Title: Implementing European Directive 2010/48/EC on roadworthiness tests	Impact Assessment (IA)	
IA No: DfT00147 Lead department or agency: Department for Transport Other departments or agencies: Vehicle and Operator Services Agency	Date: 29/03/2012 Stage: Final	
	Source of intervention: EU Type of measure: Secondary legislation	
	<b>Contact for enquiries:</b> Bob Moran, 020 7944 2388 bob.moran@dft.gsi.gov.uk	
Summary: Intervention and Options	RPC: AMBER	

Cost of Preferred (or more likely) Option					
Total Net Present Value	Business Net Present Value	Net cost to business per year (EANCB on 2009 prices)	In scope of One-In, One-Out?	Measure qualifies as	
£-22.23m	£-20.69m	£2.4m	No		

#### What is the problem under consideration? Why is government intervention necessary?

Everyone who uses a vehicle on the road must keep it in a roadworthy condition. GB regulations prescribe roadworthiness tests for motor vehicles and their trailers specifying items to be tested and the technical requirements to ensure road safety and environmental standards are met. Whilst GB regulations predate the minimum requirements in European law by Directive 2009/40/EC recent amendments adapting the base Directive for technical progress have impacted our national technical inspection schemes for cars, heavy goods and passenger service vehicles.

Government intervention is necessary to ensure that motorists invest the appropriate level of resources in preventative measures to ensure compliance. Without government regulation, motorists would underinvest in preventing pollution and accidents as they do not incur the full social costs associated with these events

#### What are the policy objectives and the intended effects?

The policy objective is to reduce road accidents and pollution by ensuring that road vehicles in operation are properly maintained and scheduled testing to defined procedures checks that road vehicles meet the appropriate road safety and environmental standards. To reflect recent advances in vehicle design and construction our test standards need to be updated to reflect this technical progress and ensure that modern vehicles continue to deliver their safety and environmental benefits in-service.

# What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)

The policy options considered are:

Policy Option 1: Do nothing.

Policy Option 2: Implement new mandatory requirements doing the minimum necessary to be compliant. Policy Option 3: Implement new mandatory requirements doing the minimum necessary to be compliant, whilst removing some non-EU mandated measures to simplify the schemes and offset some new costs.

Policy Option 3 is preferred as this delivers the policy objective whilst simplifying the existing tests, removes an element of EU gold platingand offseting some of the implementation cost of the new measures.

Will the policy be reviewed? It will be reviewed. If applicable, set review date: Month/2017					
Does implementation go beyond minimum EU requirements? No					
Are any of these organisations in scope? If Micros not exempted set out reason in Evidence Base.	Micro No	<b>&lt; 20</b> No	SmallMediumLarNoNoNo		Large No
What is the $CO_2$ equivalent change in greenhouse gas emissions? (Million tonnes $CO_2$ equivalent)			Traded: nil	Non-t nil	raded:

I have read the Impact Assessment and I am satisfied that (a) it represents a fair and reasonable view of the expected costs, benefits and impact of the policy, and (b) that the benefits justify the costs.

Mike Penning Date: 02

02/05/2012

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### Summary: Analysis & Evidence

**BUSINESS ASSESSMENT (Option 1)** 

**Description:** Implement new mandatory requirements doing the minimum necessary to be compliant. **FULL ECONOMIC ASSESSMENT** 

#### Price Base **PV Base** Time Period Net Benefit (Present Value (PV)) (£m) Year 2011 Year 2011 Years 10 Best Estimate: -52.10 Low: 0 High: 0 **Total Transition** COSTS (£m) Average Annual **Total Cost** (Constant Price) Years (excl. Transition) (Constant Price) (Present Value) Low Optional Optional Optional High Optional Optional Optional **Best Estimate** 1 6.3 53.3 Description and scale of key monetised costs by 'main affected groups' The costs arise for businesses delivering roadworthiness tests, since the test duration has increased and additional test equipment is required. There are 38 million tests affected. There are some costs to consumers operating newer diesel vehicles solely in urban areas for a small increase in corrective maintenance of emissions control systems. There are no other additional costs for consumers, as there is no increase to the maximum test fee ceiling. Other key non-monetised costs by 'main affected groups' There are no other additional costs for those groups presenting a vehicle for test, since they would be preparing a vehicle, taking it for testing and paying for a vehicle to be tested. In preparing a vehicle to pass the new test requirements we have assumed that no additional preparation will be required over and above a vehicle driver's responsibility to ensure their vehicle is roadworthy. **Total Transition** Average Annual **Total Benefit** BENEFITS (£m) (Constant Price) Years (excl. Transition) (Constant Price) (Present Value) Low Optional Optional Optional High Optional Optional Optional **Best Estimate** 0 0.1 1.2 Description and scale of key monetised benefits by 'main affected groups' Price base year is 2011 and the appraisal period is 10 years starting in 2011. There are small benefits in reducing emissions of air pollutants. There will be no other additional benefits made from increased vehicle roadworthiness; rather these changes will update existing tests and procedures to maintain the safety levels inherent within modern vehicle design and reduce the future potential for deteriorating standards of roadworthiness Other key non-monetised benefits by 'main affected groups' Key assumptions/sensitivities/risks 3.5 Discount rate (%) The significant non-monetised benefit is from removing the risk of infraction proceedings by the European Commission.

