#### EXPLANATORY MEMORANDUM TO

# THE ROAD VEHICLES (CONSTRUCTION AND USE) (AMENDMENT) REGULATIONS 2009

#### 2009 No. 142

# THE PUBLIC SERVICE VEHICLES (CONDITIONS OF FITNESS, EQUIPMENT, USE AND CERTIFICATION) (AMENDMENT) REGULATIONS 2009

#### 2009 No. 141

# THE PUBLIC SERVICE VEHICLES ACCESSIBILITY (AMENDMENT) REGULATIONS 2009

#### 2009 No. 143

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

This memorandum contains information for the Joint Committee on Statutory Instruments.

#### 2. Purpose of the Instrument

- 2.1 The three sets of Regulations covered by this memorandum respectively amend:
  - a) The Road Vehicles (Construction and Use) Regulations 1986 (SI 1986/1078) ("C&U");
  - b) The Public Service Vehicles (Conditions of Fitness, Equipment, Use and Certification) Regulations 1981 (SI 1981/257) ("COIF"); and
  - c) The Public Service Vehicles Accessibility Regulations 2000 (SI 2000/1970) ("PSVAR").

#### Mirrors Retro-fit

2.2 The Road Vehicles (Construction and Use) (Amendment) Regulations 2009 provide for the amendment of regulation 33 (mirrors and devices for indirect vision) of C&U so as to implement Directive 2007/38/EC on the retrofitting of devices for indirect vision to existing vehicles registered within the European Community.

#### **Speed limiters**

2.3 The Road Vehicles (Construction and Use) (Amendment) Regulations amend regulations 36A and 36B of C&U in respect of the requirements for fitting speed limiters on buses and goods vehicles. Speed limiter is defined as "a device designed to limit the maximum speed of a motor vehicle by controlling the power output from the engine of the vehicle".

2.4 These Regulations are removing time expired provisions in regulations 36A and 36B that gave effect to transitional arrangements for the fitting of speed limiters and also providing an exemption from the need to fit speed limiters to certain categories of vehicles operated by or on behalf of Her Majesty's Prison Service ("HMPS").

#### UNECE Regulations 52 and 107

- 2.5 The three sets of Regulations give effect to UNECE<sup>1</sup> Regulation 52 (R52) or UNECE Regulation 107 (R107) so that compliance with their requirements will provide an alternative means of compliance to:
  - a) the technical requirements in C&U for the construction and use of vehicles on the public highway;
  - b) certain technical requirements in COIF relating to the current prescribed conditions as to fitness of public service vehicles; and
  - c) the current prescribed wheelchair accessibility and general accessibility requirements in PSVAR for single and double deck buses and coaches.
- 2.6 R52 sets standards for the general construction of minibuses and smaller buses. R107 sets standards for general construction of minibuses, buses and coaches (classes  $M_2$  and  $M_3$ )<sup>2</sup>. Both UNECE Regulations include technical requirements for safety items such as entrances, gangways, exits, steps, lighting, etc. as well as provisions on accessibility for passengers with reduced mobility.

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

Paragraph 7.15 includes comments about the prospect of consolidating C&U.

#### 4. Legislative Context

#### Mirrors Retro-fit

4.1 The current regulation 33 of C&U sets out the existing domestic requirements for motor vehicles in respect of mirrors and other indirect vision devices. One of the requirements of regulation 33 (introduced in 2005) is that certain vehicles first used on or after 26<sup>th</sup> January 2007 must comply with the requirements of Directive 2003/97/EC of the European Parliament and of the Council on the approximation of the laws of the Member States relating to the type-approval of devices for indirect vision and of vehicles equipped with these devices, amending Directive 70/156/EEC and repealing Directive

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<sup>&</sup>lt;sup>1</sup> United Nations Economic Commission for Europe

<sup>&</sup>lt;sup>2</sup> These vehicle categories are defined in Annex II of Council Directive 70/156 on the approximation of the Laws of the Member States relating to the type approval of motor vehicles and their trailers. The M<sub>2</sub> vehicle category is defined as a vehicle designed and constructed for the carriage of passengers, comprising more than eight seats in addition to the driver's seat, and having a maximum mass not exceeding 5 tonnes. The M<sub>3</sub> vehicle category is defined as a vehicle designed and constructed for the carriage of passengers, comprising more than eight seats in addition to the driver's seat, and having a maximum mass exceeding 5 tonnes.

71/127/EEC (by an amendment made by Directive 2005/27/EC, the scope of Directive 2003/97/EC has been extended to include certain smaller vehicles). UNECE Regulation 46.02 is available as an alternative in respect of certain vehicles.

- 4.2 Directive 2007/38/EC of the European Parliament and of the Council on the retrofitting of mirrors to heavy goods vehicles registered in the Community provides that certain heavy goods vehicles first used on or after 1<sup>st</sup> January 2000 that are not, otherwise, required to comply with the requirements of Directive 2003/97/EC must be fitted with mirrors to the passenger side which comply with the requirements of Directive 2003/97/EC or, in certain cases, comply with other measures intended to improve indirect vision.
- 4.3 The Road Vehicles (Construction and Use) (Amendment) Regulations 2009 implement the requirements of Directive 2007/38/EC. They do this by requiring that vehicles to which Directive 2007/38/EC apply are required to comply with the provisions of Directive 2003/97/EC as implemented by regulation 33 to the extent that Directive 2007/38/EC requires such vehicles to comply with Directive 2003/97/EC. To the extent that a vehicle may comply with the other measures (set out in article 3(2) and 3(3) of 2007/38/EC), the Regulations allow for that. UNECE Regulation 46.02 is, as with other vehicles to which 2003/97/EC applies, available as an alternative in respect of certain vehicles within scope of 2007/38/EC.
- 4.4 As regulation 33 (including as amended by the Regulations) is a prescribed construction and use requirement for the purposes of the Goods Vehicles (Plating and Testing) Regulations 1988, the goods vehicle test provided for under the 1988 Regulations will test for compliance with the requirements of regulation 33.
- The original proposal for Directive 2007/38/EC was the subject of an 4.5 Explanatory Memorandum 13869/06 dated 16 November 2006 which was considered by the Commons European Scrutiny Committee on 29 November 2006 (Report 2, session 2006/07, reference 27903). The Committee recommended that the document was "politically important" and maintained the scrutiny reserve pending further information and developments. House of Lords Select Committee on the European Union referred the EM to Sub-Committee B following the 1268th sift on 22 November 2006. Sub-Committee B also maintained scrutiny pending further information and developments. The Minister wrote to both Committees on 11 May 2007 updating them on the legislative process, subsidiarity and our stakeholder consultation. In response to the Minister's letter the Commons European Scrutiny Committee cleared the EM on 16 May 2007 (Report 22, session 2006/07). The Lords Sub-Committee B replied to the Minister on 5 June 2007 seeking further clarification. The Minister wrote to Sub-Committee B on 7 June 2007 clarifying the points on policing of measures, particularly with respect to visiting vehicles, the actual cost of compliance to industry, consultation with the Road Haulage Association and the date of implementation. The proposal was cleared by the Lords Sub-Committee B in a letter to the Minister of 19 June 2007.

#### **Speed Limiters**

- 4.6 Section 41 of the Road Traffic Act 1988 allows for regulations to be made regarding the use of vehicles on roads, their construction and the conditions under which they may be used. C&U includes provisions which set out:
  - the requirements for the fitting of speed limiters to buses and goods vehicles; and
  - the existing domestic construction requirements for minibuses and coaches operating on the public highway.
- 4.7 In implementing Directive 2002/85/EC amending Council Directive 92/6/EC on the installation and use of speed limitation devices for certain categories of motor vehicles in the Community (S.I. 2004/2102 and S.I. 2005/3170), full use was made of the transitional arrangements permitted by the Directive. The provisions giving effect to those transitional arrangements are now time expired.
- 4.8 The Road Vehicles (Construction and Use) (Amendment) Regulations 2009 effect the removal of those time expired provisions as well as inserting a new exemption into regulations 36A and 36B so that certain vehicles operated by or on behalf of Her Majesty's Prison Service which carry high risk prisoners or which transport staff and equipment in emergency tactical response vehicles will no longer be required to have a speed limiter fitted.

