 and 750 kg, while the lowest payload in the table is 900 kg.

Table 6: Heavy motor car more then 2½ tonnes laden or 7–9 seats, unladen weight over 1·6 tonnes

Euro Standard	Number of seats	Fuel	Limit values (grammes per kilometre)					Implementation Dates		Directive
			CO	HC	NO_x	HC+NO_x	PM_{10}	Type Approval	In-Use	
Euro 1	up to 9	petrol	6·9	–	–	1·7	–	1 July 1992	31 Dec 1992	93/59
		diesel					0·3			
Euro II		petrol	5			0·7	–	1 Jan 1996	1 Jan 1997	96/69
		diesel	1·5			1·2	0·17			
		direct injection diesel				1·6	0·2			
Euro III		petrol	5·2	0·29	0·21	–	–	1 Jan 2000	1 Jan 2001	To be agreed
		diesel	1·0	–	0·78	0·86	0·1			
Euro IV		petrol	2·3	0·16	0·11	–	–	1 Jan 2006	1 Jan 2007	
		diesel	0·7	–	0·39	0·46	·06			

LIGHT COMMERCIAL VEHICLE EXHAUST EMISSION STANDARDS

B.7 Light commercial vehicles are divided into three classes for the purpose of setting EU emission standards. These are set out in the following table. Class 1 vans are, in general, car derived. Classes 2 and 3 are purpose built (eg, transits).

Table 7: Light commercial vehicle classes

Class	Unladen Weight		Laden Weight
	Euro-1	Euro-II and -III	
Class 1	up to 1,150 kg	up to 1,205 kg	up to 3,500 kg
Class 2	between 1,151 kg and 1600 kg	between 1,206 kg and 1,760 kg	
Class 3	over 1,600 kg	over 1,760 kg	

Table 8: Class 1 light commercial vehicle exhaust standards

Euro Standard	Fuel	Limit values (grammes per kilometre)					Implementation Dates		Directive
		CO	HC	NO_x	HC+NO_x	PM	Type Approval	In-Use	
Euro I	petrol	2·72	–	–	0·97	–	1 Oct 1993	1 Oct 1994	93/59
	diesel					0·14			
Euro II	petrol	2·2	–	–	0·5	–	1 Jan 1997	1 Oct 1997	96/69
	diesel	1·0			0·7	0·08			
	direct injection diesel				0·9	0·1			
Euro III	petrol	2·3	0·2	0·15	–	–	1 Jan 2000	1 Jan 2001	To be agreed
	diesel	0·6	–	0·5	0·56	0·05			
Euro IV	petrol	1·0	0·1	0·08	–	–	1 Jan 2005	1 Jan 2006	
	diesel	0·5	–	0·25	0·3	0·025			

Table 9: Class 2 light commercial vehicle exhaust standards

Euro Standard	Fuel	Limit values (grammes per kilometre)					Implementation Dates		Directive
		CO	HC	NO_x	HC+NO_x	PM	Type Approval	In-Use	
Euro I	petrol	5·17	–	–	1·4	–	1 Oct 1993	1 Oct 1994	93/59
	diesel					0·19			
Euro II	petrol	4·0	–	–	0·6	–	1 Jan 1998	1 Oct 1998	96/69
	diesel				1·0	0·12			
	direct injection diesel	1·25			1·3	0·14			
Euro III	petrol	4·17	0·25	0·18	–	–	1 Jan 2001	1 Jan 2002	To be agreed
	diesel	0·8	–	0·65	0·72	0·07			
Euro IV	petrol	1·85	0·13	0·1	–	–	1 Jan 2006	1 Jan 2007	
	diesel	0·63	–	0·33	0·39	0·04			

