EXPLANATORY MEMORANDUM TO
THE ROAD VEHICLES (CONSTRUCTION AND USE) AND MOTOR VEHICLES (TYPE APPROVAL FOR GOODS VEHICLES) (GREAT BRITAIN) (AMENDMENT) REGULATIONS 2006

2006 No. 2565

1. This explanatory memorandum has been prepared by the Department for Transport and is laid before Parliament by Command of Her Majesty.

2. Description

These Regulations amend Regulation 61A and Schedule 7XA of the Road Vehicles (Construction and Use) Regulations 1986 ("the 1986 Regulations") and the Motor Vehicles (Type Approval for Goods Vehicles) (Great Britain) Regulations 1982 ("the 1982 Regulations"), to implement three community Directives and make drafting changes and adjustments to the emissions regulatory scheme

3. Matters of special interest to the Joint Committee on Statutory Instruments

None

4. Legislative Background

4.1 Directive 88/77/EC, as amended, provides the main emissions requirements for heavy diesel vehicles. It has been recast, and will be replaced by Directive 2005/55/EC. This latter directive is implemented and amended by Directives 2005/78/EC and 2006/51/EC. These Directives are all part of the EC Framework on vehicle type approval, established by Directive 70/156/EEC.

4.2 Section 41 of the Road Traffic Act 1988 gives the Secretary of State the power to make Regulations on the construction and use of vehicles, of which the 1986 Regulations are an example. Sections 54 to 66, under which the 1982 Regulations were made, give him the power to establish a scheme for vehicle type approval.

4.3. Regulation 61A of the 1986 Regulations prescribes emissions standards for road vehicles first used on or after 1 January 2001. Vehicles are required to comply with design, construction, and equipment requirements and limit values related to their emissions of certain pollutants as specified in European Directives included in the Table in the Regulation. The directives are broadly of two types: those applicable to light vehicles such as cars and light vans (directive 70/220/EEC and its amendments) and those applicable to heavy diesel engined vehicle such as lorries and buses (directive 88/77/EEC and its amendments).

4.4 Regulation 61A(7) of and Schedule 7XA to the 1986 Regulations exempt certain vehicles entering into service from compliance with emissions standards prescribed in regulation 61A, to allow a manufacturer's end of series production vehicles to continue to enter service for up to 12 months after the date prescribed in the Directive concerned.

4.5 In exempting end-of-series vehicles, the 1986 Regulations refer to Regulations on the type approval of vehicles. These latter Regulations are the instruments that provide that the vehicles' Certificates of Conformity, which certify that vehicles conform to type approval requirements, continue to remain valid after the introduction of new type approval requirements. The provisions referred to in Regulation 61A and Schedule 7XA are:

Schedule 1C to the 1982 Regulations and Schedule 1C to the Motor Vehicle (Type Approval) (Great Britain) Regulations 1984.

5. Extent

This instrument extends to Great Britain.

6. European Convention on Human Rights

As **t**he instrument is subject to negative resolution procedure and does not amend primary legislation, no statement is required.

7. Policy background

7.1 The introduction of directives 2005/55/EC and 2005/78/EC is part of a reshuffle of the EU regulatory scheme for vehicle environmental and safety standards. In the new scheme, a "split level" approach is being adopted. The fundamental provisions are adopted by co-decision, while the technical measures necessary to implement them are adopted through Commission directives. Directive 2005/55/EC of the European Parliament and of the Council contains the fundamental provisions regarding heavy diesel emissions. It will replace Directive 88/77/EC. Commission Directive 2005/78/EC will be the first "second level" directive implementing the technical measures. Directive 2006/51/EC further amends Directives 2005/55/EC and 2005/78/EC.

7.2 The amending Regulations implement these three directives as far as the construction and use of vehicles is concerned. Their requirements, which will have effect from 9 November 2006 for heavy vehicles entering service, complement existing requirements by prescribing standards to ensure that a vehicle's emissions performance does not deteriorate while in service.

7.3 The amending regulations also make changes to the end-of-series provisions in the 1986 and 1982 Regulations, to ensure that:

i) when a directive in the Table in regulation 61A contains more than one Stage of emissions requirements, a vehicle is exempted from the requirements of one Stage and one Stage only (a Stage is a period during which a particular set of requirements is in force; generally, when a new Stage enters into force, that means the requirements are tightened), and must comply with the emissions requirements in force immediately before the new requirements from which the vehicle is exempt came into effect;

ii) the position of passenger cars which are similarly exempted under separate EC Whole Vehicle Type Approval Regulations is regularised;

iii) end-of-series exemptions granted in other Member States or Northern Ireland are recognised in Great Britain.

7.4 The amending regulations also align the calculation of the maximum number of vehicles that can enter into service through the end-of-series domestic provisions with that of Directive 70/156/EEC, as indicated in paragraph 8.3 below.

7.5. A consultation on the draft regulations and associated Regulatory Impact Assessment started on 18 May 2006 and ended on 10 August 2006. A supplementary

consultation on directive 2006/51/EC commenced on 11 July 2006 and ended on 10 August 2006.

7.6. 395 organisations were consulted and 19 responded. Of these 13 offered no comments. Most of the responses were concerned with the "end of series" arrangements, and, in particular with the requirements that would apply in relation to the introduction of the forthcoming Euro IV emission standard for heavy vehicles from 1 October 2006. No comments of substance were received on the implementation of the directives. This was not unexpected given the close involvement of manufacturing industry in their development.

7.7. The proposed changes to the end of series requirements were mostly of a relatively minor nature and imposed no new burdens on industry. However consultation responses indicated that some manufacturers had already planned their production on the assumption that more flexibility in calculating the numbers of vehicles entitled to be regarded as "end of series" vehicle would be available than was actually proposed in the regulations. Serious financial consequences for sections of the heavy vehicle manufacturing industry were predicted if the resulting vehicles could not now be registered for road use after 1 October 2006. To meet this situation, after consultation with Industry, the draft Regulations have been amended to provide greater flexibility. This has been achieved by increasing the number of end of series production vehicles permitted to enter service for up to 12 months after the date prescribed in the Directive concerned from 10% of previous year's registrations per manufacturer or 50, whichever is the greater, to 30% or 100.

7.8. A summary of all comments received and the Department's response is at www.dft.gov.uk/roads and vehicles/consultations.

8. Impact

8.1. A Regulatory Impact Assessment, prepared in respect of the requirements introduced by directives 2005/55/EC and 2005/78/EC, is attached to this Memorandum. No impacts are anticipated from directive 2006/51/EC.

8.2. In the UK the end of series changes will impact on 3 manufacturers of heavy-duty vehicles (over 3.5 tonnes) and 3 bus and coach manufacturers The change to the 30% allowance will have a positive impact on these manufacturers, since, in its absence, a greater number of vehicles would have to be pre-registered before 1 October 2006, thereby making them “second- hand” vehicles and significantly reducing their value. No cost to industry is envisaged. The fact that the vehicles of the manufacturers which will benefit already exist and would otherwise have been pre-registered and used means there is no environmental impact.

8.3. There is no impact on the public sector.

9. Contact

Tony Baker at the Department for Transport (tel: 020 7944 2063 or email: tonyt.baker @dft.gsi.gov.uk) can answer any queries regarding the instrument.