#### **UNECE Regulations 52 and 107**

- 4.9 Section 6 of the Public Passenger Vehicles Act 1981 requires that a vehicle adapted to carry more than 8 passengers and used as a public service vehicle shall not be used on the road unless a certificate, indicating that prescribed conditions of initial fitness have been fulfilled, has been issued. Part II of COIF prescribes those conditions of initial fitness.
- 4.10 Sections 40 and 41 of the Disability Discrimination Act 1995 allow for the making of public service vehicles accessibility regulations regarding the construction, use and maintenance of public service vehicles so as to enable disabled persons to access these vehicles and to be carried in safety and reasonable comfort and prohibits their use on a road unless a certificate, indicating the prescribed requirements are satisfied, has been issued. PSVAR sets out the domestic requirements for wheelchair accessibility and general accessibility for single-deck and double-deck buses and coaches.
- 4.11 The three sets of Regulations respectively amending C&U, COIF and PSVAR will have the effect of allowing R52 or R107 to be used as an alternative means of compliance to the relevant technical requirements currently prescribed by them.
- 4.12 R52 governs the design and construction of single-deck minibuses and smaller buses, with a capacity not exceeding 22 passengers. Its requirements are optional and sit alongside national requirements for vehicle standards. It

was originally agreed in 1982; a revised and consolidated version was agreed in 1995 and signed by the UK in 1997. The European Community is not a signatory to this Regulation; the UK has agreed to it in its own right.

- 4.13 R107 governs the interior layout and access to minibuses, buses and coaches and affects many areas of bus construction, including access for passengers with reduced mobility including those with disabilities. It is optional and sits alongside national requirements for vehicle standards. It was originally agreed in 1998; a revised and consolidated version (the "01 series of amendments") was agreed in 2004. The UK signed in 1998. The 01 series of R107 aligns with Directive 2001/85/EC relating to the special provisions for vehicles used for the carriage of passengers comprising eight seats in addition to the driver's seat.
- 4.14 The European Community signed up to the "01" version of R107 earlier this year (an Explanatory Memorandum referring to this process was presented to Parliament in January 2006). This being the case, R107 has become a standard which all European Community Member States must recognise. Many requirements from R52 have been incorporated into R107, which will ultimately supersede R52. Further amendments to R107 (the "02" series of amendments) were recently agreed and entered into force in November 2007.

#### 5. Territorial Extent and Application

These Regulations apply to Great Britain.

#### 6. European Convention on Human Rights

As these Regulations are subject to negative resolution procedure and do not amend primary legislation, no statement is required.

#### 7. Policy Background

What is being done and why

#### Mirrors Retro-fit

- 7.1 Pursuant to the United Kingdom's membership of the European Union, the United Kingdom is required to implement Directive 2007/38/EC.
- 7.2 The Department has received a good deal of correspondence from the public who have been involved in incidents with foreign lorries and who believe that the drivers had not seen them because of a left hand drive blind spot. Statistical evidence of road accidents, collected by the Department, shows there is also a risk that in urban environments cyclists and pedestrians will not be seen as a consequence of the height of large goods vehicles. Directive 2007/38/EC and its implementation measures are expected to help reduce the numbers of pedestrian, cyclist and car occupant casualties from collisions with heavy goods vehicles.

- 7.3 Directive 2007/38/EC requires existing goods vehicles above 3.5 tonnes to be equipped, in addition to their main rear view mirrors, with a close proximity mirror and a wide angle mirror on the passenger side. The current GB provisions already require some of these vehicles to be fitted with close proximity and wide angle mirrors and it may be possible to upgrade these mirrors simply by replacing the glass. Cameras or alternative vision systems may be used in addition to the mandatory mirror requirements.
- 7.4 For goods vehicles between 3.5 and 7.5 tonnes and in accordance with Article 2(2)(b), this requirement only applies to those vehicles having high cabins similar to heavy goods vehicles and so will exclude 'Transit' type vans, for example, which represent the majority of this weight range.
- 7.5 The changes in respect of mirrors will come into force on 31<sup>st</sup> March 2009 which, as set out in article 3 of Directive 2007/38/EC, is the final day for bringing these measures into force. In order to give as much time as possible for operators to prepare for the changes the Department has been liaising with manufacturers representatives and the road haulage trade associations throughout the transposition process. Further to this a public consultation was conducted between July and September 2008 (see paragraph 8) and the trade press have been publicising the requirements. The Department is also working with the Vehicle and Operator Services Agency on enforcement procedures, which includes further publicity material.

#### **Speed Limiters**

- 7.6 Directive 2002/85/EC required the application of speed limiters to be fitted to all buses and goods vehicles exceeding 3.5 tonnes so that the speed of these vehicles is retrospectively restricted to 100 km/h and 90km/h. Directive 2002/85/EC applied, with transitional provisions, to all new buses and goods vehicles from 1st January 2005 and retrospectively to certain vehicles first used between 1st October 2001 and 31st December 2004 and which also satisfied specified emissions criteria.
- 7.7 The implementation of Directive 2002/85/EC in 2004 resulted in a complicated set of amendments to regulations 36A and 36B with various transitional provisions and some savings provisions, necessary to prevent operators with vehicles already covered by domestic legislation from removing fitted speed limiters before the expiry of the transitional provisions.
- 7.8 The Road Vehicles (Construction and Use) (Amendment) Regulations 2009 are effecting the removal of the various time expired transitional provisions. It is accepted that the retention of such provisions serves a function so that a reader coming afresh to regulations 36A and 36B can see when certain requirements started and stopped applying to certain vehicles. However, regulations 36A and 36B are complex provisions and it was felt that the removal of such time expired provisions would help make them easier to understand.

- The Road Vehicles (Construction and Use) (Amendment) Regulations 2009 are also removing a savings-provision from regulation 36B in respect of goods vehicles registered between 1st October 2001 and 31st December 2004. The savings provision was included in regulation 36B(1B) so as to preserve the position regarding speed limiters already fitted to goods vehicles. (In 1992 domestic legislation required speed limiters to be fitted on GB goods vehicles with a maximum gross weight (MGW) exceeding 7.5 tonnes. EC legislation was introduced subsequently, but only applied to goods vehicles exceeding 12 tonnes MGW.) The removal of the savings provision will mean that the affected goods vehicles will be covered by a different provision of regulation 36B, which will necessitate a recalibration of the fitted speed limiter to a different speed. This amendment is necessary so as to ensure that the C & U fully implement the requirements of Directive 2002/85/EC.
- 7.10 Regulations 36A and 36B already provide an exemption from the requirement to fit a speed limiter in respect of police, ambulance and fire emergency vehicles. A further exemption is being added in respect of vehicles operated by or on behalf of HMPS so that vehicles used in carrying high risk prisoners and emergency tactical response vehicles will not be required to be fitted with a speed limiter. The exemption is supported by Association of Chief Police Officers (ACPO) particularly in respect of vehicles conveying high risk prisoners as it may be necessary on appropriate occasions for such vehicles to be able to travel at faster speeds than would be permitted if the vehicle was fitted with a speed limiter. HMPS emergency tactical response vehicles also need to be able to travel at appropriate speeds in order to be able to deal effectively with emergency situations at HMPS prisons or immigration centres. Ministers have taken into account the views expressed by HMPS and ACPO in reaching the decision to seek to provide this exemption.