Table 10: Class 3 light commercial vehicle exhaust standards

Euro Standard	Fuel	Limit values (grammes per kilometre)					Implementation Dates		Directive
		CO	HC	NO_x	HC+NO_x	PM	Type Approval	In-Use	
Euro I	petrol	6·9	–	–	1·7	–	1 Oct 1993	1 Oct 1994	93/59
	diesel					0·25			
Euro II	petrol	5·0	–	–	0·7	–	1 Jan 1998	1 Oct 1998	96/69
	diesel				1·2	0·17			
	direct injection diesel	1·5			1·6	0·2			
Euro III	petrol	5·22	0·29	0·21	–	–	1 Jan 2001	1 Jan 2002	To be agreed
	diesel	0·95	–	0·78	0·86	0·1			
Euro IV	petrol	2·27	0·16	0·11	–	–	1 Jan 2006	1 Jan 2007	
	diesel	0·74	–	0·39	0·46	0·06			

MOTORCYCLE AND MOPED EXHAUST EMISSION STANDARDS

B.8 There are no UK emission standards for mopeds and motorcycles until 17/6/99, whereupon the following limits become effective:

Table 11: Emissions Limits for Motorcycles and Mopeds

Type	Number of wheels	Limit values (grammes per kilometre) CO	HC	NO_x	HC + NO_x	Implementation date	Directive
Moped	2	6	–	–	3	17/6/1999	97/24
	3	12	–	–	6	17/6/1999	
	2	1	–	–	1·2	17/6/2002	
	3	3·5	–	–	2·4	17/6/2002	
two stroke motorcycle	2	8	4·4	0·1	–	17/6/1999	
	3 and 4	12	6	0·15	–	17/6/1999	
four stroke motorcycle	2	13	3	0·3	–	17/6/1999	
	3 and 4	19·5	4·5	4·5	–	17/6/1999	

Mopeds are less than 250 kg unladen, otherwise they are classified as motorcycles. Motorcycles are less than 410 kg unladen, otherwise they are classified as motor cars.

ANNEX C: ENVIRONMENTAL APPRAISAL

C.1 The main objective of reforming the Vehicle Excise Duty system is to introduce a fairer, more environmentally sensitive system to encourage smaller, more fuel efficient and cleaner vehicles.

C.2 It is expected that the new system of VED will help to meet the reduction in fuel consumption of new vehicles required under the EU strategy to reduce carbon dioxide emissions from new cars, and the early meeting of stringent forthcoming EU engine emissions standards.

C.3 The Government expects that the VED options discussed in this document will share the following effects. The scale of the effects may, however, differ between some of the options:

a. encourage people buying new or second-hand cars to choose cleaner, smaller and more fuel efficient cars;

b. encourage early scrappage and replacement decisions by making the cost of running a new, cleaner car lower than an old, dirty car;

c. encourage car manufacturers to improve fuel efficiency and reduce exhaust emissions from new cars.

C.4 The reform of Vehicle Excise Duty will complement the measures recently outlined in the Integrated Transport White Paper, *A New Deal for Transport: better for everyone*. Reform will send another signal to motorists and manufacturers that they should think about the environmental impact of their motoring choices. The Government considers that the existence of several signals helps to reinforce behavioural changes, and so the impact of the VED reforms may well be greater than those described here.

C.5 A preliminary environmental appraisal of VED reform is presented below. The environmental problems associated with vehicle emissions were discussed in the main body of the consultation document, as well as in Annex A, page 22.

Environment effect	Possible causes	Likely scale
emissions of carbon dioxide	i. improvement in fuel efficiency ii. change in fuel choice iii. change in cost of motoring iv. change in congestion levels v. change in patterns of vehicle production	reform likely to reduce emissions of carbon dioxide.
emissions of regulated pollutants, such as particulates (PM_{10}) and oxides of nitrogen (NO_x)	i. change in fuel choice ii. early achievement of EURO IV standards iii. change in cost of motoring iv. change in congestion	early achievement of EURO IV and any shift away from diesel will reduce emissions of PM10 and NO_x.
volume of recyclate	i. change in scrappage rates	volume of recyclate likely to increase.
road track damage	i. change in average car size ii. change in cost of motoring iii. change in congestion	shift to smaller cars should reduce road track damage.
noise	i. change in car size ii. change in fuel choice	effects likely to be minimal.
safety and accidents	i. change in car size ii. change in congestion	shift to smaller cars may lead to reduction in fatalities from motoring accidents.
resource and energy use by car manufacturers	i. change in car size	small cars use less resources and energy to produce.