# Direct impact on business (Equivalent Annual) £m:In scope of OIOO?Measure qualifies asCosts: 5.9Benefits: 0Net: -5.9NoNA

### Summary: Analysis & Evidence

FULL ECONOMIC ASSESSMENT

## Policy Option 3

**Description:** Implement new mandatory requriements doing the minimum necessary to be compliant, whilst removing some non-EU mandated measures to simplify the schemes and offset some new costs.

#### Price Base **PV Base** Time Period Net Benefit (Present Value (PV)) (£m) Year 2011 Year 2011 Years 10 Best Estimate: -22.32 Low: 0 High: 0 COSTS (£m) **Total Transition Average Annual Total Cost** Years (Constant Price) (excl. Transition) (Constant Price) (Present Value) Low Optional Optional Optional High Optional Optional Optional **Best Estimate** 1 6.3 53.3 Description and scale of key monetised costs by 'main affected groups' The costs arise for businesses delivering roadworthiness tests, since the test duration has increased and additional test equipment is required. There are 38 million tests affected. There are some costs to consumers operating newer diesel vehicles for a small increase in corrective maintenance. The costs have been offset by removing some non-EU mandated measures for scheme simplification. There are no other additional costs for consumers, as there is no increase to the maximum test fee ceiling. Other key non-monetised costs by 'main affected groups' There are no other additional costs for those groups presenting a vehicle for test, since they would be preparing a vehicle, taking it for testing and paying for a vehicle to be tested. In preparing a vehicle to pass the new test requirements we have assumed that no additional preparation will be required over and above a vehicle driver's responsibility to ensure their vehicle is roadworthy. Average Annual **Total Transition Total Benefit BENEFITS** (£m) (Constant Price) Years (excl. Transition) (Constant Price) (Present Value) Low Optional Optional Optional High Optional Optional Optional **Best Estimate** 0 3.6 31.0 Description and scale of key monetised benefits by 'main affected groups' Price base year is 2011 and the appraisal period is 10 years starting in 2011. There are cost reductions to businesses delivering roadworthiness tests by deletion of some testable items. There are small benefits in reducing emissions of air pollutants. There will be other no additional benefits made from increased vehicle roadworthiness; rather these changes will update existing tests and procedures to maintain the safety levels inherent within modern vehicle design and reduce the future potential for deteriorating standards of roadworthiness. Other key non-monetised benefits by 'main affected groups' Key assumptions/sensitivities/risks 3.5 **Discount rate (%)** The significant non-monetised benefit is from removing the risk of infraction proceedings by the European Commission. **BUSINESS ASSESSMENT (Option 2)**

Direct impact on business (Equivalent Annual) £m:			In scope of OIOO?	Measure qualifies as
Costs: 5.9	Benefits: 3.5	<b>Net: -</b> 2.4	No	NA

## **Evidence Base (for summary sheets)**

#### Problem under consideration

- 1. GB regulations that prescribe the minimum requirements for roadworthiness testing (through periodic technical inspection) of motor vehicles and their trailers predate the minimum requirements now written into European law by Directive 2009/40/EC. Amendments (in Directive 2010/48/EC) to adapt this base Directive for technical progress that impact our cars, heavy goods and passenger service vehicles technical inspection schemes require implementation by 31 December 2011.
- 2. Roadworthiness testing ensures that vehicles meet the required road safety and environmental standards. The changes proposed impact on each of our car, light goods vehicle, truck and bus roadworthiness schemes, but not the schemes for motorcycles, tricycles or quadricycles.