#### UNECE Regulations 52 and 107

- 7.11 R52 relates to minibuses and smaller buses. R107 relates to all minibuses, buses and coaches. Since compliance to the standards in these Regulations offers an alternative means of compliance to the various technical requirements applicable to these vehicles under national rules, recognising them offers industry a choice of standards to comply with, which provides flexibility to manufacturers.
- 7.12 At the time the UK signed R52 in 1997, industry were interested in using this as a vehicle approval route. It meant the UK was required to accept vehicles complying with the standards contained in the new regulation. However, national regulations were not amended to recognise R52, since the industry sector, which might have taken advantage of R52, did not, in fact, adopt this route to approval. More recently, industry has indicated a renewed interest in this approval route, and the Department is giving effect to it into domestic regulations.
- 7.13 Since the European Communities has recently signed up to R107 (the "01" series of amendments), the Department is now fulfilling European obligations to recognise it in domestic regulations. Further, since R107 has

recently been updated (the "02" series of amendments), which further improves the standard; the Department is taking the opportunity to recognise this as well. The Department is not recognising the "00" version because its scope and content are quite different to the "01" and "02" versions, and to the Department's knowledge, industry has not used this route to approval, nor has any intention to do so.

7.14 There is some commonality between the R52 and R107 "01" version, and R107 "01" will eventually supersede R52 and the R107 "00" version. Therefore, both Regulations need to be recognised, which is why they are being introduced into domestic regulations.

#### • Consolidation

7.15 The Department does intend to consolidate the C&U but this will be a major undertaking. It will be subject to the Department having the necessary legal and administrator staff resources available to commit to this task, and to the Department considering that it should take priority over other important work. So it is very difficult to provide a projected timescale.

#### 8. Consultation outcome

#### Mirrors Retro-fit

- 8.1 Three hundred and sixty two organisations and interested parties were consulted on the draft Regulations. Those consulted included vehicle manufacturers and operators of heavy goods vehicles and their trade organisations, mirror manufacturers and the police. Organisations concerned with road safety such as the Parliamentary Advisory Council for Transport Safety and the Royal Society for the Prevention of Accidents were also included in the consultation, as well as other Government Departments likely to be affected by these changes.
- 8.2 The Department received seventeen responses from the consultation. 82% supported the proposal. Of the rest, the main comments were on the costs and benefits and the Department has responded by explaining the basis of the calculations used. A summary of responses is available on the DfT website.

#### **Speed Limiters**

- 8.3 Around 50 organisations and interested parties throughout the United Kingdom were consulted on the draft Regulations. Those consulted included operators of heavy goods vehicles and organisations concerned with road safety.
- 8.4 The Department received eight responses from the consultation. Five of the respondents agreed with the approach being adopted in respect of the speed limiter provisions; one of the respondents raised concerns on the cost of adjusting individual speed limiters on affected goods vehicles. Three of the

respondents agreed with the proposal to provide HMPS vehicles with an exemption. One of the respondents opposed the exemption on the basis that the HMPS vehicles would generally be quite large and in a pursuit situation road safety would be compromised. However, the Police support the provision of this exemption. The number or HMPS vehicles, which are likely to fall within the ambit of the exemption, is expected to be small and such vehicles would normally be under a Police escort. The Department will place on its website a formal response to the matters raised during the consultation.

#### **UNECE Regulations 52 and 107**

8.5 Ten key representatives in vehicle manufacture and operation, and appropriate road safety groups in the United Kingdom were consulted on the draft Regulations. The Department received 3 responses from the consultation of which all three fully supported the proposal. The results of the consultation will be published through the inclusion of this document on the Department's website.

#### 9. Guidance

#### Mirrors Retro-fit

9.1 A guide, explaining the requirements and how to confirm the mirrors field of view, is available to download from the VOSA or Transport Office websites:

http://www.vosa.gov.uk/vosacorp/publications/manualsandguides/vehicletestingmanualsandguides.htm

http://www.transportoffice.gov.uk/crt/generalinfo/publications/manualsandguides/operatorinformationmanuals.htm

#### Speed Limiters and UNECE Regulations 52 and 107

9.2 None required

#### 10. Impact

#### Mirrors Retro-fit

- 10.1 The impact on business, charities or voluntary bodies will be dependent on the number of affected vehicles operated by each organisation.
- 10.2 The impact on the public sector is also dependent on the number of affected vehicles operated by each organisation.
- 10.3 An Impact Assessment is attached to this memorandum.

#### **Speed Limiters**

10.4 Although there is no direct impact on business, charities or voluntary bodies, an Impact Assessment is attached.

#### **UNECE Regulations 52 and 107**

10.5 An Impact Assessment has not been prepared for this instrument as it has no impact on business, charities or voluntary bodies.

#### 11. Regulating small business

#### Mirrors Retro-fit

- 11.1 The legislation applies to small business.
- 11.2 There is no action planned to minimise the impact of the requirements on firms employing up to 20 people.
- 11.3 As detailed in the Impact assessment, the basis for the final decision on what action to take to assist small business is that it is expected that smaller operators will face lower costs from the proposal than the figures below suggest because of the tendency for smaller businesses to operate vehicles that are older and, therefore, on average are more likely to be beyond the scope of the requirements than those of operators of large fleets. Ultimately, the costs resulting from the increased requirements will fall to the end user, either the vehicle operators or private owners. Since all organisations use vehicles to some extent, the cost will be spread across all business sectors, charities and voluntary organisations.

#### Speed Limiters and UNECE Regulations 52 and 107

#### 11.4 None

#### 12. Monitoring & review

#### Mirrors Retro-fit

- 12.1 By requiring all large goods vehicles registered since 1 January 2000 to be equipped with improved mirror systems on the passenger side, the safety benefits that would be gradually achieved by Directive 2003/97/EC can be realised much more quickly. It is estimated that doing so could save 57 more lives over the twelve years before the existing measures become fully effective; nearly 5 every year.
- 12.2 A post implementation review will be conducted by the European Commission. This will be completed by 2010.

#### **Speed Limiters**

12.3 The exemption for HMPS vehicles will be subject to ongoing review.

#### UNECE Regulations 52 and 107

12.4 None

#### 13. Contacts

#### Mirrors Retro-fit

Brian Greenway of the Transport Technology and Standards Division, Department for Transport, Zone 2/07, Great Minster House, 76 Marsham Street, London SW1P 4DR (Tel: 020 7944 2115; e-mail: brian.greenway@dft.gsi.gov.uk) can answer any queries regarding these provisions in the instrument.

#### **Speed Limiters**

Rob Haggar of the Licensing, Roadworthiness and Insurance Division, Department for Transport, Zone 2/09, Great Minster House, 76 Marsham Street, London SW1P 4DR (Tel: 020 7944 2457; e-mail: rob.haggar@dft.gsi.gov.uk) can answer any queries regarding these provisions in the instrument.

#### UNECE Regulations 52 and 107

Donald Macdonald of the Transport Technology and Standards Division, Department for Transport, Zone 2/07, Great Minster House, 76 Marsham Street, London SW1P 4DR (Tel: 020 7944 4923; e-mail: donald.macdonald@dft.gsi.gov.uk) can answer any queries regarding these provisions in the instrument.

Summary: Intervention & Options				
Department /Agency:	Title:			
TTS Division	Impact Assessment of Retrofitting of Mirrors to Increase the Field of Indirect Vision (Blind Spot) of Goods Vehicles			
Stage: Implementation	Version: Draft v3.5	Date: 3 <sup>rd</sup> December 2008		
Related Publications:				

#### Available to view or download at:

http://www.

Contact for enquiries: Brian Greenway Telephone: 020 7944 2115

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

Blind spots in the drivers' field of indirect vision can contribute to road accidents involving large goods vehicles. Measures to improve the minimum standards for mirror systems fitted to new goods vehicles have already been introduced to reduce the number of vulnerable road users killed and seriously injured by goods vehicles. However, until these measures become fully effective (after the entire goods vehicle fleet is replaced) casualties will continue to result from the limitations of the current vehicle mirror systems.

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

The aim is to reduce the number of casualties which result from the limitations of current large vehicle mirror systems. By requiring all large goods vehicles registered since 1<sup>st</sup> January 2000 to be equipped with improved mirror systems on the passenger side, the safety benefits that would be gradually achieved by Directives 2003/97/EC and 2005/27/EC can be realised much more quickly. It is estimated that doing so could save 57 more lives over the twelve years before the existing measures become fully effective; nearly 5 every year.