Final Regulatory Impact Assessment Implementation of EU Directives 2005/55/EC, 2005/78/EC and 2006/51/EC concerning emission standards for new heavy-duty vehicles into GB law

CONTENTS

1. Title of proposal 6
2. Purpose and intended effect 6
   (a) Objective 6
   (b) Background 6
      (i) The Directives 6
      (ii) Air quality 7
   (c) Rationale for government intervention 8
      (i) Short term health effects 8
      (ii) Long term/chronic health effects 8
      (iii) Emissions 9
      (iv) Concentrations 9
   (d) Main provisions 10
      (i) Format 10
      (ii) Content 10
      (iii) Durability requirements 11
      (iv) On-board diagnostic systems (OBD) 12
      (v) In-use conformity (IUC) requirements 12
   (e) Regulatory instruments 13
3. Simplification Measures & Administrative Burdens 13
4. Consultation 14
   (a) Within government 14
   (b) Public consultation 14
5. Options 14
   (a) Do nothing 14
   (b) Transpose directives other than by regulation 11
   (c) Transpose Directives by regulation 15
6. Costs and benefits 15
   (a) Sectors and groups affected 15
   (b) Benefits 16
      (i) General 16
      (ii) Quantifying the benefits 16
   (c) Costs 17
      (i) Durability requirements 17
      (ii) On-board diagnostic systems 18
      (iii) In-use conformity (IUC) requirements 19
      (iv) Total compliance costs 19

7. Small Firms' Impact Test 20
(a) Vehicle manufacturing.....20
(b) Component/after-market manufacturers.....20
(c) Other businesses, organisations and consumers.....20
8. Competition Assessment 20
9. Enforcement, sanctions and monitoring.....21
10. Implementation and delivery plan 21
11. Post-implementation review.....18
12. Summary costs and benefits table.....22
13. Summary and recommendation……20
14. Ministerial declaration…….20
15. Contact point……20
ANNEX A - NOx and PM emissions from road transport sources ……..24

REGULATORY IMPACT ASSESSMENT

1. Title of proposal

Amendment to the Road Vehicles (Construction and Use) Regulations 1986 in order to implement into GB law European Parliament & Council Directive 2005/55/EC and Commission Directives 2005/78/EC and 2006/51/EC relating to measures to be taken against air pollution by emissions from heavy-duty vehicles,

2. Purpose and intended effect

(a) Objective

The Directives aim to ensure that improvements introduced in pollutant emission standards for new heavy-duty vehicles through the application of the Euro III, Euro IV and Euro V standards since 2000 are sustained when these vehicles have entered into service over the course of their useful life of operation. This will be achieved by the introduction of requirements concerning:

- the durability of emission control systems (i.e. a prescribed period of use that is time or distance related over which the emission control systems must keep pollutant emissions below the regulated limit);

- on-board diagnostic (OBD) systems that will monitor the operation of emission control systems and alert the driver if there is likely to be high emissions and store information about faults in computer memory that will aid the diagnostic and repair of emission-related faults, and;

- the testing of in-service heavy-duty vehicles for compliance to the required emission standards over the durability period appropriate for a type of heavy-duty vehicle.

The Directives leave no room for interpretation of the legal requirements concerning durability and OBD but they do allow manufacturers freedom to design appropriate engineering solutions that comply with the various requirements.

Devolution: The Directives will apply throughout the UK.

(b) Background

(i) <u>The Directives</u>

Emission standards for new heavy-duty vehicles (i.e. trucks and buses over 3.5 tonnes gross vehicle weight) are presently defined in Directive 88/77/EEC (as amended) which covers emissions from heavy-duty vehicles. Directive 1999/96/EC, amending 88/77/EEC, introduced the so-called ‘Euro III’, ‘Euro IV’ and ‘Euro V’ emission standards applicable to all new registrations of heavy-duty vehicles from 1 October 2001, 1 October 2006 and 1 October 2009 respectively. The ‘regulated pollutants’ are carbon monoxide, hydrocarbons (HC), oxides of nitrogen (NOx) and mass of particulate matter (PM).

The Articles of Directive 1999/96/EC required the European Commission to bring forward proposals concerning the durability of exhaust aftertreatment technology, on-board diagnostic (OBD) systems and in-use conformity which they did in late 2003 on the basis of proposals for two Directives. These measures will complement the already agreed Euro IV emission limits but due to delays in publication of the final directives will apply from 9 November 2006 for all new registrations of heavy-duty vehicles.

European Parliament & Council Directive 2005/55/EC[1] consolidates and recasts Directive 88/77/EEC, as part of the Commission's work to simplify the Community acquis, and lays down the fundamental elements with respect to durability and OBD (i.e. performance limits). From 9 November 2006, this Directive will replace and repeal Directive 88/77/EEC from the Community acquis. Type-approvals granted against Directive 88/77/EEC will remain valid and no additional burden due to Directive 2005/55/EC is imposed on industry.

Commission Directive 2005/78/EC[2] contains the technical elements necessary to implement the fundamental provisions of Directive 2005/55/EC. Commission Directive 2006/51/EC[3] was needed to clarify certain procedures in these two directives and also provides for certain necessary exemptions from their requirements. In essence, the two Commission Directives are the first amendments to Directive 2005/55/EC and all directives will enter into force on 9 November 2006.

(ii) Air quality

Clean air is an essential ingredient for a good quality of life. European, international (UN-ECE) and national legislation sets legally binding health and ecosystem-based objectives which the UK and other countries have signed up to achieve.

Latest projections, which include already agreed measures (including vehicle emissions standards), predict difficulties in achieving EU legally binding air quality objectives for concentrations of nitrogen dioxide (NO_2) and particles (PM_{10}) in a number of areas in the UK. These are mostly urban areas and busy roads. The objective for ozone (O_3), of which NOx is one of the two main precursors, is also unlikely to be met in a large part of England. 122 Local Authorities (LAs) in Great Britain have declared Air Quality Management Areas (AQMAs) for NO_2 and/or PM_{10} and are implementing air quality action plans to work in pursuit of these objectives. More then 95% of AQMAs declared are due to transport pollution only or where transport plays a major role. It is clear however that more is required in terms of national and/or EU measures, such as tighter Euro-standards, if LAs are to successfully improve air quality in their local areas.

In addition to concentration based objectives, the UK is signed up to a legally binding ceiling on total annual emissions of NOx (1167 kilotonnes to be achieved from 2010 onwards) under the EC National Emission Ceilings Directive. Defra, in conjunction with DTI and DfT, is revising emission projections to 2010 and 2025. There are considerable inherent uncertainties in estimation of future emissions, and for NOx in particular, projected emissions for 2010 are being carefully assessed, as there is a significant risk that the UK will not meet its target. In addition, the National Emission Ceilings Directive is likely to be reviewed in 2005/6. There is likely to be increasing pressure from Europe to

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1 Official Journal of the European Communities, L275, 20.10.2005, p.1.

2 Official Journal of the European Communities, L313, 29.11.2005, p.1.

3 Official Journal of the European Communities, L152, 7.6.2006, p11.

agree further reductions on NOx emissions to reduce the human health effects of NO_2, ozone and particles, and to reduce the environmental effects of nitrogen deposition.

(c) Rationale for government intervention

(i) Short term health effects

Air quality has serious implication for people's health. DoH's Committee on the Medical Effects of Air Pollutants (COMEAP) estimated the number of deaths and hospital admissions for respiratory diseases affected per year (in 1996) by PM_{10}, NO_2 and Ozone. They were:

PM_{10}

Deaths brought forward: 8,100 (GB urban).

Hospital admissions (respiratory) additional or brought forward: 10,500.

NO_2[4]

Hospital admissions (respiratory) additional or brought forward: 8,700.

Ozone[5]

Deaths brought forward: between 700 and 12,500 depending on threshold for health effects.

Hospital admission (respiratory) additional or brought forward: between 500 and 9,900 depending on threshold for heath effects.

The COMEAP has also concluded that PM_{10} may be associated with cardiovascular hospital admissions.

(ii) Long term/chronic health effects

Whilst emissions from transport have decreased substantially since 1996, COMEAP have also said that long-term exposure to air pollutants is likely to damage health. Such effects are not included in the above figures and could substantially increase the magnitude of the health effects of air pollution.

There is evidence from the United States that long term exposure to particulate air pollution is associated with a decrease in life expectancy. In 2001 the COMEAP published a report on the long-term effects of particles on mortality (Department of Health, 2001). COMEAP concluded that it was more likely than not that long-term exposure to particles reduced life expectancy. Hence, since 2001 the Interdepartmental Group on Costs, Benefits and Air Quality (IGCB) has followed the COMEAP

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[4] The reliability of the estimate for NO_2 is very much less certain and ought to be considered with care.

[5] Estimates for O_3 are presented as NO_2 is a precursor for O_3. It should be noted that a large component of O_3 has a transboundary nature. EU wide measures to reduce emissions of precursors, such as Euro standards, would eventually benefit the UK as well. Latest health studies indicate that no threshold might exist for O_3. If this is confirmed the top figure of the range given above will apply.

recommendation and quantifies the long-term mortality effects from reductions in PM_{10} emissions in any benefits assessment[6].

The COMEAP recommendations have recently been updated in an interim statement[7]. This has been taken into account in the updated IGCB methodology used in the recent economic analysis to inform the Air Quality Strategy review consultation[8]. The statement confirmed the effect of long term exposure to particles on life expectancy but considered that the effect was larger than previously thought.