#### **Rationale for intervention**

3. Motorists have individually an incentive to under invest in preventing pollution and accidents as they do not incur the full social costs associated with these events. Hence the need for government regulation to ensure that the appropriate level of resources is invested in preventative measures.

#### **Policy objective**

4. The policy objective is to reduce road accidents and pollution by ensuring road vehicles in operation are properly maintained and scheduled testing to defined procedures checks they meet the appropriate road safety and environmental standards. To reflect recent advances in vehicle design and construction our test standards need to updated to reflect recent technical progress and improving GB roadworthiness testing.

#### **Description of options considered**

5. The policy options considered are:

Option 1: Do nothing.

Option 2: Implement new mandatory requirements doing the minimum necessary to be compliant.

Option 3: Implement new mandatory requirements doing the minimum necessary to be compliant, whilst removing some non-EU mandated measures to simplify the schemes and offset new costs.

#### Monetised / non-monetised costs and benefits of each option (including administrative burden);

- 6. The changes required by this Directive introduce a small number of newly testable items, but mainly refinements and/or adaptations to some test standards and methods to reflect recent technical progress in motor vehicle construction, use and roadworthiness testing. The new items are the wiring and batteries of electronic safety and environmental systems now frequently seen on modern vehicles. The new requirements require these to be the subject of a visual inspection by the tester.
- 7. In addition to the new testable items the Directive introduces a new failure item in respect of exhaust emissions control equipment, namely equipment being absent, modified or obviously defective. This is intended to safeguard the environmental benefits delivered by new vehicle emissions standards. As above testing would be by the existing visual inspection of the exhaust system. For the majority of vehicles no changes are required to existing UK legislation to implement this requirement of the Directive. Long-standing requirements in Regulation 61 and 61A of the Road Vehicles (Construction and Use) Regulation 1986, as amended, make it an offence to use a vehicle on the road if its emissions control equipment has been removed, modified to reduce its effectiveness or is defective. However, such requirements are not yet in place for vehicles meeting the latest new vehicle emissions standards in recent EU Regulations e.g. the Euro 5 & 6 standards for cars and vans. To implement the Directive requirements in UK Regulations need to be extended to cover vehicles meeting these new standards.
- 8. In addition to test harmonisation across EU, the impact of these changes will be to identify sooner than previously some roadworthiness defects that would otherwise not be picked up until the vehicle underwent regular service / maintenance. We do not believe that motorists or operators will face an additional cost burden in any given year as a result of these changes because these changes will not identify defects that would not have been identified and repaired previously.

9. VOSA (Vehicle and Operator Services Agency) has a commitment to ensure that the car, heavy goods and passenger service vehicle inspection manuals are kept up to date, fit for purpose and that the trade are consulted on proposed changes to the roadworthiness schemes and listened to. These changes are therefore part of 'business as usual' for VOSA though the implementation and update project carries a discrete cost.

#### **OPTION 1**

10. There are no direct costs associated with this option. The potential costs of infraction proceedings are presented under 'risks'.

#### **OPTION 2**

- 11. Data on the impact of these changes to the roadworthiness schemes have been provided by VOSA who have completed timing exercises on all of the affected vehicle classes test routines. Once integrated into the test procedure these new requirements are difficult to distinguish from the established routine, so VOSA simulated the new requirements within a controlled environment, rather than making estimates from previous timing exercises or introducing the checks into a test at a 'live' site. This gave the best understanding and greater transparency of any increased burdens.
- 12. Not all of the changes introduced for Class 3 / 4 vehicles are applicable to all vehicles that will be presented for testing. For example, a visual inspection of the airbag malfunction indicator will only apply to those vehicles that have an airbag installed as part of its restraint system. Based upon VOSA data, Table 3 below estimates the number of vehicles presenting for testing expected to be impacted by the changes in each vehicle class. The percentage increase year on year indicated for passenger cars has been based on market intelligence from VOSA. Although only 30% of passenger vehicles would be affected in 2012, VOSA estimate that 100% of the fleet will require this additional testing by 2019.
- 13. Tables 1 and 2 below show the number of MOT tests performed in the last three years, with the resulting number of vehicles passed. The discrepancy between passes and tests performed is due to failed tests. Although there has been some growth in MOT testing in recent years, we have used the 2010 figures to forecast future tests impacted, as VOSA do not expect the number of MOT tests to change dramatically over the next few years. No formal projection of the number of vehicles expected to be eligible for MOT testing is available.