#### What policy options have been considered? Please justify any preferred option.

A retrospective Directive that would require improved mirrors to be fitted to the passenger side of all large goods vehicles registered from 1<sup>st</sup> January 2000 has been analysed. This proposal was considered in relation to an alternative option of taking no action beyond the existing requirements of Directives 2003/97/EC and 2005/27/EC. Other options were considered at an earlier stage but none of these was suited to solving the very specific problem identified by the Commission.

When will the policy be reviewed to establish the actual costs and benefits and the achievement of the desired effects?

A post implementation review will be conducted by the Commission. This will be completed by 2010.

**Ministerial Sign-off** For final proposal/implementation stage Impact Assessments:

I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.

Signed by the responsible Minister:	
Jim Fitzpatrick	
Date: 29th Januar	y 2009

#### **Summary: Analysis & Evidence**

**Policy Option: 2** Description: The retrospective fitting of mirrors to increase the field of indirect vision of goods vehicles

#### Description and scale of **key monetised costs** by 'main **ANNUAL COSTS** affected groups' One-off (Transition) Yrs One-off costs of £63m, in present value (PV) terms, for 1 £63m installing mirrors fall upon vehicle operators, who also face COSTS maintenance costs of £5m, together with higher vehicle operating costs of £1.7m. The cost of extra CO<sub>2</sub> emissions for **Average Annual Cost** society totals approximately £367k (PV). (excluding one-off) 12 Total Cost (PV) £70m £600k

Other key non-monetised costs by 'main affected groups' Changing the specification of mirrors may impose adjustment costs on manufacturers and suppliers.

	ANNUAL BENEFI	TS	Description and scale of <b>key monetised benefits</b> by 'main affected groups'  In present value terms, benefits from reductions in the number of road users killed and seriously injured total approximately £118m over a twelve year period.		
	One-off	Yrs			
ST	£0				
ENEFI	Average Annual Ber (excluding one-off)	nefit			
<u>m</u>	£9.9m	12	Total Benefit (PV) £118m		

Other key non-monetised benefits by 'main affected groups' Increasing the demand for mirrors is likely to benefit firms who manufacture them.

#### Key Assumptions/Sensitivities/Risks

- The benefits are sensitive to the uncertain forecast of casualty reductions to be achieved by the scheme:
- The estimated cost of the improvements assumes most vehicles will only require a replacement glass, where they already have the base mirrors fitted;
- Parts and labour costs could rise and affect future maintenance costs;
- There is a risk that enforcement costs could increase.

Price Base Year 2005	Time Period Years 12	Net Benefit Range £1m to 95m	Benefit Range (NPV) NET BENEFIT (NPV Best estimate) £48m				
What is the geographic coverage of the policy/option?					Great Britain (GB)		
On what date	will the policy b	e implemented?			2009		
Which organi	sation(s) will enf	orce the policy?			VOSA		
What is the to	otal annual cost	of enforcement for th	nese organisa	itions?	£0		
Does enforce	ment comply wit	h Hampton principle	es?		Yes		
Will implemen	ntation go beyon	d minimum EU requ	irements?		No		
What is the v	alue of the propo	sed offsetting meas	ure per year	>	£0		
What is the v	alue of changes	in greenhouse gas	emissions?		£367k		
Will the proposal have a significant impact on competition?					No		
	Annual cost (£-£) per organisation (excluding one-off)  Micro £4  Small £10						
Are any of the	ese organisation	s exempt?	No	No	N/A	N/A	

Impact on Admin Burdens Baseline (2005 Prices)					(Increase - Decrease)
Increase of	£0	Decrease	£0	Net Impact	<b>£</b> 0

Key: Annual costs and benefits: (Net) Present

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

#### 1. Purpose and Intended Effect

<u>Objective</u>: To improve the exterior field of indirect vision of existing Heavy Goods Vehicles (HGVs). A new Directive (2007/38/EC) will apply to all vehicles with a mass over 3.5 tonnes (categories  $N_2$  and  $N_3$ ), which meet the standards set out in Directive 71/127/EC and all subsequent amendments up to Directive 88/321/EC. To fall within the scope of the Directive, lorries must have cabs of sufficient height to enable close proximity (class V) mirrors to be fitted at least two metres from the ground and still be visible to the driver, and to have been first used on, or after,  $1^{st}$  January 2000. The Directive entered into force in August 2007. Full implementation is expected by 31 March 2009 and measures to ensure compliance are expected to commence in April 2009.

Background and Rationale for Government Intervention: Approximately 3,200 people have been killed and more than 30,000 seriously injured on British roads on an annual basis in recent years<sup>3</sup>. In order to reduce the number of road casualties, the European Council and Parliament produced Directive 2003/97/EC in 2003, setting standards for rear view mirrors fitted to vehicles. A later Directive (2005/27/EC) extended the requirement to certain goods vehicles in the 3.5 to 7.5 tonne mass range. Together these Directives require all new goods vehicles registered since 26<sup>th</sup> January 2007 to be equipped with compliant mirrors. Increasing the number of mirrors fitted and improving their field of view is intended to reduce blind spots and improve visibility of pedestrians, cyclists and other vehicles, particularly those in close proximity to high-sided vehicles where the drivers' view is often obstructed.

However, the existing fleet of around 5 million goods vehicles within the European Union will not be replaced for about 12 years (2020 at the earliest). Until then, the danger will continue to exist, even with existing legislation. In response to this, the European Commission put forward a proposal to reduce road accidents by extending the requirement to fit blind spot mirrors to existing goods vehicles.

This proposal resulted in a new Directive (2007/38/EC). The retrofitting Directive is designed to apply to goods vehicles above 3.5 tonnes and first used on, or after, 1 January 2000, which may already be equipped with class IV (wide angle) and class V (close proximity) mirrors and could therefore be upgraded at a reasonable cost, in many cases without changing the mirror housings. The road safety benefits of this policy are considered to be cost effective even when taking into account that operators of some vehicles would be required to fit additional mirrors because:

- class IV and class V mirrors are not obligatory on goods vehicles between 3.5 and 7.5 tonnes and may not be fitted to all vehicles; and
- class V mirrors are not obligatory on goods vehicles between 7.5 and 12 tonnes and may not be fitted to all vehicles.

#### 2. Consultation

- We have consulted within government on the changes to the GB Construction and Use Regulations needed for the policy to be implemented.
- Public consultation has involved all major stakeholders in Commission Working Group discussions concerning this proposal. These stakeholders represent vehicle and component manufacturers, vehicle operators and consumer interests. Details of the public responses received can be found at:

http://www.dft.gov.uk/consultations/closed/retrofittingmirrors/

Prior to preparing this proposal, the Commission conducted a web-based consultation exercise. Details of the public responses received, including the major stakeholders, can be found at: <a href="http://ec.europa.eu/transport/roadsafety/vehicles/blind\_spot\_mirrors\_en.htm">http://ec.europa.eu/transport/roadsafety/vehicles/blind\_spot\_mirrors\_en.htm</a>

<sup>&</sup>lt;sup>3</sup> Transport Statistics Great Britain 2007 (November 2007), 33<sup>rd</sup> Edition, London, TSO

#### 3. Options

Two options are examined:

Option 1: assumes no action taken and is the baseline for all calculations.

Risk – Doing nothing is not regarded as a feasible course of action for Government to take. Vulnerable road users would continue to be killed at the same rate and a window of opportunity would have been missed to save lives as a result of this measure. There would also be cost implications if the UK were involved in infraction proceedings as a result of non-compliance with the requirements of the Directive. Consequently the option of doing nothing is not directly appraised in this impact assessment.

However, all impacts are measured relative to a baseline scenario under which no further action is taken by the government to reduce the number of road users killed or seriously injured by goods vehicles. This reference level entails fitting new vehicles with improved mirrors, as is required by existing Directives 2003/97/EC and 2005/27/EC. Thus it entails a gradual reduction in the number of road casualties over time as the proportion of vehicles equipped with upgraded mirrors rises.