(iii) Emissions

Road transport continues to be a significant contributor to emissions of air pollutants. Latest estimates show that, despite significant improvements in this sector, road transport will still account for some 30% of total UK NOx emissions in 2010, with some 13% of the UK total being attributable to heavy-duty vehicles. For PM_{10}[9] road transport emissions are forecast to be responsible for 13% of total UK emissions in 2010, with heavy-duty vehicles being responsible for 2.5% of the UK total. Furthermore, the contribution of vehicle emissions is even higher in urban areas compared to their contribution to the UK total. Within the road transport sector, the contribution that the different vehicle types make towards NOx and PM_{10} emissions are illustrated in ANNEX A.

There is growing evidence (although not conclusive as yet) that particles finer than PM_{10} (such as $PM_{2.5}$, PM_1 and $PM_{0.1}$) are responsible for the described health effects. The World Health Organisation has recently advised that health guidelines should be set for $PM_{2.5}$ and the Clean Air for Europe (CAFE) process is advising the European Commission that a new objective for $PM_{2.5}$ should be agreed next to existing PM_{10} objectives. If emissions of the finer particles are considered, the contribution of the transport sector in 2000 was 29% of total UK emission of $PM_{2.5}$ (the biggest source in the UK), 35% of total UK emission of PM_1 (by far the biggest source in the UK) and 49% of total UK emission of $PM_{0.1}$ (by far the biggest source in the UK).

(iv) Concentrations

Based on roadside monitoring station data, Table **1** shows the transport sector contribution to ambient concentrations of NO_2 and PM_{10} (rather than emissions) in London. This indicates that with current measures, road transport will still be the largest single contributor to background (and roadside) concentrations of NO_2 in 2010.

Although the UK and EU have agreed concentration-based objectives for all key pollutants, PM_{10} and O_3 are no-threshold pollutants. This means that reducing

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[6] An Economic Analysis to inform the review of the Air Quality Strategy Objectives for Particles, A second report of the IGCB group, DEFRA, September 2001.

[7] Committee on the Medical Effects of Air Pollutants (2006), Quantification of the Effects of Air Pollutants on Health in the UK, Interim Statement, 18th January 2006. Report available at: http://www.advisorybodies.doh.gov.uk/comeap/pdfs/interimlongtermeffects2006.pdf

[8] DEFRA "An Economic Analysis to Inform the Air Quality Strategy Review Consultation. Third Report of the Interdepartmental Group on Costs and Benefits" http://www.defra.gov.uk/environment/airquality/strategy/igcb/index.htm

[9] This figure excludes estimates of PM_{10} from re-suspension, ca. 19 kilotonnes, or 10% of 2001 total PM_{10} from all sources.

concentration of these pollutants below the objectives still delivers significant health benefits. Indeed, all else being equal, the same health benefits that are generated by reducing the concentration of these pollutants by 1ug/m^3 in areas above the objectives would equally be achieved by reducing them by 1ug/m^3 in areas that are already below the objectives.

Table 1

Transport Sector Contributions to ambient concentrations		
	% of total ambient concentration	
	2001	**2010**
NO_2 roadside	85/90%	80%
NO_2 background	65/70%	40/45%
PM_{10} roadside	55/60%	40%
PM_{10} background	20/25%	10/15%

Source: DEFRA

(d) Main provisions

(i) Format

Directives 2005/55/EC and 2005/78/EC are the first to be made as “split Directives”. This arrangement is intended to reduce the complexity of (presently) vehicle environmental proposals subject to the EU co-decision procedure. Council and European Parliament Directive 2005/55/EC includes the political elements, such as the scope of the Directive, the durability and OBD performance parameters and future requirements/reviews, to be agreed under the co-decision procedure. The complimentary technical Commission Directive 2005/78/EC, which has been considered under the comitology process, provides the technical annexes necessary to fulfil the performance requirements agreed through co-decision. Commission Directive 2006/51/EC clarifies and amends both directives.

Directive 2005/55/EC also consolidates the previous mandatory heavy-duty diesel Directives, primarily to reduce the volume of legislation in the Community acquis.

(ii) Content

Directive 1999/96/EC introduced three new stages of successively tighter limits for emissions of carbon monoxide (CO), hydrocarbons (HC), oxides of nitrogen (NOx) and particulates (PM) from heavy duty diesel and gas engines. These stages have effect from 1 October 2000 for ‘Euro III’, 1 October 2005 for ‘Euro IV’ and 1 October 2008 for ‘Euro V’ for manufacturers seeking approval for new engine types and from 1 October 2001, 1 October 2006 and 1 October 2009 respectively for all new heavy-duty vehicles entering service.

To reinforce these measures the Directives require the emissions control systems of heavy vehicles to meet specified "useful life" durability requirements, to incorporate a system of on-board diagnostics (OBD) in order to detect degradation or failure of the emissions control equipment and for emissions performance in-service to be subject to compliance checks.

In addition, Commission Directive 2005/78/EC amends the type-approval test requirements for the sampling and measurement of particulate emissions in order to improve the reliability and repeatability of measuring particulates at the low levels set by the Euro IV and future standards. This has been done on the basis of International Standard ISO 16183 and work done in Geneva, led by the UK, in the Particulate Measuring Programme (PMP).

Directive 2006/51/EC essentially refines the type approval testing procedures set out in the two earlier directives - specifically in the case of how the emission control system operates in respect of control of NOx emissions - and clarifies the mechanism for type approval testing where there were gaps in the directives. The directive also exempts gas engines and vehicles fuelled by gas from certain requirements of the directives in relation to NOx control measures, and exempts military and emergency vehicles from the "torque limit" restrictions in the directives which might otherwise inhibit their operational performance.

(iii) Durability requirements

The Euro IV and Euro V emission standards prescribed in Directive 1999/96/EC will require, for the first time on heavy-duty vehicles, the use of exhaust aftertreatment technology. As was the case with light-duty vehicles it is now appropriate to introduce measures to establish that aftertreatment technology is designed and constructed so as to be able to maintain the control of emissions for a reasonable period of use. Directive 2005/55/EC therefore introduces distance/time requirements that are relevant to the useful life of a heavy-duty vehicle depending on its classification while directive 2005/78/EC details the means of testing heavy-duty vehicles to those distance/time requirements. The durability performance requirements are:

Classification	Durability requirement
Engines to be fitted to vehicles of category N_1 (goods vehicles up to 3.5 tonnes) and M_2 (passenger vehicles with more than 9 seats and up to 5 tonnes)	100,000 km or 5 years
Engines to be fitted to vehicles of category N_2, N_3 with a maximum technically permissible mass not exceeding 16 tonnes and M_3 Class I, Class II and Class A, and Class B with a maximum technically permissible mass not exceeding 7.5 tonnes	200,000 km or 6 years
Engines to be fitted to vehicles of category N_3 with a maximum technically permissible mass exceeding 16 tonnes and M_3, Class III and Class B with a maximum technically permissible mass exceeding 7.5 tonnes	500,000 km or 7years

The requirements take effect from 9 November 2006 for all new heavy-duty vehicles entering service.

Not all heavy-duty engines need be tested for durability. The manufacturer may group engines having similar characteristics that control pollutant emissions into families and thereby reduce the cost and burden of durability development and testing by testing just one engine representing a family of similar engines.

(iv) On-board diagnostic systems (OBD)

The Directives require heavy vehicles to incorporate a system of on-board diagnostics (OBD) that monitor degradation or failure of the emissions control equipment. Similar provisions were introduced for light-duty vehicles from 2001. OBD systems provide early indication to the driver that a fault has occurred in the emissions control system thereby permitting the earliest repair and return to effective emission control.

Provision is also to be made for fault codes that identify the principal emission-related failure to be recorded on an on-board computer and for access to those fault codes to be unrestricted to repairers so as to aid effective diagnosis and repair of faults.

Because of the early state of development of the technology in heavy-duty vehicles a two-stage approach is adopted. These stages are broadly aligned with the introduction of the Euro IV and Euro V emission limits. Stage I OBD is mandatory for new registrations of heavy-duty vehicles from 9 November 2006 and the OBD system is required to monitor the functioning of the engine against fixed threshold limits. Due to the unreliable situation regarding market availability of appropriate sensor technology needed to monitor against fixed threshold limits, an alternative monitoring strategy described as ‘major functional failure’ will be applicable in this first stage for any exhaust aftertreatment system downstream of the engine. Stage II OBD will be mandatory for all new registrations of heavy-duty vehicles from 1 October 2009 and technical development will permit monitoring of the performance of the engine and associated after-treatment systems against fixed threshold limits and also to account for the effect that other vehicle systems may have on the effectiveness of the emission control system. However, the OBD threshold limits applicable for the second stage will be subject to European Commission review based on technical developments.