Vehicle Class	Annual MOT test results				
01000	2009/10	2008/09	2007/08		
3/4	26,047,520	25,537,682	24,912,548		
5	49,453	49,583	48,705		
7	563,829	541,307	520,682		

Table 1 Annual MOT tests results by vehicle class

Vehicle Class	Annual MOT test performed					
01400	2009/10	2008/09	2007/08			
3/4	36,612,843	35,716,162	34,498,535			
5	66,630	66,886	64,467			
7	845,510	808,439	770,180			

Table 2 Annual MOT tests performed by vehicle class

	Classes 3 & 4: Cars , vans and passenger vehicles with up to 12 seats		Class 5: Private passenger vehicles with more than 12 seats		Class 7: Goods vehicles between 3,000 & 3,500 kg gross vehicle weight	
	% tests affected	# of tests affected (on 2010 figures)	% tests affected	# of tests affected (on 2010 figures)	% tests affected	# of tests affected (on 2010 figures)
2012	30	10,983,853	100	66,630	100	845,510
2013	40	14,645,137	100	66,630	100	845,510
2014	50	18,306,422	100	66,630	100	845,510
2015	60	21,967,706	100	66,630	100	845,510
2016	70	25,628,990	100	66,630	100	845,510
2017	80	29,290,274	100	66,630	100	845,510
2018	90	32,951,559	100	66,630	100	845,510
2019	100	36,612,843	100	66,630	100	845,510
2020	100	36,612,843	100	66,630	100	845,510
2021	100	36,612,843	100	66,630	100	845,510

Table 3 Number of vehicles impacted by these changes to the MOT over next ten years

- 14. The VOSA determined the amount of time required to incorporate the additional requirements to be relatively small, around 60 seconds across the classes of vehicles affected (cars and light goods 58 seconds; heavy goods 53 seconds; passenger service vehicle 73 seconds). These are (arithmetic mean) average times taken from a 'best case' and 'worst case' timing simulation exercise. The 'worst case' rationale assumes that there is no 'multi-tasking' by the vehicle inspector, that the checks required to be completed on a particular vehicle system are all completed in series and that the tester is fully trained with a working knowledge of the test routine. In practice an experienced tester familiar with the test routine will be far more efficient in terms of test time when inspecting a vehicle and in the 'best case' we have allowed 'multi-tasking' to take place.
- 15. The number of MOT tests performed each year and how they are affected by these changes are shown in the table below. Table 4 shows the cost based on the 2010 level of MOT testing, however as Table 3 above indicates, the full annual cost on Class 3/4 vehicles will only be achieved in 2019 estimates over the full 10 year period have taken account of this 'phasing in'. Across the 10 year assessment period the average annual cost for Class 3/4 is £5.7m in constant price terms, £0.01m in constant price terms for Class 5 vehicles and £0.23m in constant price terms for Class 7 vehicles.

Vehicle Class	MOT tests performed (2010)	Change to each test time	Hourly Rate <sup>1</sup>	Cost £
3/4	36,612,843	+58 seconds	£13.43	£7.92m
5	66,630	+53 seconds	£13.43	£0.01m
7	845,510	+73 seconds	£13.43	£0.23m

Table 4 Labour costs for changes – additions

16. The changes require every Class 3 / 4 test station to purchase two additional pieces of compulsory test equipment. The first is a 13 pin trailer socket test tool, which must be selected from the approved equipment list published by VOSA (<u>http://www.dft.gov.uk/vosa/repository/Section%20O%20-%20Tow%20Bar%20Socket%20Testers.pdf</u>). There are 12 approved products on the list ranging in price from £29 - £200 (inclusive VAT) and should not require specific maintenance. Based on informal consultation with industry, we anticipate the majority of test stations will purchase the cheapest approved product. This is a one-off current price cost occurring in the first year. The second piece of additional equipment is a proprietary leak detection spray which meets BS EN 14291:2004 requirements and is readily available for less than £10. This is necessary to confirm a fuel leak on gas powered vehicles and requires no maintenance other than replacement when the manufacturer's expiry date has been exceeded. We estimate this to be likely every two years and have therefore shown a current price yearly recurring cost of £5.