Option 2: the policy option assumes full adoption of the measures within the EC Directive.

#### These measures are:

- The mandatory upgrading of all existing close proximity (class V) mirrors on the passenger side of all goods vehicles over 3.5 tonnes, where these mirrors can be fitted at least 2m from the ground and still be visible to the driver and requiring vehicles that are not already equipped with these mirrors to have them installed; and
- The mandatory upgrading of all existing wide angle (class IV) mirrors on the passenger side of goods vehicles which fall into the above category and requiring vehicles that are not already equipped with these mirrors to have them installed.

Whilst the Directive requires that all vehicles be equipped, on the passenger side, with wide angle and close proximity mirrors that fulfil the requirements set by Directive 2003/97/EC, it also recognises that full compliance with these standards may be difficult to achieve. To make allowance for this, vehicles will be deemed to be compliant if they are equipped with mirrors whose combined field of vision covers not less than 95% of the total field of vision at ground level of a class IV mirror and not less than 85% of the field of vision at ground level of a class V mirror according to Directive 2003/97/EC.

Taking this into account, the Commission estimates that 75% of vehicles will be able to comply by installing replacement mirror glasses. The remaining 25% are likely to require new mirrors to be fitted.

Risk - The Directive will initially be implemented through changes to the GB Construction and Use Regulations and enforced by means of roadside and annual roadworthiness checks. There is a risk that these checks may prove impractical and expensive because there are no requirements for marking the replacement mirror glasses. If it was necessary to carry out a practical test to judge whether mirrors conform to the regulations in every inspection, this would cause enforcement costs to rise above the zero level assumed in this appraisal. Further, if monitoring and enforcement procedures are badly designed or implemented there is a possibility that significant administrative burdens will be placed on vehicle operators.

An additional risk is that existing vehicle door construction may not be designed to cope with the weight and wind loading created by fitting additional mirrors. This could lead to premature failure and liability claims.

#### 4. Costs and Benefits

The overall costs and benefits indicated in this document apply only to GB and are calculated in 2005 Net Present Value prices (NPV). Northern Ireland will be making its own Regulations.

#### Sectors and Groups Affected

- Vehicle manufacturers:
- o Replacement mirror and glass manufacturers;
- Vehicle owners and operators; and
- End users and vulnerable road users.

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

#### Benefits

The main benefits of the retrofitting policy will be reductions in the number of people killed and seriously injured by accidents involving goods vehicles. However, determining precisely how many casualties are caused by collisions with goods vehicles as a direct result of the limitations of current mirror systems is a challenging task and involves considerable uncertainty. There are a number of stages involved in calculating the likely benefits of a policy to retrofit improved mirrors to existing goods vehicles.

The benefits are dependent upon:

- how many accidents may be partly attributable to the limitations of current mirror systems;
- the extent to which improved mirrors would be effective at reducing the casualties that occur as a result of collisions involving domestic lorries;
- the percentage of the domestic goods vehicle fleet that will have improved mirrors installed as a result of the proposal; and
- the proportion of accidents involving domestic goods vehicles.

Whilst the Directive will encompass goods vehicles registered throughout the European Union, this Impact assessment is concerned only with the domestic GB fleet. Foreign registered vehicles are therefore excluded from the analysis.

Step 1 - Because only limited information on the cause of road accidents is collected, it is not possible to determine how many casualties may be attributable partly to the limitations of current mirror systems fitted to goods vehicles. The Department has attempted to circumvent this problem by using the STATS19 database for 2005 to investigate specific accident scenarios that are likely to be related to driver visibility. These are indicative of the scale of road casualties that could potentially be prevented by improving the drivers' field of vision:

- 38 Vulnerable Road Users (VRU) were killed in GB as a result of collisions with the sides of heavy goods vehicles; and
- 4 car occupants were killed in side swipe incidents involving heavy goods vehicles on multilane roads.

These figures (42 fatalities) are believed to provide the best available indication of the scale of road casualties. However, the reliability of inferences made from this limited information remains uncertain. Further details of these casualties are provided in Table 1, below.

Table 1 – Fatalities in Accidents with the Sides of HGV's during 2005						
Accidents with Vulnerable Road Users			Sido Swino Accidents	Total		
Pedestrian	Pedal Cycle	Motor Cycle	Side Swipe Accidents	lotai		
13	10	15	4	42		

Step 2 - Determining how effective measures to reduce blind spots in the drivers' field of vision may be at reducing road casualties is problematic because many different factors play a causal role in traffic accidents. On the basis of all available information on the causes of accidents, this appraisal makes the assumption that improving mirrors has the potential to prevent one quarter of

accidents involving the sides of goods vehicles. On the basis of the data from the STATS19 database, this assumption leads to the estimate that 10 lives per annum could be saved by implementing the proposal across the entire fleet (see table 2 below). Given the limited information available and complexity of road accident causes, this forms a reasonable prediction of the benefits that improving mirrors will bring, but there is necessarily a degree of uncertainty.

	Table 2 - Estimated Number of Lives Saved per Annum						
Accident	Vehicle Manoeuvre	Fatalities	Effectiveness of Measure	Lives Saved (Rounded)			
VRU Struck by Side of HGV	All	38	25%	9			
Side Swipe	Changing Lane and Overtaking	4	25%	1			
	Total	42		10			

Step 3 - As noted above, the benefits are calculated relative to the baseline scenario. If no further government action is taken in this area, the proportion of goods vehicles equipped with compliant mirrors (in accordance with the requirements of previous Directive 2003/97) is forecast to rise steadily over time. This will occur as new vehicles, which existing regulations require to be fitted with such mirrors, replace those reaching the end of their life. Consequently the baseline for comparison is expected to be a gradual reduction in the annual casualty figures.

Step 4 - Whilst foreign registered goods vehicles are included within the scope of the retrofitting requirement being considered, this appraisal is only concerned with the domestic GB fleet. Foreign registered vehicles are therefore excluded from the analysis and, for this reason; they are not included in the data presented in Table 1 (above).

It should be noted that, as corresponding requirements are being introduced across the European Union, this is expected to result in most of the foreign registered goods vehicles operating within Britain having improved mirror systems, thereby producing greater overall reductions in this type of accident than are measured by this appraisal. In the same way, British vehicles driving abroad will be less likely to be involved in accidents.

Installing improved mirrors on existing vehicles will cause a steeper reduction in year on year casualties to occur. The exact scale of casualty reductions achieved by the retrofitting proposal will be determined by the rates of depletion of the existing vehicle fleet and growth of new vehicles. The proportion of vehicles manufactured after 2000 is also an important consideration, since it is these that the proposal will apply to. The policy is appraised over a period of twelve years, by which time most goods vehicles will have been replaced by new vehicles that meet the standards set by existing Directives 2003/97/EC and 2005/27/EC. Data from Transport Statistics 2005 were used to make projections on new vehicle registrations for the period up to 2020 and calculate the annual depletion of the existing fleet, along with the number of lives saved by the retro fit measures (see Table 3 below).

Tabl	Table 3 - Calculation of Annual Vehicle Fleet Changes and Average Numbers of Lives Saved					
Year	% of Fleet Equipped with Improved Mirrors					
1	11.3%	88.7%	9			
2	22.4%	77.6%	8			
3	31.9%	68.1%	7			

4	41.3%	58.7%	6
5	49.9%	50.1%	5
6	57.0%	43.0%	4
7	63.5%	36.5%	4
8	68.6%	31.4%	3
9	73.0%	27.0%	3
10	76.9%	23.1%	2
11	79.7%	20.3%	2
12	81.5%	18.5%	2
	Average Number of Lives	Saved per Annum	5

The policy is expected to lead to a reduction in the numbers of pedestrian, cyclist and car occupant casualties due to collisions with goods vehicles. This is estimated to deliver an average of 5 fewer fatalities and 25 fewer serious injuries per year. However, the estimated number of lives saved per year can be seen to decline over time as fewer of the accidents prevented are attributable to retrofitting existing vehicles with improved mirrors.