Article 4 of directive 2005/55/EC lays down the OBD threshold limits for stages I and II, the dates for application of the two stages of OBD and the fundamental requirements for heavy-duty vehicle OBD. Directive 2005/78/EC, as amended by directive 2006/51/EC, provides the technical means of implementing directive 2005/55/EC. Again, not all heavy-duty engines must have their OBD systems tested for proper performance. The manufacturer may group engines having OBD systems and emission control systems with similar characteristics into families and thereby reduce the cost and burden of OBD development and testing by testing just one engine representing a family of similar engines.

(v) In-use conformity (IUC) requirements

Procedures for checking that light-duty vehicles continue to deliver good emissions performance "in-service" were introduced in 2001 but similar IUC requirements have not, until now, been developed for heavy-duty vehicles. Directive 2005/55/EC sets the requirement that IUC shall be applied to all new registrations from 9 November 2006 and directive 2005/78/EC as amended by directive 2006/51/EC contains the measures to

carry-out IUC which, in most respects, is similar to the IUC requirements for light-duty vehicles. In demonstrating IUC, manufacturers compile data concerning the emission behaviour of properly maintained and serviced products in-use (including emission tests conducted under laboratory conditions) and the type-approval authority then audits this data. IUC will only be applied to vehicles/engines that are within the distance/time requirements for durability described in the paragraphs above.

Light-duty vehicle IUC requires confirmatory testing of a sample of representative vehicles to a statistical model if the type-approval authority does not accept the audit data. There is presently no similar statistical IUC procedure for the testing of heavy-duty vehicles since such a procedure would be very costly involving the extraction of engines out of heavy-duty vehicles to test them in the same way as engines are tested at the time of type-approval (to compare like-for-like emission levels). However, if the type-approval authority finds that the IUC of the heavy-duty vehicles covered by the manufacturer's audit data is not satisfactory, he will carry out confirmatory testing on a small sample of engines representative of the family. If two or more engines show high emissions, then the manufacturer may face the possibility of taking remedial action.

Again, not all heavy-duty engines must be tested for IUC. The manufacturer may group engines having emission control systems with similar characteristics into families and thereby reduce the cost and burden of IUC testing.

(e) Regulatory instruments

Amendments to "The Motor Vehicles (Type Approval for Goods Vehicles) (Great Britain) Regulations 1982" and to "The Road Vehicles (Construction and Use) Regulations 1986" made under "The Road Traffic Act 1988".

3. Simplification Measures & Administrative Burdens

Demonstration of compliance with emissions requirements for engines intended for use in heavy-duty vehicles is currently conducted as part of the vehicle type-approval process. (Although buses are not as yet subject to whole-vehicle type-approval, they are still required to meet comparable standards and invariably use engines which have been approved through the type-approval process (for fitting to heavy lorries). Manufacturers must submit an engine for emissions testing and approval by the type-approval authority of any of the EU Member States. On successful completion of the testing, the type-approval authority will issue an approval certificate.

In order to obtain Whole Vehicle Type-Approval, the manufacturer must have an emissions approval certificate for the vehicle model (as well as approval certificates for a range of other subjects e.g. braking performance, noise etc). The UK and other Member States enforce compliance with emissions and other type-approval standards by means of a registration check on Certificates of Conformity which are issued to all vehicles manufactured in compliance with a Whole Vehicle Type-Approval. In the UK this check is usually conducted by electronic exchange of data between manufacturers and DVLA but paper certificates are checked where such links are not in place. The new directives would not require any changes to these existing administrative provisions, though the approval for emissions would involve additional checks and provision of information for on-board diagnostic systems, durability and to satisfy in-use compliance requirements.

The Framework Directive defining the Whole Vehicle Type-Approval process is being "recast" and a number of simplification measures have been included as a result of this review. These include: extension of harmonised EC Whole Vehicle Type-Approval to goods vehicles and large passenger vehicles thus facilitating access to the EU market; simplification of the procedures for manufacturers to seek approval of innovative technologies not considered within current requirements; and streamlining procedures for resolving disputes over the validity of approvals. In addition, the recast Directive provides for the greater use of the Comitology procedure to rapidly update technical provisions in response to technical developments.

Directive 2005/55/EC consolidates and repeals the existing vehicle emissions standards Directives (Directive 88/77/EEC and subsequent amendments).This will simplify comprehension and clarity of the requirements and reduce the administrative burden of type-approval somewhat by reducing the number of approvals required. Due to the fact that the proposal consolidates existing requirements, a large proportion of the content of the proposal is simply restating existing requirements. These existing requirements are not discussed in this RIA which focuses solely on the changes to existing requirements introduced by the directives.

4. Consultation

(a) Within government

Colleagues in Defra, DTI and DoH have been consulted on this RIA and draft Regulations and they were also consulted during the discussions at EU level leading to the development and agreement of the measures included in Directives 2005/55/EC, 2005/78/EC and 2006/51/EC. Defra, DTI and DoH officials are content with this RIA.

(b) Public consultation

UK industry and the Society of Motor Manufacturers and Traders (SMMT) and the main European organisations representing motor manufacturers, component and fuel suppliers were all involved in discussions during the development of these directives. Industry is content with the directives having had adequate opportunity to participate and comment. They have known for some time the technical details of the three directives. No concerns of substance were raised by industry or other stakeholders during the public consultation on the regulations to implement the directives into domestic law.

5. Options

(a) Do nothing

This is not a feasible or desirable option since transposition of these **Directives** into UK law is an obligation. Failure to transpose would result in the European Commission initiating infraction proceedings against the United Kingdom.

(b) Transpose directives other than by regulation.

Transposition outside of the type-approval procedure would create confusion and uncertainty for manufacturers and purchasers of these vehicles/engines and potentially

undermine the type-approval system. On the other hand voluntary approvals to the directive standards would not guarantee compliance with the directives' requirements.

(c) Transpose directives by regulation

Transposition of Directives 2005/55/EC, 2005/78/EC and 2006/51/EC by mandatory regulation according to the timetables laid down in those Directives is the only means by which fulfilment of our Community obligations can be assured. The costs and benefits of this option are considered below. Transposition will be accompanied by "end of series" arrangements to facilitate a smooth transfer for industry to the new standards.

6. Costs and benefits

(a) Sectors and groups affected

The industries likely to be affected by the implementation of **the three Directives** are:

- Heavy-duty vehicle and engine manufacturers;

- Manufactures and suppliers of exhaust after-treatment systems;

- Owners and operators of heavy-duty vehicles.

UK manufacturers of heavy-duty vehicles mostly rely upon independent engine manufacturers to supply type-approved engines. This is unlike the light-duty sector, where the emission approval is given to the complete vehicle. It is the engine manufacturer who will obtain the necessary type-approval as to the durability of the emission control systems and OBD systems. The Directives will therefore affect engine manufacturers directly and UK heavy-duty vehicle manufacturers indirectly.

In the UK the Directives will impact on just one manufacturer of heavy-duty engines, 3 manufacturers of heavy-duty vehicles (over 3.5 tonnes) and there are also 3 bus and coach manufacturers who will be indirectly affected as customers for heavy-duty engines.

The Directives will also impact on manufacturers and suppliers of emissions control after-treatment devices and systems, manufacturers and suppliers of vehicle electronic systems, manufacturers of replacement parts, owners and operators of heavy-duty vehicles, the industry associated with the maintenance and repair of heavy-duty vehicles and engines, and manufacturers and suppliers of replacement parts for heavy-duty vehicles and engines.

In terms of new heavy-duty vehicles entering service, 48,400 heavy-duty goods carrying vehicles and 8,400 public transport vehicles were newly registered in the UK in 2003 (Transport Statistics GB 2004). Similar registration figures are likely to be maintained for the next few years.

Race impact - This policy has been assessed for race relevance; a Race Impact Assessment is not required.

(b) Benefits

(i) General

The three Directives will help to ensure that the expected benefits arising from the implementation of Directive1999/96/EC (which set the actual 'Euro' emission limits) are not diluted by degradation or failure of the emission control systems used on heavy-duty vehicles to meet the emission limits established for those vehicles.