<sup>&</sup>lt;sup>1</sup> The Hourly Rate is calculated as = £20000 (wage) \* 1.212) / 1804] <u>http://www.dft.gov.uk/webtag/documents/expert/pdf/unit3.12.2c.pdf</u> para 11.4.12]

17. The number of MOT test stations affected by the need to purchase additional equipment are shown in the table below:

Vehicle Class	Number of test stations	% requiring additional equipment	£ Additional Equipment	£ Cost / Item	Total Cost £
3/4 5 7 <sup>2</sup>	} 19,000	100%	1 x 13 pin socket tool 1 x leak detection spray	£29 £5	£0.65m

#### Table 5 Additional equipment needs and costs

- 18. These costs are costs to businesses delivering the tests. Businesses can only charge customers undergoing MOT testing a ceiling value set by VOSA (based on the time taken to perform the test procedure). VOSA have confirmed that this ceiling value will not be affected by these changes and in the absence of robust data to the contrary we have assumed that the test fees paid are equivalent to the ceiling value, which means that the entire cost falls on businesses. However, although there is no formal evidence on which to alter our assumptions, there is a risk that if businesses were more efficient than VOSA assumed and were previously charging under the ceiling value, then there may be some scope to increase the test fees charged by those garages, in which case some of the costs may be passed onto consumers.
- 19. VOSA have estimated that their implementation and programme update (transition) costs for the changes will total £329k, broken down as £33k capital costs and £296k running costs. An example of the capital costs are the design changes to the MOT computer system, whilst examples of the running costs including updated user manuals, training materials and communications literature. These are one-off costs occurring in the first year.
- 20. In addition to the costs to businesses the requirement that emissions control equipment must remain fitted may impose costs on a small number of motorists driving vehicles built to the latest emissions standards. In general there is no reason to remove emissions control equipment from a vehicle as it does not reduce the functionality of the vehicle even in the event of its failure. However, diesel cars and light goods vehicles from the Euro 5 standard (mandatory for new vehicles from 2011/12) onwards are fitted with Diesel Particulate Filters (DPFs) in order to comply with strict particle emissions limits. DPF reliability problems have been reported on some Euro 5 vehicles where the vehicles are used solely for short urban trips. These problems impair the drivability of vehicles and necessitate corrective maintenance. In the absence of a legislative requirement that DPFs remain fitted to Euro 5 and later vehicles, motorists experiencing reliability problems may be tempted to have them removed rather than incur repair costs.
- 21. The cost to motorists of having to repair, rather than remove, DPFs is estimated in the table below. Almost no information is available about failure rates, however the number of complaints reported to a consumer television programme who ran a story on this issue in late 2011 represents approximately 0.02% of diesel vehicle registrations in that year. Clearly not all motorists experiencing problems would have reported them to a consumer programme. However, impending problems are indicated by a warning light on the dashboard and can be corrected simply by taking the vehicle for a higher speed trip of 15 minutes or longer (as indicated in vehicle handbooks). Whilst this is an inconvenience to consumers, in most cases this is the only action they would need to take. It is therefore likely that although warning indication rates will be higher than 0.02% that corrective maintenance would only be required very rarely. In the absence of other information the 0.02% failure rate has been used. We have further assumed that when a failure occurs, 100% of motorists used to remove the DPF, but these changes mean that no motorists will now be able to do that and must instead repair the DPF.
- 22. Following discussions with vehicle manufacturers it has been assumed that failure rates will decrease for newer vehicles as the technology matures and as consumer understanding increases. A linear decrease to a 0.01% failure rate for 2015 and later vehicles has been assumed. The projected Euro 5 & 6 diesel vehicle fleet size is taken from the Department's Fleet Fuel Efficiency Models. The DPF maintenance cost is an average of prices reported on the internet. Maintenance costs are assumed to start in 2012 once the legislation enters into force, but failures which occurred in 2011 are also assumed to be repaired in 2012. Across the 10 year assessment period the average annual maintenance cost is £338,436 in constant price terms.

<sup>&</sup>lt;sup>2</sup> All Class 5 and 7 stations are similarly approved for Class 3 / 4 so will need the equipment.

Year	Number of Euro 5 or 6 class 3 & 4 diesel vehicles in the fleet	Number of vehicles requiring	DPF maintenance cost/unit	Total cost £	
				Constant Price	Present Value in 2012
2011	1,101,542	-	£288	-	-
2012	2,386,287	607		£175,037	£175,037
2013	3,772,424	602		£173,637	£167,765
2014	5,200,108	774		£223,196	£208,355
2015	6,781,990	932		£268,807	£242,448
2016	8,350,895	1089		£314,043	£273,671
2017	9,904,336	1245		£358,834	£302,129
2018	11,439,121	1398		£403,087	£327,912
2019	12,951,152	1549		£446,684	£351,090
2020	14,435,177	1698		£489,473	£371,712
2021	15,894,749	1844		£531,558	£390,020
			Total	£3,384,356	£2,810,139