ANNEX D: RESPONSE FORM

RESPONDING

This Annex is a response form which we would like you to use to give us your answers to the questions to be found in the main body of the document. ***It would greatly ease the analysis of responses if you used this form*** and returned it to the Driver and Vehicle Licensing Agency **by 31 January 1999:**

ENVIRONMENTAL VED CONSULTATION
B1
DVLA
Longview Road
Swansea
SA6 7JL

You can also reply by email to

vehpol.dvla@gtnet.gov.uk

or, better still, over the internet using the electronic version of this document at

http://www.open.gov.uk/dvla/dvla.htm

Please note that

a. ***although responses to this document will be considered carefully, responses will not be acknowledged individually;***

b. ***responses,and the names of respondents, may be quoted and made available to the public. You can, however, indicate on the form (Q1) that you do not wish this information to be made available in this way.***

VED CONSULTATION RESPONSE FORM

YOUR PARTICULARS

Your **name**
The **organisation** that you represent (if any)
Your **address**
Your **telephone** number (if you wish)
Your **fax** number (if you wish)
Your **email** address (if you wish)

YOUR RESPONSES

Responses

Q1. Are you prepared to allow your response or name to be quoted, or made available to the public?

A1.a *Yes* ☐

A1.b *No* ☐ *(tick one)*

THE PROPOSED SYSTEM

For new cars

VED graduation based upon rate of emission of carbon dioxide (in terms of grammes of CO_2 emitted per km driven).

Q2. Should CO_2 emission rate (grammes of CO_2 per km) be used as the basis for VED for **new cars?**

A2.a Yes ☐

A2.b No ☐ *(tick one)*

Q3. If VED for **new cars** should **not** be based on CO_2 emissions rate (ie, you answered "no" to the previous question), on what should VED for new cars be based?

A3.a Engine capacity ☐

A3.b Euro engine emission standard ☐

A3.c Other (specify) .....

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Q4. As a matter of principle, should VED for **new cars** be charged on the basis of a continuous scale (ie, X pence per gramme of CO_2 per km), or should there be emission rate bands?

A4.a Continuous ☐

A4.b Banded ☐ *(tick one)*

A4.c Comment,if you wish .....

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Q5. And if there should be bands, how many should there be and where should the breakpoints between the bands be?

A5.a There should be ☐ *bands*

A5.b First breakpoint should be at ☐ *grammes of CO_2 per km (eg, 150 in Example 1)*

A5.c Second breakpoint (if any) should be at ☐ *grammes of CO_2 per km (eg, 170 in Example 1)*

A5.d Third breakpoint (if any) should be at ☐ *grammes of CO_2 per km (eg, 200 in Example 1)*

A5.e Other breakpoints,if any: ☐ ☐

Taking into account other factors

Q6. Should there be a VED supplement for **new diesel cars** over new petrol cars, to reflect their more damaging impact on local air quality?

A6.a *Yes* ☐

A6.b *No* ☐ *(tick one)*

A6.c *Comment,if you wish* .....

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Q7. If so, how much should it be (either as a percentage or as a fixed amount)?

A7.a ☐ *%; or*

A7.b £ ☐

Q8. Should the ability to meet regulated pollution standards be reflected in the VED rate for **new cars?**

A8.a *Yes* ☐

A8.b *No* ☐ *(tick one)*

A8.c *Comment, if you wish* .....

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Q9. If so, what should be the benefit for cars meeting the

A9.a *Euro II standard:* £ ☐ *or* ☐ *%*

A9.b *Euro III standard:*£ ☐ *or* ☐ *%*

A9.c *Euro IV standard:* £ ☐ *or* ☐ *%*

For existing cars

VED graduation based upon engine capacity (cc)

Q10. Should VED for **existing cars** be based on engine capacity?