The Directives thus form a further element in the process of reducing pollution emissions from road transport, which in turn will help combat the problem of atmospheric pollution. While the air quality benefits accruing from these Directives is small (in comparison with Directive 1999/96/EC which sets the actual tailpipe emission standards), they will provide a technology platform for the development of the more sophisticated OBD systems envisaged for the second stage of OBD from 2009 which offers the potential for an additional and more effective in-service enforcement tool having the potential for greater air quality benefits.

The Directives will also help to maintain the single market in heavy-duty vehicles, benefiting engine, vehicle and component manufacturers.

(ii) Quantifying the benefits

Many of the benefits of reducing air pollution are hard to quantify or value in monetary terms. Preliminary studies into the evaluation of the benefits of reducing emissions for nitrogen dioxide (NO_2) and particles have been undertaken in the context of the UK National Air Quality Strategy (NAQS) as described in the Third report of the Interdepartmental Group on Costs and Benefits.

By providing greater robustness to the Euro IV and Euro V emission standards of directive 1999/96/EC, the measures contained in these Directives will assist in maintaining a heavy-duty vehicle's emissions conformity with those standards and thereby help achieve the UK's air quality targets for NOx (i.e. NO_2) and particulate (PM_{10}) emissions.

For example, modelling conducted as part of the recently completed review of the UK Air Quality Strategy[10] shows that in the case of emissions from heavy-duty vehicles, the measures introduced by directive 1999/96/EC are estimated to result in a reduction in NOx emissions from all heavy-duty vehicles of 128 ktonnes and a reduction in PM_{10} emissions from all heavy-duty vehicles of 5 ktonnes between the years 2001 (when Euro III is mandatory for all new heavy-duty vehicles) to 2010.

Put another way, the contribution of all heavy-duty vehicles to road transport PM_{10} emissions are estimated to fall from 27% in 2001 to 17.7% in 2010 but, over the same period, the contribution of all heavy-duty vehicles to road transport NOx emissions is estimated to increase slightly from 37% in 2001 to 39% in 2010. This modelling includes the effect of other legislative measures applying to cars, light-commercial vehicles and motorcycles coming into effect over the same time period.

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[10] The Air Quality Strategy for England, Scotland, Wales and Northern Ireland. A consultation document on options for further improvements in air quality, April 2006. Consultation and reports available at: http://www.defra.gov.uk/corporate/consult/airqualstrat-review/index.htm

We have no information on how much of this estimated reduction in NOx and PM_{10} emission is directly attributable to the introduction of directive 1999/96/EC against what the market might have delivered anyway. If directive 1999/96/EC had not been introduced some European manufacturers delivering new engines into the US market, where emission standards were lower than those in the EU, may have sold those same engines in the European market to deliver economies of scale. European competitors may or may not have followed their lead, depending on the impact that meeting lower US standards would have on the competitive factor of fuel consumption. This may have produced some air quality benefit but it is unquantifiable.

(c) Costs

As indicated in 5(a) above, a variety of enterprises will be affected by the proposal. The requirements will impose a cost penalty on vehicle and engine manufacturers whilst providing a business opportunity to the specialist system suppliers. Manufacturers are allowed to group engines of similar technical specification and size into 'families' for the purposes of type-approval in order to reduce testing and thereby associated costs. Therefore, some of the cost estimates below are quoted in terms of cost per engine family to reflect this grouping. It is re-stated that the costs imposed on manufacturers of heavy-duty vehicles and heavy-duty engines in complying with the actual Euro IV or Euro V emission limits are significantly greater than the costs of the additional technical measures on OBD, durability and IUC.

(i) Durability requirements

When proposing these Directives the Commission indicated that manufacturers already take care to ensure the reliability of their heavy-duty engines and vehicles and to minimise, as far as possible, operator costs associated with maintenance and replacement of components. The high level of competition in this sector between manufacturers is a strong driver to reduce operating costs.

In addition, most European manufacturers of heavy-duty engines export to the US market where durability demonstration is required. The Directives permits the use of data accumulated during a US durability test to be used for the purposes of EU type-approval so that testing and associated costs can be reduced.

Durability requires manufacturers to lay down the primary maintenance events during periods of up to 500,000 km for the larger vehicles so they don’t impose in the real world shorter maintenance events that can mask the true durability of aftertreatment systems. Hence, operators of heavy-duty vehicles are likely to face an increase in vehicle operating costs due to engine/vehicle manufacturers imposing additional maintenance requirements in order to ensure emissions compliance over the full durability period for any specific type of heavy-duty engine.

The elements of an emission control system likely to be subject to durability concerns are:

Emission control technology	Durability risk
Engine unit	Low
Exhaust gas recirculation (EGR, high and low pressure)	Low

Diesel oxidation catalyst (as a separate unit or part of a combined aftertreatment system)	Medium
Diesel particulate filter	Medium
Lean NOx catalysts (passive and active regeneration strategies)	Medium
Selective Catalytic Reduction (SCR)	Low
NOx adsorber catalyst	High

There are unlikely to be any additional development costs associated with the durability requirements since all manufacturers of heavy-duty engines face similar requirements established in US regulations. The cost of compliance testing necessary for type-approval will be in the order of £10,000 per engine family. This cost is described as negligible on a per engine basis compared to that of meeting the Euro IV and Euro V emission limits.

Assuming a typical family contains 10 engine types having a type-approval valid for 3 years, the cost of durability equates to some £1.50 per engine over that 3 year period and based on the sales figures quoted in section 5(a).

As a consequence, a small increase in net operating costs is anticipated at some £10 per vehicle per annum due to additional maintenance requirements.

(ii) <u>On-board diagnostic systems</u>

The Department obtained preliminary information from industry during the development of the Commission's proposals. This was based on industry experience in California where an OBD system, slightly less stringent than that of Stage I OBD in directive 2005/55/EC was introduced from 2005. The Commission do not expect the cost of adapting existing manufacturer-specific systems for the first stage of OBD to be "extensive" on a per vehicle/engine basis.

This information indicated that the costs of developing OBD systems to a common EU standard would be higher initially than the manufacturer specific system. One manufacturer estimated a cost of £M1.36 [$M2.25] amortised over 3 years for development of an EU OBD system for one vehicle type. EU OBD development work for future engine programmes would require less input, estimated at £600k [$M1] amortised over 3 years for one engine type.

The likely unit cost of providing EU OBD with each new engine is dependant on the engine size and numbers produced, with the cost for the EU OBD unit being thought to be much more significant for small volume production. Examples of estimated technical development costs for EU OBD provided by one manufacturer indicated a cost of approximately £422 [$700] per unit for the largest engines based on a production volume of 800 engines and with cost amortised over a 3-year period. For the smallest engine in their range with a production volume of 6,000 engines, amortised costs per EU OBD unit are estimated at some £94 [$156]. These costs are those which would be incurred in developing the OBD systems and assume that EU OBD largely follow current California OBD requirements. They

are purely development costs. The cost of providing hardware and software for each unit will also need to be taken into account.

The Commission do not expect the cost of adapting existing manufacturer-specific systems for the first stage of OBD to be "extensive" on a per vehicle/engine basis.

Any costs will be made up of those charged by the type approval authority for the additional work involved in approving the OBD equipment plus the internal costs of the manufacturer who will need to buy in the OBD system from specialist suppliers.

Costs for the second OBD stage are more difficult to assess today. Estimates based on experience of implementing OBD for light vehicles suggest a cost of £4,452 [€6 500] per OBD engine family. On a per engine basis the Commission suggests that this cost is low compared to the cost of meeting the 2005/8 emissions limits.

(iii) In-use conformity (IUC) requirements

Vehicle manufacturers will have to present data to the type-approval authority to demonstrate the emissions performance of their products over extensive mileages travelled. Commission Directive 2005/78/EC as amended by Commission Directive 2006/51/EC prescribe the sort of information a manufacturer will have to present to demonstrate conformity.

The costs of IUC include an additional emission testing burden for samples of engines or vehicles by manufacturers, collection and administration of data and the cost of any necessary rectifications in case emissions-related defects are found. However, authorities will also face cost (not passed on to vehicle purchasers) if they decide to conduct IUC (since the EU scheme is not compulsory) and approval authorities may choose not to include those costs in the approval fees charged to applicants for type-approval.

As a basic estimate, the costs to manufacturers of complying with IUC obligations is estimated to be no more than £2 per vehicle or engine based on the sales figures quoted in section 5.