#### Table 6 DPF maintenance costs

- 23. The benefits of these changes are derived from ensuring that vehicles in operation are properly maintained and tested and ensuring that the road safety benefits of the base Directive continue to be delivered. In order to reflect the technical progress of modern vehicles, it is necessary to ensure our testing methods and assessment criteria keep pace and remain appropriate. Whilst these changes introduce some new reasons by which a vehicle may fail a test, there are no new areas of the vehicle specifically inspected. An example is the introduction of a reason for failure being any malfunction of the electronic stability control indicator lamp. The electronic stability control system is a function of a vehicles brake system, which is already inspected. Although roadworthiness may increase as a result, there is no robust evidence available to link this to potential additional road safety benefits that may be delivered as a result of these changes
- 24. The changes also deliver a small air quality benefit by ensuring that DPFs remain fitted to Euro 5 & 6 diesel vehicles. The benefits (savings in emissions of Particulate Matter (PM)) are tabulated below. The assumed annual emissions saving per vehicle (0.574kg PM) is based on the annual (2025) PM emissions savings from the Euro 5 & 6 impact assessment (reference 4) divided by the Euro 5 & 6 diesel vehicle fleet size assumed in those calculations. This is likely to give a conservative estimate of the benefits of DPFs remaining fitted as Euro 5 vehicles with DPFs removed may have higher levels of emissions than (pre-DPF) Euro 4 vehicles. The savings are monetised using the Inter-departmental Group on Costs and Benefits central damage cost for transport PM emissions of £48,517/tonne. Across the 10 year assessment period the average annual emissions saving benefit is £146,132 in constant price terms.

Year	Cumulative number of vehicles with DPEs removed	Annual PM emissions	Monetised value £		
		saving (tornes)	Constant Price	Present Value in 2012	
2012	607	0.35	£16,915	£16,915	
2013	1,209	0.69	£33,695	£32,556	
2014	1,983	1.1	£55,264	£51,590	
2015	2,916	1.7	£81,241	£73,275	
2016	4,005	2.3	£111,589	£97,244	
2017	5,249	3.0	£146,266	£123,152	
2018	6,647	3.8	£185,220	£150,676	
2019	8,197	4.7	£228,386	£179,509	
2020	9,894	5.7	£275,688	£209,360	
2021	11,738	6.7	£327,056	£239,971	
		Total	£1,461,320	£1,174,248	

Table 7 Particulate Emissions Saving Benefits

25. The Department keeps the level of test fees for roadworthiness testing under review and the amount of fee charged is based upon the amount of time and equipment required to undertake the test. There is no element of profit in the fee, since it is a statutory test, though VOSA receive around 2% of the test fee for administration. By taking steps to reduce burdens (on business) we can mitigate any uplift in test fee that may otherwise be required .VOSA have assessed the changes required for each of these schemes and determined that there will be no increase in the test fee ceiling as a result of these changes.

#### **OPTION 3**

- 26. This option updates tests and procedures as described in Option 2 and simplifies some aspects. Therefore all the costs in Option 2 apply, but are mitigated by offsetting and removing other test elements not mandated by the EU.
- 27. We have considered the GB test content alongside the minimum EU requirements and have not identified any major items that we can remove from the GB test in order to simplify our tests. This is because the GB test content mirrors closely the prescribed EU minimum requirements. However, by incorporating these updates we have identified some changes in the way we test certain items, which will simplify the test and offset the increased burden from these latest amendments.
- 28. The simplification changes are:
  - A. Testing brake efficiency across axles rather than individually at each wheel;
  - B. Additional simplification of brake efficiency test procedures for heavy vehicles;
  - C. Making jacking of steered axles of heavy vehicles optional rather than mandatory;
  - D. Dropping checks for safety glazing and demister operation on public service vehicles; and
  - E. Dropping the shock-absorber 'bounce test' on light vehicles.
- 29. The number of MOT tests performed each year and how they are affected by these changes are shown in the table below.

Change	Applicable MOT tests performed (2010)	Change to each test time	Hourly Rate	Cost £
А	66, 630	- 60 seconds*	£13.43	£0.01m
	36,612,843	- 15 seconds	£13.43	£2.05m
В	66,630	- 60 seconds*	£13.43	£0.01m
С	66,630	- 71 seconds	£13.43	£0.02m
D	845,510	- 0 seconds^	£13.43	£0
E	36,612,843	- 10 seconds	£13.43	£1.37m

\* Not implemented until 2014 (what does this mean?). ^ Multi-task operation, no time saving to tester (but benefits in simplification of procedure).