Departmental estimates of the value of the prevention of road casualties, published in Highways Economic Note No.1: 2005 (HEN1), put the statistical value of avoiding a single fatality at £1,428,180 and for preventing a serious injury at £160,480. Applying these estimates to the forecast casualty reductions indicates that **approximately £118m** in **social benefits is likely to result from the proposal** to retrofit mirrors over the twelve year appraisal period. This present value benefit is in 2005 prices. It has been calculated by uplifting the HEN1 values in line with expected income growth, applying these to the forecast of casualty reductions and discounting the resulting benefits by 3.5% per annum. This benefit equates to average annual societal benefits of £9.9m. Further details can be found in **Annex 1**.

#### Costs

The baseline for calculating the costs of the proposal is taking no action beyond the existing requirements of Directives 2003/97/EC and 2005/27/EC, which would not impose any costs on society.

#### 4.1 Business Sectors Affected

The Directive entails a retrofit requirement. Goods vehicle manufacturers are not expected to be affected by the provisions other than as suppliers of replacement mirrors and glasses. However, mirror manufacturers and suppliers are likely to obtain a net benefit which will cause an increase in the number of mirrors required. The size of existing stocks of mirrors and glasses that conform to earlier requirements (laid down by Directive 71/127/EEC) is not known but it is assumed they will be utilised for vehicles not covered by this requirement (i.e. pre 2000 vehicles) and will not represent a loss to manufacturers or stockists.

Ultimately, the costs resulting from the increased requirements will fall to the end user, either the vehicle operators or private owners. Since all organisations use vehicles to some extent, the cost will be spread across all business sectors, charities and voluntary organisations.

#### 4.2 Compliance Costs for Mirror Manufacturers

The Directive changes the specifications of the mirror glasses and requires either, upgrading or replacement of the existing mirrors or, where mirrors are not already fitted, the installation of

additional mirrors. Any development costs incurred by the manufacturers should be recovered quickly from the high initial demand for the products caused by the need to modify the vehicles before the deadline.

#### 4.3 Compliance Costs for Vehicle Users

It is anticipated that the cost of mirrors and their installation, as well as any increase in operating or administrative costs will be met by the vehicle users.

#### 4.4 Installation Cost for Each Measure

Costs of installing the equipment required for vehicles to meet the standards proposed will depend on two main factors:

- the number of vehicles in the existing fleet that will accept replacement mirror glasses against the numbers that need replacement mirrors; and
- the number of vehicles in the existing fleet that do not have the mirrors required by the proposal and must have additional mirrors installed.

The total installation cost estimates are based on the Commission assertion that 75% of the existing fleet of goods vehicles will only need to have the mirror glass replaced, while the remaining 25% of vehicles are expected to require replacement mirrors, where those mirrors are already likely to be fitted.

According to the latest figures available<sup>4</sup>, approximately 419,000 goods vehicles are registered in GB. Of these, 237,543 were registered since 2000 and fall within the scope of the proposal. Separating these into different categories by Gross Vehicle Weight (GVW), around 100,200 are between 3.5 and 7.5 tonnes and the Department estimates that 20% of these vehicles (20,044) a have the type of cab that falls within the scope of the proposal and will require additional class IV and V mirrors to be fitted. 9,699 are between 7.5 and 12 tonnes, which will also probably need additional mirrors to be fitted. The remaining 127,622 are over 12 tonnes and are usually fitted with class IV and V mirrors as standard, so are unlikely to require any additional mirrors to be fitted.

In calculating the installation costs, the average cost of each mirror glass is taken to be £110 and each replacement mirror is assumed to cost £225. The additional mirrors that will have to be installed because they are not provided as original equipment on vehicles are also assumed to have an average cost of approximately £225 per unit. An installation cost of around £48 is assumed for every mirror and glass fitted.

The costs calculated from this information are presented in Table 4, below. In present value terms, the total one off cost of retrofitting to all appropriate existing goods vehicles is predicted to be around £63m in 2005 prices.

Table 4 - Installation Costs for Each Vehicle Type and Requirement					
Vehicle Type	3.5 to 7.5 Tonnes	7.5 to 12 Tonnes	Over 12 Tonnes	All Vehicles	
Number of Vehicles Affected	20,044	9,699	127,622	157,365	
Class IV Mirror Glass or Mirror Replaced	No	Yes	Yes	N/A	
Class V Mirror Glass or Mirror Replaced	No	No	Yes	N/A	
Additional Class IV Mirror Fitted	Yes	No	No	N/A	

<sup>&</sup>lt;sup>4</sup> Vehicle Licensing Statistics 2006 (June 2007)

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Additional Class V Mirror Fitted	Yes	Yes	No	N/A
Average Cost per Vehicle	£546	£460	£373	£401
Total Installation Cost	£10,944,024	£4,459,144	£47,666,932	£63,070,100

More detailed calculations underlying this table are provided in Annex 2

#### 4.5 Vehicle Operating Costs

The vehicle operating costs are expected to rise very slightly, caused by increased fuel consumption. Other things remaining constant, fuel efficiency is predicted to fall by a small amount due to minor increases in weight and aerodynamic drag caused by installing additional mirrors to goods vehicles.

The proportional increase in weight will depend on the size of each vehicle. Utilising figures from previous research<sup>5</sup>, the additional mirrors appear likely to increase the weight of the vehicle by 0.025% (3kg on a 12 tonne vehicle), which in turn will probably increase fuel consumption by 0.015%. Aerodynamic drag is influenced by various factors including the average speed of vehicles, the size and nature of the load being carried and other aerodynamic features of the vehicle but is expected to have a similar effect on fuel consumption as the increase in mass. Therefore, the combined effect of weight and drag on fuel consumption is predicted to be a 0.025% increase.

The annual fuel consumption of all heavy goods vehicles is estimated as 118 billion litres and this would increase by 0.025% if the entire fleet were equipped with the maximum number of additional mirrors required in order to comply with the Directive. The increase in fuel consumption is likely to affect around 7% of the total vehicle fleet and, when the number of additional mirrors and depletion of the fleet is taken into account, this suggests consumption will increase by approximately 526,575 litres. The average cost of fuel is taken to be £0.35 per litre after stripping out duty and VAT and from this Table 5, below, shows that the increased fuel costs are estimated to cost operators £184,301 per annum. In 2005 Net Present Value terms, the total cost of the additional fuel consumed over the life of the vehicles is expected to be about £1.7m.

Table 5 - Vehicle Operating Costs						
Vehicle Type	3.5 to 7.5T	7.5 to 12T	Over 12T	All Vehicles		
Additional Fuel Consumed per Annum - Litres	424,800	101,775	N/A	526,575		
Cost of Additional Fuel Consumed per Annum	£148,680	£35,621	N/A	£184,301		
2005 NPV Total Extra Operating Cost Over 12 Years	£1,369,084	£328,015	N/A	£1,697,099		

#### 4.6 Carbon Assessment

This section analyses the specific carbon impact of the policy. Burning 1 litre of diesel fuel produces 2.64kg of  $CO_2$  so, as a result of requiring additional mirrors to be fitted, an extra 526,575 litres of diesel will potentially be consumed causing an additional 1,390 tonnes of  $CO_2$  per annum to be emitted into the atmosphere. Table 6, below, breaks this down by type of vehicle and details the monetary cost of the carbon dioxide emissions, which are calculated using the shadow price of carbon published by Defra<sup>6</sup>. The estimated carbon cost is relatively small, totalling approximately £367,031 in 2005 Net Present Value terms over the appraisal period.

6 http://www.defra.gov.uk/environment/climatechange/research/carboncost/pdf/HowtouseSPC.pdf

<sup>&</sup>lt;sup>5</sup> S0227/VF Potential Casualty Savings From Fitting Blind Spot Mirrors to Heavy Goods Vehicles – PPRO13 Final Report. TRL Limited.