(iv) Total compliance costs

Amortising additional costs over the type-approval validity for a particular heavy-duty vehicle or heavy-duty engine of just 3 years (approvals could well be valid for longer as there is presently 5 years between regulatory emissions stages), the following costs are estimated per heavy-duty vehicle or heavy-duty engine:

Durability testing:	£1.50 per heavy-duty vehicle or heavy-duty engine;
OBD Stage I:	£260 (average) per heavy-duty vehicle or heavy-duty engine;
IUC:	£2 per heavy-duty vehicle or heavy-duty engine.
Total compliance cost:	£263.50 per heavy-duty vehicle (or heavy-duty engine).

Additional operating costs: ..... £10 per heavy-duty vehicle per annum.

Based on an annual registration figure of 56,800 for heavy goods vehicles and public transport vehicles, total annual costs to manufacturers amount to some £15 million with a total additional annual operating cost to purchasers of new vehicles of some £568,000

7. Small Firms' Impact Test

(a) Vehicle manufacturing

Manufacturers of heavy-duty vehicles are all large enterprises or subsidiaries of larger companies. Manufacturers whose worldwide production is less than 500 units per annum will be able to type-approve their product to slightly less stringent requirements.

(b) Component/after-market manufacturers

Medium size businesses are likely to supply the technology to deliver the necessary emission controls. The Directives could therefore be a positive advantage for these bodies.

(c) Other businesses, organisations and consumers

These organisations will be affected by increased vehicle costs where these are passed on by manufacturers and indirectly where these are in turn passed on in the form of higher prices. In-service maintenance costs may be reduced if faults are detected at an early stage through OBD systems.

8. Competition Assessment

The markets affected by the Directives are primarily the UK heavy-duty vehicle market and the market for after-treatment and vehicle electronic systems. The requirements will apply equally to all EU manufacturers selling heavy-duty vehicles in the UK and throughout the European Community, as well as to non-EU manufacturers who wish to market their products in the UK or the European Community. The Directives are not expected to have a major impact on competition despite these markets being dominated by a small number of large manufacturers. Similar requirements will apply in all other EEA Member States.

Within the United Kingdom, the requirements will not affect any racial group disproportionately or have any deleterious effects on human health. Due to their higher exposure to road traffic, members of the public in urban areas may be affected to a greater or lesser extent than those in rural or remote areas.

The cost impact is expected to be similar across all firms and the Directives are unlikely to affect the market structure. The Directives will not create higher costs for new manufacturers than for existing manufacturers, however it should be noted that set up costs in diesel engine manufacturing are high which has tended to discourage new entrants to the market. The heavy-duty vehicle market is not characterised by rapid technological change, changes tending to be in response to legislation. The Directives will not restrict the range of products offered by vehicle manufacturers or by manufacturers of after-treatment and vehicle electronic systems.

9. Enforcement, sanctions and monitoring

Enforcement, sanctions and monitoring will be carried out through the established type-approval process administered by the Vehicle Certification Agency (VCA), by the Driver and Vehicle Licensing Agency via registration checks of vehicles and under the Road Traffic Acts. The VCA would carry out the primary monitoring function, but the Department as part of its ongoing vehicle testing programme for vehicle emission factors will be able to carry out limited random monitoring at no extra cost.

VCA charges manufacturers for its services - which include witnessing of type approval tests and issuing of type approval certificates. Any increases necessary in type approval costs of new engines due to the durability, OBD and in-use conformity requirements are likely to be passed on to vehicle or engine manufacturers, although any increase is likely to be small.

No increases in the costs of annual or roadside inspection of these vehicles by the Vehicle and Operator Services Agency are anticipated and no change in enforcement costs is envisaged for trading standards officers or the police.

10. Implementation and delivery plan

Implementation would be carried out through transposition of Directives 2005/55/EC, 2005/78/EC and 2006/51/EC into the Motor Vehicles (Type Approval for Goods Vehicles) (Great Britain) Regulations 1982 and into the Road Vehicles (Construction and Use) Regulations 1986 made under the Road Traffic Act 1988.

The Department has consulted industry and other stakeholders on the implementation of the three Directives No concerns of substance have been raised by manufacturing industry or other stakeholders on the introduction of the directives' proposals. Industry was aware of the content of the directives and has been making the necessary engineering changes to products in order to comply.

The Vehicle Certification Agency would implement the Directives as part of the mechanism for type-approving new heavy-duty vehicles.

11. Post-implementation review

Post-implementation review is on-going within DfT and with other government departments such as Defra and DTI as part of the government's policy development of further emissions standards applicable to heavy-duty vehicles. **Scenarios for a Euro VI set of emission standards** are being assessed within Defra's review of the Air Quality Srategy and government policy regarding Euro VI will be developed over forthcoming months in order to feed into the debate in the European institutions, based on a Commission proposal for Euro VI expected by mid-2007.

Verification that the **requirements of Directives 2005/55/EC, 2005/78/EC and 2006/51/EC** are being met by heavy-duty vehicles entering into service on the UK's roads would be carried out by the Vehicle Certification Agency and other EU certification agencies by checks on a manufacturer's Conformity of Production (COP) and through the application of the measures in Directive 2005/78/EC as amended by directive

2006/51/EC covering in-use conformity (IUC) checking. IUC would be applied to vehicles type-approved to Directives 2005/55/EC, 2005/78/EC and 2006/51/EC that have covered a resonable amount of mileage in order that the durability of the emission control system can be assessed.

12. Summary - costs and benefits table

Option	Total benefit per annum: economic, environmental, social	Total cost per annum: - economic, environmental, social**;** policy and administrative.
Do nothing	Negative benefit due to the risk that the impact of the Euro IV and Euro V pollutant emissions standards would not be achieved in real-life.	Not addressed but negative environmental costs in terms of increased levels of pollutant emissions from new heavy-duty vehicles due to non-maintenance of emission control system performance.
Implement Directives 2005/55/EC 2005/78/EC, and 2006/51/EC	Maintenance of the EU single market. Contributing to the maintenance of Euro IV and Euro V emissions performance in the real-world. As a result of the **combination** of the Euro IV and Euro V emission standards and Directives 2005/55/EC 20005/78/EC and 2006/51/EC. - achievement of an estimated reduction in NOx emissions from all heavy-duty vehicles of 128 ktonnes and; - achievement of an estimated reduction in PM_{10} emissions from all heavy-duty vehicles of 5 ktonnes, between the years 2001 (when Euro III is mandatory for all new heavy-duty vehicles) and 2010.	An increased cost of up to £263.50 per heavy-duty vehicle (or heavy-duty engine), which equates to a total annual cost to industry of some £15 million. Additional heavy-duty vehicle operating costs of £10 per annum, which equates to a total annual cost to all operators of new vehicles of some £580,000. Nil policy & administrative costs.

13. Summary and recommendation

The transposition of Directives 2005/55/EC, 2005/78/EC and 2006/51/EC is an obligation under EU law. The directives would help to ensure that the emission standards introduced by directive 1999/96/EC would be maintained while heavy vehicles are in service. The costs to manufacturers would be relatively small in comparison to those for meeting the original emission standards while the extra costs to operators would be negligible.

It is therefore recommended that the draft Regulations to transpose the Directives into the Construction and Use Regulations be made.

14. Declaration and publication

I have read the regulatory impact assessment and I am satisfied that the benefits justify the costs.