A10.a *Yes* ☐ *(and skip to Q12)*

A10.b *No* ☐ *(tick one)*

A10.c *Comment, if you wish* .....

.....

Q11. If VED for **existing cars** should **not** be based on engine capacity (ie, you answered "no" to the previous question), on what should VED for existing cars be based?

A11.a *Age of vehicle* ☐

A11.b *Fuel type used* ☐

A11.c *Other (specify)* .....

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Q12. If VED for **existing cars** should be based on engine capacity, should the amount be based on a rate per 100cc (a **continuous** approach), or should there be rate **bands?**

A12.a *Continuous* ☐

A12.b *Bands* ☐ *(tick one)*

A12.c *Comment,if you wish* .....

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Q13. If there should be rate bands, how many bands should there be and where should the breakpoints be?

A13.a *There should be* ☐ *bands*

A13.b *First breakpoint should be at* ☐ *cc (eg,1,250 in Example 2)*

A13.c *Second breakpoint (if any) should be at* ☐ *cc (eg, 1,600 in Example 2)*

A13.d *Third breakpoint (if any) should be at* ☐ *cc (eg, 2,000 in Example 2)*

A13.e *Other breakpoints,if any:* ☐ ☐

Taking into account other factors

Q14. Should **existing diesel cars** be treated differently from existing petrol cars for VED purposes?

A14.a *Yes* ☐

A14.b *No* ☐ *(tick one)*

A14.c *Comment,if you wish* .....

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Q15. If differently, what VED supplement should be charged?

A15.a ☐ *%;or*

A15.b £ ☐

Q16. Should age (ie, date of first registration) of vehicle be a factor in determining VED rates for **existing cars?**

A16.a *Yes* ☐

A16.b *No* ☐ *(tick one)*

A16.c *Comment,if you wish* .....

.....

Q17. If account should be taken of the age (ie, date of first registration) of vehicle, where should the registration date breakpoints be?

A17.a *To determine pre-Euro I standard treatment:* ☐

A17.b *To determine Euro I standard treatment:* ☐

A17.c *To determine Euro II standard treatment:* ☐

Q18. What should be the VED discount or supplement for cars qualifying for each type of treatment? (Indicate discount by a negative amount and supplement by a positive amount.)

A18.a *Pre-Euro I standard treatment:* £ ☐ *or* ☐ %

A18.b *Euro I standard treatment:* £ ☐ *or* ☐ %

A18.c *Euro II standard treatment:* £ ☐ *or* ☐ %

OTHER ISSUES

Environmental impact

Q19. Comments are invited on the environmental appraisal set out in Annex C.

A19 .....

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Assessment of costs to business

Q20. Describe and quantify any costs of compliance that you envisage.

A20.a *First year costs* . . . . . .

A20.b *Continuing costs* . . . . . .

A20.c *Please explain* . . . . . .

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Vans and other light goods vehicles

Q21. Should vans and other light goods vehicles be treated in the same way as cars for VED purposes?

A21.a *Yes* ☐

A21.b *No* ☐ *(tick one)*

A21.c *Comment,if you wish* . . . . . .

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Heavy goods vehicles and buses/coaches

Q22. Views are invited on options for addressing the environmental performance of heavy goods vehicles and buses/coaches, particularly the smaller categories of these vehicles used more intensively in the urban environment.

A22.a *HGVs* . . . . . .

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A22.b *Buses/coaches* . . . . . .

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Motorcycles

Q23. Should a more environmentally-sensitive duty band structure be adopted for motorcycles?

A23.a *Yes* ☐

A23.b *No* ☐ *(tick one)*

A23.c *Comment,if you wish* .....

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Alternative fuel vehicles

Q24. Should alternative fuel vehicles be treated in the same way as petrol-driven cars for VED purposes or is there a case for discounting the basic VED charge to reflect the benefits to local air quality of such fuels?

A24.a *Yes* ☐

A24.b *No* ☐ *(tick one)*

A24.c *Comment,if you wish* .....

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Any other comments

Q25. Do you have any other comments on the issues raised in this document?

A25 .....

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