Table 6 - Carbon Assessment Costs								
Vehicle Type	3.5 to 7.5T	7.5 to 12T	Over 12T	All Vehicles				
Additional CO <sub>2</sub> Emitted per Annum - Tonnes	1,121	269	N/A	1,390				
Cost of Additional CO <sub>2</sub> Emitted per Annum	£30,895	£7,414	N/A	£38,309				
2005 NPV Total Cost of Carbon Emitted Over 12 Years	£296,011	£71,020	N/A	£367,031				

#### 4.7 Maintenance Costs

Although mirrors require very little maintenance they are sometimes subjected to damage. It is envisaged that 25% of the **additional** mirrors installed as a result of the Directive will need to be replaced once during the lifetime of the vehicle. This means that for every £1.00 of additional mirror cost, an additional £0.25 will be set aside for the cost of a replacement mirror, with an additional £24 per mirror allocated for the labour cost. These costs will fall to the end users.

Table 7, below, presents a detailed analysis of maintenance costs by class of goods vehicle. It shows that the costs of maintaining the additional mirrors mandated by the Directive will fall upon operators of goods vehicles weighing less than 12 tonnes. The present value of maintenance costs over the 12 year appraisal period is predicted to total about £5m in 2005 prices.

Table 7 - Maintenance Cost for Each Vehicle Type								
Vehicle Type	3.5 to 7.5 tonnes	7.5 to 12 tonnes	Over 12 tonnes	All Vehicles				
Number of Additional Mirrors	2	1	None					
Total Number of Vehicles	20,044	9,699	None	29,743				
Total Number of Additional Mirrors	40,088	9,699	None	49,787				
Cost of Replacement Mirrors	£4,509,900	£1,091,138	£0	£5,601,038				
Cost of Labour @ £24.00 for Each Mirror	£481,056	£116,388	£0	£597,444				
Annual Maintenance Cost	£415,913	£100,627	£0	£516,540				
2005 NPV of Total Maintenance Cost over 12 Years	£4,019,106	£972,394	£0	£4,991,500				

#### 4.8 Total Costs

Adding together the costs detailed earlier in this impact assessment provides a detailed profile of the total costs expected to be incurred by implementing this proposal. The costs are broken down into different categories and across different classes of goods vehicle in Table 8, below.

Table 8 - Total Cost by Vehicle Type								
Vehicle Type	3.5 to 7.5T	7.5 to 12T	Over 12T	All Vehicles				
Installation Cost	£10,944,024	£4,459,144	£47,666,932	£63,070,100				
Operating Cost	£1,369,084	£328,015	£0	£1,697,099				
Carbon Cost	£296,011	£71,020	£0	£367,031				
Maintenance Cost	£4,019,106	£972,394	£0	£4,991,500				
2005 NPV of Total Costs Over 12 Years	£16,628,225	£5,830,573	£47,666,932	£70,125,730				

Apart from the cost of carbon dioxide emissions, which will fall upon society, all costs will be met by the end users. Most costs are predicted to take the form of upfront expenditure required to install the improved mirrors, although operators of goods vehicles weighing less than 12 tonnes also face some operating and maintenance costs as a result of installing additional mirrors to these classes of vehicle. The present value of all costs imposed by the requirements of the policy is forecast to be around £70m.

#### 5. Small Firms Impact Test

The total fleet of goods vehicles is 419,000<sup>2</sup>. The proposal will affect the operators of around 157,365 of these goods vehicles, which have been registered since 2000.

In total there are 100,000 operators of goods vehicles in GB<sup>7</sup>. Micro operators with use of only one vehicle make up 57,900 of the total number. There are 36,100 small operators who have between 2 and 10 vehicles, and 5,600 medium sized vehicle operators with between 11 and 100 goods vehicles. The number of large operators, with fleets over 100 vehicles, is just 275. These proportions have been used to estimate the relative cost of the proposals per organisation type. These calculations therefore assume that this split is constant across goods vehicles registered before and after 2000. However, due to lack of data it has not been possible to determine whether this assumption is valid.

It is expected that smaller operators will face lower costs from the proposal than the figures below suggest because of the tendency for smaller businesses to operate vehicles that are older and, therefore, on average are more likely to be beyond the scope of the requirements than those of operators of large fleets. Therefore the Directive could have a proportionately lower impact on small firms, although small operators may be less able to pass on the costs of the proposal than companies running large vehicle fleets.

By determining the average number of goods vehicles operated by different sized businesses and multiplying by the average annual cost per vehicle, excluding all one-off installation costs, an average annual cost per operator was obtained for different sizes of firm. The cost for micro-size operators is forecast to be around £4 a year, while small operators will incur costs of about £10 per year. Medium sized businesses are expected to face costs of approximately £90 per year whilst the burden on the largest few vehicle operators will be around £700 annually.

#### 6. Competition Assessment

A competition assessment has been carried out and has indicated that the policy is unlikely to have any significant competition implications. Details are contained in **Annex 3**.

<sup>&</sup>lt;sup>2</sup> Vehicle Licensing Statistics 2006 (June 2007)

<sup>4</sup> Road Freight Statistics 2006, DfT publication, September 2007

#### 7. Enforcement, Sanctions and Monitoring

The new Directive will be implemented through changes to regulation 33 of the GB Construction and Use Regulations, which will require that the additional mirrors are fitted to and maintained on all affected goods vehicles to which regulation 33 applies in use on the road. Enforcement of the Construction and Use requirements is by means of roadside enforcement and annual roadworthiness checks.

#### 8. Implementation and Delivery Plan

The Directive will be implemented in accordance with the normal procedures as described in paragraph 7 above.

#### 9. Post Implementation Review

Article 3 of the Directive requires the Commission to carry out a detailed study to assess whether the measures are having a positive effect on road safety. This review should be completed by 2010.

#### 10. Key Assumptions

Although it is expected that VOSA will be responsible for monitoring and enforcing the requirements imposed by this policy, the details of this regime have not yet been determined. It is possible that the process will be incorporated within existing inspection regimes at no extra cost, which is assumed in the estimated costs used in this impact assessment. However, there is a risk that the enforcement activities and their costs could escalate.

The benefits are sensitive to the level of casualty reductions achieved by the scheme. This forecast is very uncertain and depends on how effective the measures are. The benefit figures presented above are conditional on an assumption that 25% of accidents involving the side of British registered HGVs could be avoided by increasing the driver's field of indirect vision.

The estimated cost of the improvements assumes most vehicles will only require a replacement glass where they already have an original mirror fitted. It may rise significantly if more vehicles need entirely new mirrors to be fitted. However, alternative solutions may be utilised where vehicles cannot be made to fully comply with the requirements for technical and economic reasons.

Installation and maintenance costs could escalate if parts and labour become more expensive.

#### 11. Summary

Taking no action to reduce road accidents involving goods vehicles will have no significant benefits, but there could be cost implications from infraction proceedings as a result of non-compliance with the Directive. Doing nothing is therefore not regarded as a feasible option.

Table 9, below, shows the sum of all benefits and all costs predicted. The benefits and costs have been combined to produce a Net Present Value (NPV), i.e. benefits less costs over the appraisal period, for each vehicle type and for the policy as a whole. In its current form the proposal will apply to all goods vehicles upon implementation so the NPV for all vehicles is the relevant figure for consideration.

Table 9 - Summary of Costs and Benefits by Vehicle Type (2005 NPV)								
Vehicle Type	PV of Total Benefit	PV of Total Cost	Net Present Value	Ratio Benefits to Social Costs				
3.5 to 7.5 tonnes	£10,643,776	£16,628,225	-£5,984,449	0.6:1				
7.5 to 12 tonnes	£3,547,925	£5,830,573	-£2,282,648	0.6:1				
Over 12 tonnes	£104,072,473	£47,666,932	£56,405,541	2.2:1				

All Vehicles	£118,264,174	£70,125,730	£48,138,444	1.7:1
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Although parts of the policy appear to represent poor value for money, overall it is expected to produce a positive net present value of £48m over the appraisal period. Therefore the policy is predicted to deliver net benefits to GB without cost to government. An indicative social benefit cost ratio (benefits to society divided by social costs) is given as a means of showing that the expected benefits are 1.7 times as great as its estimated costs.