Signed: Dr Stephen Ladyman

Minister of State for Transport
Department for Transport

Date …..21 September 2006

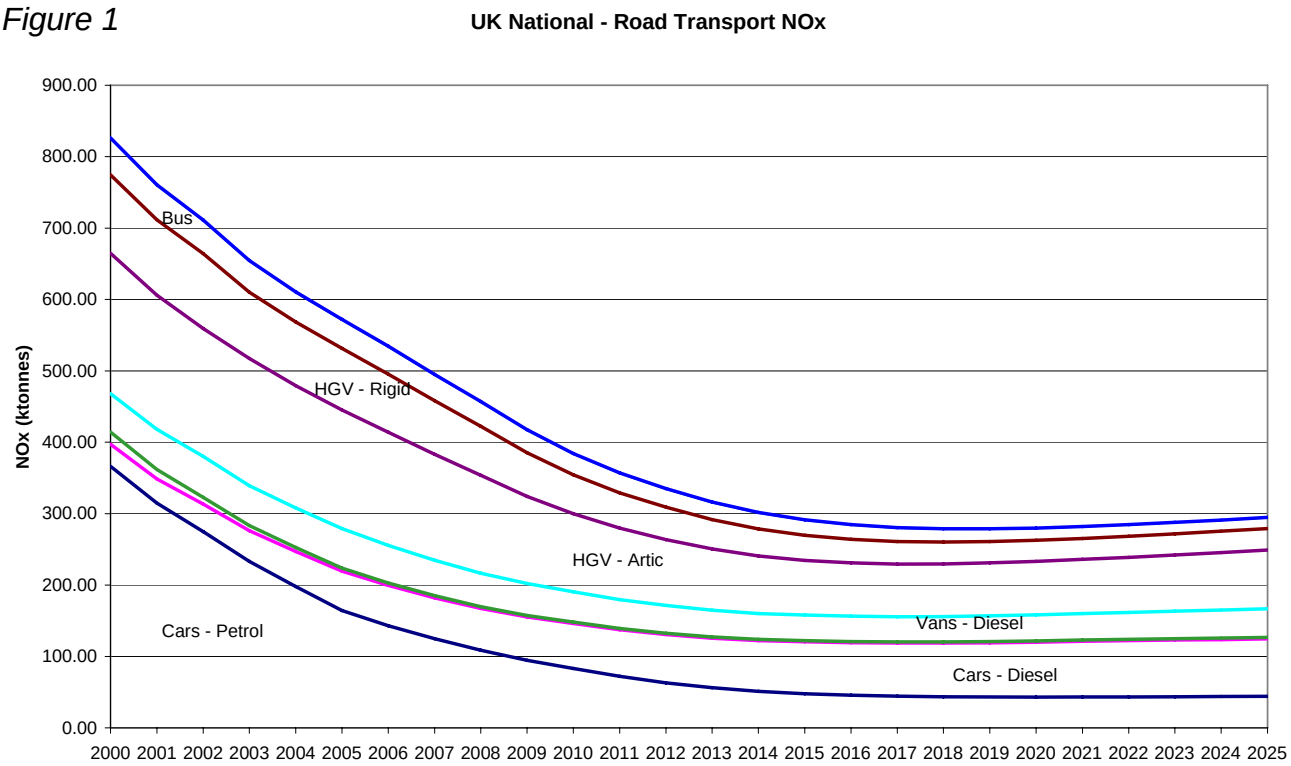
15. DfT contact point:

Tony Baker, CFV4, Zone 2/15, Great Minster House, 76 Marsham Street, London SW1P 4DR (Tel: 020 7944 2063/ Fax: 020 7944 2605; e-mail: TonyT.baker@dft.gsi.gov.uk).