#### Table 8 Labour costs for changes – removals

30. VOSA has a commitment to ensure that the car, heavy goods and passenger service vehicle inspection manuals are kept up to date and fit for purpose. A key part of this is ensuring that the test burden is minimised and that any test content beyond the minimum requirements is justifiable from the risk to road safety of its exclusion. On this basis, there are elements of the GB roadworthiness test that are not mandated by the current Directive but that have been retained. In transposing this Directive, we believe that Option 3 fulfils our EU obligations to implement the new test items and content, but does so at a minimum cost. In not removing every element of the pre-existing 'gold-plating' we appreciate that we are open to challenge, but have relied upon expert input from VOSA in order to manage the potential risk to road safety from removing every additional GB requirement.

31. The following table highlights each remaining area of our tests that include non-EU mandated elements and our justification for retaining them.

Item	Risk and justification for retention
Swivel joint insecure or retaining or locking device missing or insecure (PSV / HGV)	Component insecurity could cause steering failure resulting in loss of control of vehicle/collision. Whilst the initial probability is low (due to low occurance at test) any risk involving security on such a safety critical item such as a steering swivel joint will result in loss of control of the vehicle so we recommend that this defect is retained in the test.
A leak from the load carrying compartment (PSV / HGV)	Leak from vehicle could cause a collision/ skid hazard for other road users/pedestrians or damage to road surface/environment. The prevention of leaks/insecure loads is a primary road safety (especially for 2 wheeled vehicles) and environmental risk and no justification can be found to remove it from the test.
Spigot wheel nut washer cracked (PSV)	Wheel insecurity/loss could cause a loss of control of vehicle and result in a collision. Whilst initial probability is low it is judged that any defect directly affecting wheel nut security is too great a risk to road safety and therefore it is recommended that this item is retained as a test criteria.

Table 9 Non-EU mandated test items and justification for retention

#### SUMMARY OF OPTIONS

- 32. The Department keeps the level of test fees for roadworthiness testing under review and the amount of fee charged is based upon the amount of time and equipment required to undertake the test. There is no element of profit in the fee, since it is a statutory test, though VOSA receive around 2% of the test fee for administration. By taking steps to reduce burdens (on business) we can mitigate any uplift in test fee that may otherwise be required. VOSA have assessed the changes required for each of these schemes and determined that there will be no test fee increase as a result of their implementation. The main benefit comes from removing our risk of infraction (paragraph 34).
- 33. The average annual costs of the options over 10 years (undiscounted, but expressed in constant 2011 prices) are summarised in the table below:

	OPTION 1	OPTION 2	<b>OPTION 3</b>
COSTS - Infraction		£0	£0
COSTS – Additional Time		+ £5.94m	+ £5.94m
COSTS – Additional Equipment		+ £0.10m	+ £0.10m
COSTS - Additional Maintenance		+ £0.34m	+ £0.34m
COSTS - Offsets			- £3.46m
BENEFITS - Emissions Savings		- £0.15m	- £0.15m
TOTAL		+ £6.23m	+ £2.77m

#### **Risks and assumptions**

- 34. The main risk is that European Commission takes out infraction proceedings against the UK for not having implemented these changes to the roadworthiness testing Directive 2009/40/EC correctly. The costs of infraction vary but under the implementation of Article 260 of the Treaty of the European Union (the Lisbon Treaty), a lump sum of €9,666,000 (approximately £8,537,671) as well as a daily fine, calculated by multiplying the standard rate €640/day (approximately £565) by coefficients for seriousness and duration, and then by an 'n' factor fixed by country which takes account of the Member State's capacity to pay (the UK 'n' factor is currently 18.31) would apply.
- 35. There will be no new test fee or increase to the existing fee. The number of vehicles that are first presented for testing under each of our national roadworthiness schemes in any given year will not change due to these new requirements. Therefore there will not be any additional sets of test fees to be paid by motorists or operators in a given year.
- 36. We do not expect operators to require additional down-time for commercial vehicles or nonproductive time for their drivers or additional burden on motorists for having to present their vehicle for additional or longer testing.
- 37. The extension of requirements that emissions control systems must not be removed or modified to reduce their effectiveness to cover vehicles meeting the Euro 5 and later standards has no impact

on petrol vehicles. Unlike DPFs petrol emissions control system failures do not compromise vehicle operation so there is no reason for motorists to remove this equipment.