ANNEX A - NOx and PM emissions from road transport sources

NOx - Cumulative emissions from Road Transport Sources

Figure 1



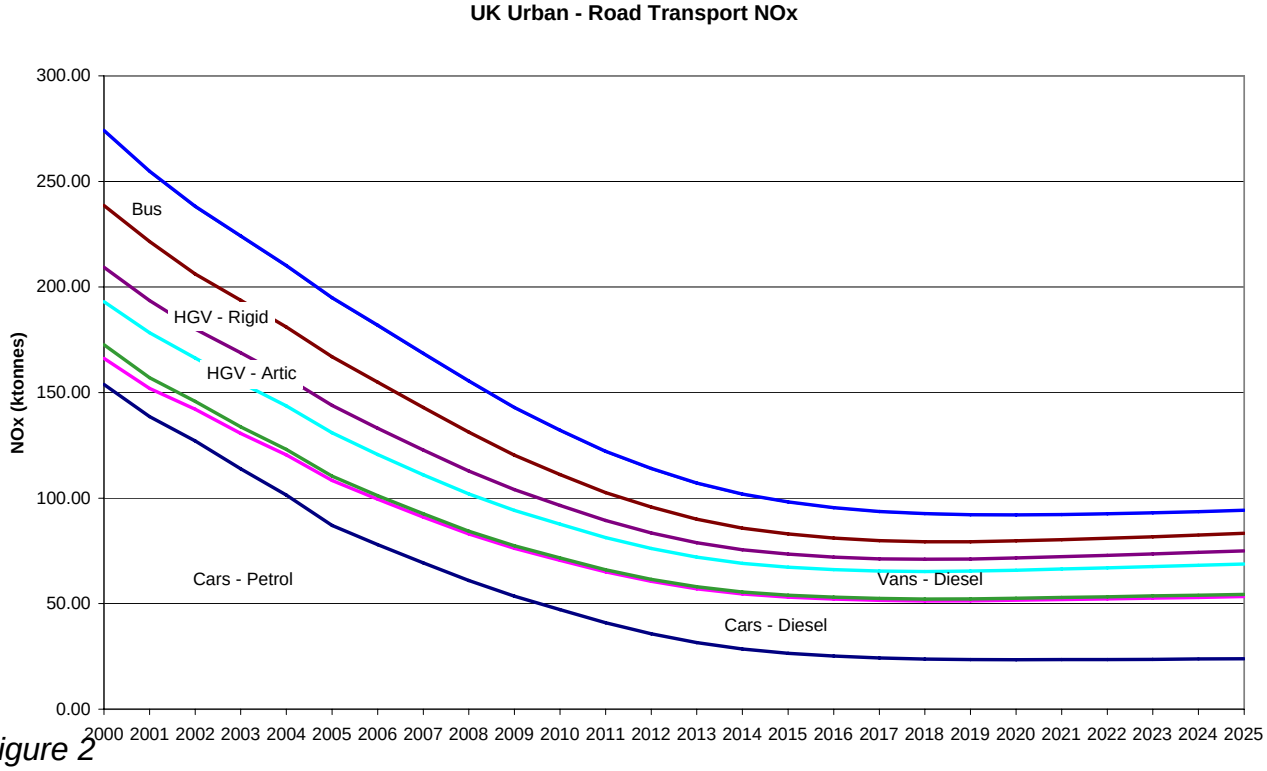


Figure 2

PM_{10} - Cumulative emissions from Road Transport Sources

Figure 3

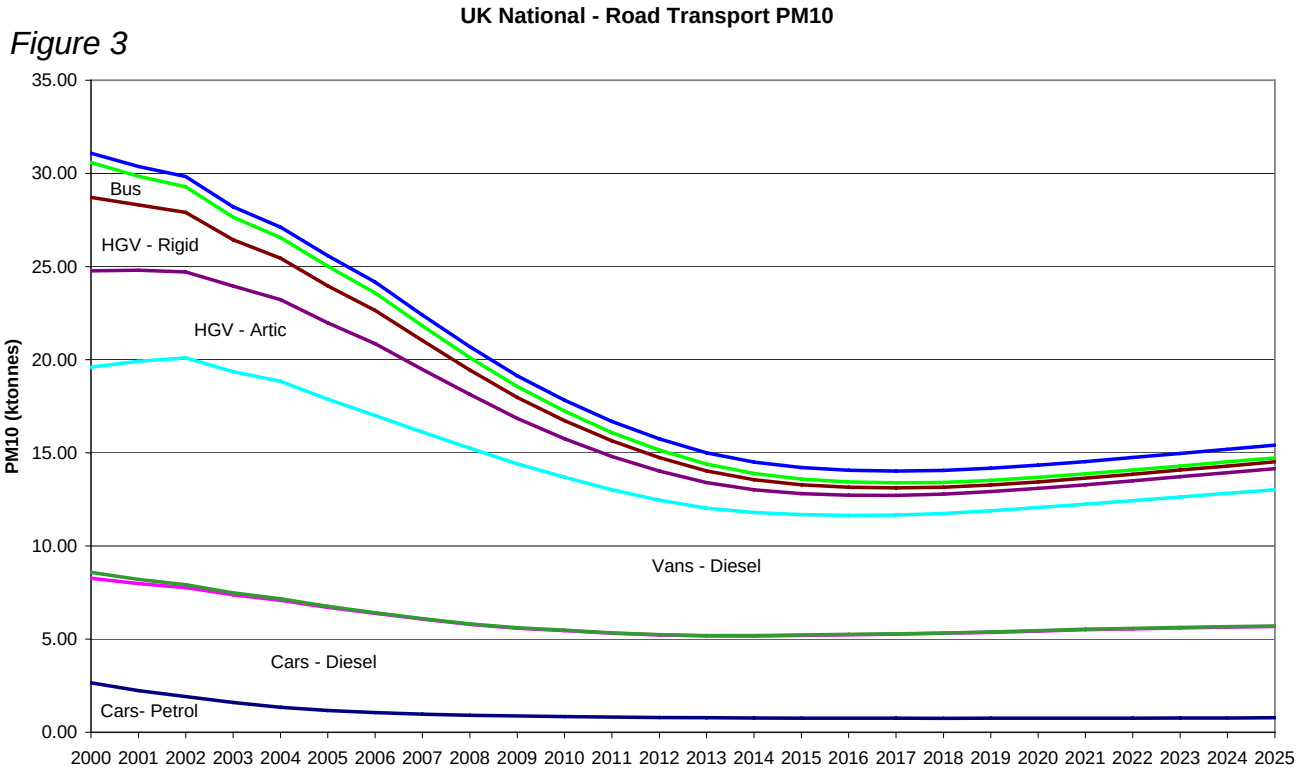
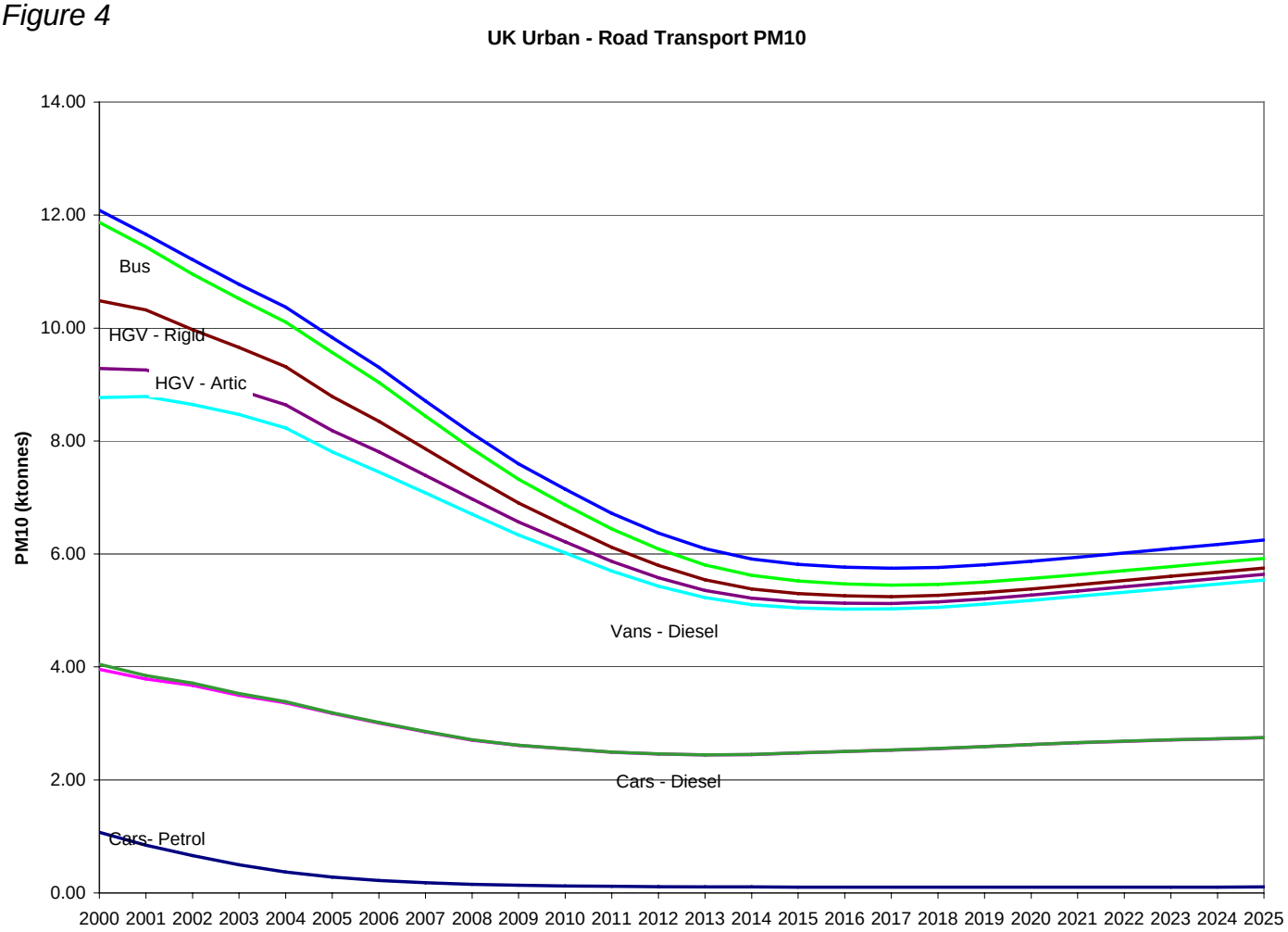


Figure 4



TRANSPOSITION NOTE

DIRECTIVE 2005/55/EC* of 28 September 2005 of the European Parliament and of the Council on the approximation of the laws of the member States relating to the measures to be taken against the emission of gaseous and particulate pollutants from compression-ignition engines for use in vehicles, and the emission of gaseous pollutants from positive-ignition engines fuelled with natural gas or liquefied petroleum gas for use in vehicles			
Article	**Objectives**	**Implementation**	**Responsibility**
Articles 2(2)(b), 2(3)(b) and 2(10), Annexes I to VIII	Consolidate previous requirements to prohibit the sale, entry into service or use of new vehicles using a compression ignition or gas engine and the sale or use of such engines unless certain emission requirements are complied with.	Regulations 4(5), 6(10) and 6(13) of the Road Vehicles (Construction and Use) and Motor Vehicles (Type Approval for Goods Vehicles) (Great Britain) (Amendment) Regulations 2006 insert a reference to the Directive at the appropriate place in regulation 61A of and Schedule 7XA to the Road Vehicles (Construction and Use) Regulations 1986.	The Secretary of State.
Articles 2(6)(b), 2(8)(b) and 2(10), Annexes I to VIII	Require member States to prohibit the sale, entry into service or use of new vehicles and engines of the description referred to above unless certain criteria relating to emissions are met.		
Articles 2(6)(b) 2(8)(b) and 2(10), Articles 3 and 4	Require member States to prohibit the sale, entry into service or use of new vehicles and engines of the description referred to above unless certain criteria relating to the durability of emission control systems and on-board diagnostic systems are met.		

COMMISSION DIRECTIVE 2005/78/EC* of 14 November 2005 implementing Directive 2005/55/EC of the European Parliament and of the Council on the approximation of the laws of the member States relating to the measures to be taken against the emission of gaseous and particulate pollutants from compression-ignition engines for use in vehicles, and the emission of gaseous pollutants from positive-ignition engines fuelled with natural gas or liquefied petroleum gas for use in vehicles and amending Annexes I, II, III, IV and VI thereto			
Article	**Objectives**	**Implementation**	**Responsibility**
Article 1 and Annex I	Amend Annexes I to VI to Directive 2005/55/EC above.	Regulations 4(5), 6(10) and 6(13) of the Road Vehicles (Construction and Use) and Motor Vehicles (Type Approval for Goods Vehicles) (Great Britain) (Amendment) Regulations 2006 insert a reference to the Directive at the appropriate place in regulation 61A of and Schedule 7XA to the Road Vehicles (Construction and Use) Regulations 1986.	The Secretary of State.
Article 2, Annexes II to V	Set out the implementation measures for Articles 3 and 4 of Directive 2005/55/EC above.		

COMMISSION DIRECTIVE 2006/51/EC* of 6 June 2006 amending for the purposes of adapting to technical progress Annex I to Directive 2005/55/EC of the European Parliament and of the Council and Annexes IV and V to Directive 2005/78/EC as regards requirements for the emission control monitoring system for use in vehicles and exemptions for gas engines			
Article	**Objectives**	**Implementation**	**Responsibility**
Article 1 and Annex I	Amend Annex I to Directive 2005/55/EC above.	Regulations 4(5), 6(10) and 6(13) of the Road Vehicles (Construction and Use) and Motor Vehicles (Type Approval for Goods Vehicles) (Great Britain) (Amendment) Regulations 2006 insert a reference to the Directive at the appropriate place in regulation 61A of and Schedule 7XA to the Road Vehicles (Construction and Use) Regulations 1986.	The Secretary of State.
Article 2 Annex II	Amend Annex IV and V to Directive 2005/78/EC above.		

* The Tables above do not relate to the implementation of the Directives in the type approval legislation; this implementation will take place through separate Regulations.