- 38. DPF reliability problems do not occur in HGVs and buses. This assumption is partly based on DPFs not becoming standard fitment to all such vehicles until 2014, giving more time to improve the reliability of the technology. In addition retrofit DPFs have been widely used on these vehicles (e.g. almost all London buses are equipped with DPFs) without reported problems.
- 39. With the exception of DPF maintenance costs there are no additional costs to motorists or operators as a result of these changes, either through time or fuel use since there will be no additional trips to and from testing stations to be made.

#### One-in, One-out

40. As this is an EU measure it is out of scope of one-in, one out.

#### Wider impacts;

- 41. The Department has screened these proposals for their likely impact on equality groups and has determined that there are no impacts. An Equality Impact Assessment (EqIA) is not required.
- 42. The Department estimates no additional impact on the environment as a result of these changes, except for the positive one highlighted in paragraph 21 above.

#### Small Firms Impact;

43. Small firms and their representative organisations were invited to respond to the consultation, but none have responded to identify a disproportionate impact on small firms.

#### **Competition Impact;**

44. We do not expect any impact on competition.

#### Equality impacts;

45. This proposal has been screened for its likely impact (positive or adverse) on the equality groups.

#### Consultation

46. VOSA published revised car and light goods, heavy goods and passenger service vehicle inspection manuals which incorporated the proposed changes required to implement the Directive on March 31st 2011. The consultation was open for eight weeks. There were four responses to the consultation consisting of one trade associations, one member organisation, one member of the public and one MOT tester. As a result, the text of the manual was clarified in some of the revised areas, but no substantive changes made. There were no concerns raised as to the proposals made to implement the requirements of the Directive into our existing roadworthiness test schemes.

#### Summary and preferred option with description of implementation plan

- 47. Policy option 3 is preferred because it realises all the benefits and minimises increased cost.
- 48. The policy would be implemented through changes to secondary legislation. The changes to each of the car, heavy goods and passenger service vehicle roadworthiness test schemes are the subject of a major programme of work in VOSA. This includes a comprehensive communications campaign to inform stakeholders, trainers training and support materials. The changes will be implemented using a 'pass and advise' period initially (01 January 2012 to 01 May 2012) to allow the industry, operators, garages and motorists to become familiar with the changes. This means that the revised schemes will 'go live' through the MOT computer system on 01 January, but vehicles will not be failed against the new criteria. The 'pass and advise' period will run from 01 January 2012 to 01 May 2012, with vehicles only able to be failed against the revised criteria from 02 May 2012.

#### References

- 1 <u>http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:173:0047:0072:EN:PDF</u>
- 2 <u>http://www.vosa.gov.uk/vosa/publications/consultationsandresearch/2007-</u> 2011closedconsultations/reviewofmothgvandpsvinspectionmanuals-directive201048eu.htm
- 3 http://www.dft.gov.uk/vosa/repository/Special%2520Notice%252001-11.pdf

### 4 <u>http://www.legislation.gov.uk/uksi/2008/2844/pdfs/uksiem\_20082844\_en.pdf</u>

### **Annex 1: List of New Testable Components**

Headlamp levelling and cleaning devices when fitted for HID or LED headlamps

Main beam 'tell-tale'

Battery (including batteries for electric or hybrid vehicles)

Electrical wiring and connectors

Trailer electrical socket security and damage

Operation of 13-pin trailer electrical sockets using an approved trailer socket tester

Operation of the steering lock (where fitted) including that malfunction warning is not displayed for an electronic steering lock

Electronic power steering malfunction warning indicating a fault

Electronic parking brake control and malfunction indicator lamp

Electronic Stability Control (ESC) components, including the switch (if fitted) and malfunction warning

Brake fluid warning lamp illuminated or inoperative

Tyre Pressure Monitoring Systems (TPMS)

SRS components including airbags, seat belt pre-tensioners, seat belt load limiters and SRS malfunction warning lamp

Engine mountings

Speedometer

Indirect vision devices (where they replace obligatory mirrors)

### For Class 5 vehicles, there are also the following new components:

Electronic Braking System warning device

Entrance/exit steps and doors

Door remote and emergency controls

Door open warning devices

Stairs

Emergency exit signs, windows and 'break glass' hammers

### Annex 2: The VOSA MOT Inspection Manual – Revised

The proposed new Inspection Manuals can be viewed here: http://vosanet.vosa.gov.uk/cms/groups/public/documents/vosanet-published/testingmanuals.hcsp