The requirement to improve mirrors fitted to existing vehicles classed between 3.5 and 12 tonnes is likely to produce slight negative net present values. It also reflects the need to fit additional mirrors to these classes of goods vehicle, which then imposes extra maintenance and operating costs on operators, as well as causing additional carbon dioxide to be emitted into the atmosphere at a cost to society.

#### 12. Risks and Uncertainties

The analysis of costs and benefits throughout this impact assessment is based upon what are judged to be the most likely impacts of requiring improved mirrors to be fitted, but many of the effects remain uncertain to varying degrees. The impact that deviations from the central case would have on costs and benefits is considered below.

A key factor for the analysis is estimating how many fatalities and casualties will be avoided by retrofitting improved mirrors. The outcome predicted to result from improving mirrors on the entire vehicle fleet is that one quarter of approximately 40 fatalities per year which involve the sides of goods vehicles will be prevented. Other things remaining constant, the proposal to improve mirrors would have to be very ineffective at preventing side swipe accidents (reducing casualties by less than 15%) before it was no longer worthwhile undertaking because it imposed a net cost on GB.

Similarly, the total costs of requiring improved mirrors to be fitted to goods vehicles would have to increase by around 70% before they outweighed the estimated benefits in terms of casualty reductions. This suggests that even some underestimation of the cost this measure entails for vehicle operators would not have altered the case for improved mirrors.

There is always a possibility that optimism bias may affect the estimation of impacts, so a sensitivity test has been carried out to examine what impact this might have. If the number of fatalities and casualties likely to be avoided by the proposal is actually 25% lower than the forecast above then the benefits of retrofitting mirrors would reduce to approximately £89m. Making an additional allowance for unanticipated rises of up to 25% in the costs of installing and maintaining mirrors that meet the new standard, as well as in the cost of operating vehicles with the new mirrors (including the associated carbon costs), raises the total cost of the proposal to about £88m. Under these circumstances the policy would yield a much lower, but still positive net present benefit to GB of around £1m. This forms the basis of the lower bound of a range of likely net benefits from implementing the retrofit proposal. The upper end of the range of likely net benefits that this proposal will yield is approximately £95m. This was determined by considering the possibility that actual costs could be up to 25% lower and than those estimated above, whilst benefits might be up to 25% greater.

#### **Value for Money Assessment**

Our best judgement is that implementing Directive 2007/38/EC, by requiring goods vehicles used on or after 1<sup>st</sup> January 2000 to be fitted with mirrors that increase drivers' field of indirect vision, will deliver **net benefits** to GB with a small increase to government revenues.

Owners and operators of goods vehicles are expected to incur a one-off cost totalling around £63m when installing improved mirrors. Over the twelve year appraisal period this proposal is also likely to increase maintenance costs by approximately £5m, raise operating costs by £1.7m and impose a cost of £370,000 on society through additional carbon emissions. These **costs** are forecast to total **£70m**.

We have estimated that retrofitting mirrors delivers **benefits** to society totalling around £118m over the appraisal period by reducing the number of road users killed and seriously injured in accidents involving goods vehicles.

However, the estimated benefits are uncertain, since they are based on an assumption that increasing drivers' field of indirect vision will prevent 1 in 4 'side-swipe' accidents involving HGVs. In addition, costs to hauliers could be higher or lower than estimated depending on how straightforward it is to replace mirrors, and how fast maintenance costs rise. There is also a risk that enforcement will entail additional unforeseen costs for VOSA. The impact of these uncertainties is that net benefits to GB could feasibly range from £1m to £95m, assuming that costs and benefits might vary by up to 25% around the central estimates above.

The proposal is expected to yield **net benefits** of between £1m and £95m over twelve years, based on the range of monetised impacts identified above. Available evidence suggests that the net effect of non-monetised impacts will be broadly neutral, and that this scheme offers net benefits to GB with a small increase in government revenues.

### **Specific Impact Tests: Checklist**

Use the table below to demonstrate how broadly you have considered the potential impacts of your policy options.

Ensure that the results of any tests that impact on the cost-benefit analysis are contained within the main evidence base; other results may be annexed.

Type of testing undertaken	Results in Evidence Base?	Results annexed?
Competition Assessment	Yes	Yes
Small Firms Impact Test	Yes	Yes
Legal Aid	No	No
Sustainable Development	No	No
Carbon Assessment	Yes	No
Other Environment	No	No
Health Impact Assessment	Yes	Yes
Race Equality	Yes	Yes
Disability Equality	No	No
Gender Equality	No	No
Human Rights	No	No
Rural Proofing	No	No

# Annexes

# ANNEX 1 – BENEFITS

	Present Value of Benefit from Retrofitting Mirrors	£20,405,806	£17,627,974	£15,236,741	£12,935,623	£10,874,048	£9,192,344	£7,685,196	£6,511,724	£5,514,859	£4,647,152	£4,022,307	£3,610,399	£118,264,174
	Discount Factor f	76:0	0.93	06:0	0.87	0.84	0.81	0.79	92.0	0.73	0.71	89.0	99.0	Total
ofitting Mirrors	Value of Benefit of Retrofitting Mirrors	£21,120,010	£18,883,527	£16,893,247	£14,843,925	£12,914,958	£11,299,738	£9,777,716	£8,574,698	£7,516,187	£6,555,267	£5,872,447	£5,455,561	
Calculation of Benefit of Retrofitting Mirrors	Value of Prevention of Serious Injury	£171,306	£175,075	£178,472	£181,934	£185,463	£189,061	£192,729	£196,468	£200,280	£204,165	£208,126	£212,164	
ဒိ	Value of Prevention of Fatality	£1,524,529	£1,558,068	£1,588,295	£1,619,108	£1,650,519	£1,682,539	£1,715,180	£1,748,454	£1,782,374	£1,816,952	£1,852,201	£1,888,134	
	Estimated Reduction in Serious Injuries	44	39	34	59	25	22	18	16	14	12	10	6	
	Estimated Reduction in Fatalities	თ	ø.	2	9	2	4	4	က	ဇ	2	2	2	
	Year	~	2	ဗ	4	5	9	7	∞	<b>о</b>	10	11	12	

.5 - 7.5 tonnes Vehicles	Percentage of Casualties Prevented	Annual Benefit
Killed	9%	£6,814,921
Seriously Injured	9%	£3,828,854
Total		£10,643,776
7.5 - 12 tonnes Vehicles	Percentage of Casualties Prevented	Annual Benefit
Killed	3%	£2,271,640
Seriously Injured	3%	£1,276,285
Total		£3,547,925
Over 12 tonnes Vehicles	Percentage of Casualties Prevented	Annual Benefit
Killed	88%	£66,634,788
Seriously Injured	88%	£37,437,686
Total		£104,072,473
	All Vehicles	£118,264,174

#### **ANNEX 2 - COSTS FOR INSTALLATION**

Calculation for Replacement of Mirror Glasses to 75% of the Fleet								
Vehicle Type	Replacement Mirror Glass Requirement	Cost per Vehicle Including Installation	Number of Vehicles	Total Cost				
3.5 to 7.5 tonnes	None	£0	None	£0				
7.5 to 12 tonnes	1 x Class IV	£158	7,274	£1,149,292				
Over 12 tonnes	1 x Class IV 1 x Class V	£316	95,716	£30,246,256				
All Vehicles			102,990	£31,395,548				

Calculation for Replacement of Mirrors to 25% of the Fleet								
Vehicle Type	Replacement Mirror Requirement	Cost per Vehicle Including Installation	Number of Vehicles	Total Cost				
3.5 to 7.5 tonnes	None	£0	None	£0				
7.5 to 12 tonnes	1 x Class IV	£273	2,425	£662,025				
Over 12 tonnes	1 x Class IV 1 x Class V	£546	31,906	£17,420,676				
All Vehicles			34,331	£18,082,701				

Calculation for Installation of Additional Mirrors Where They Are Not Original Equipment								
Vehicle Type	Additional Mirror Requirement	Cost per Vehicle Including Installation	Number of Vehicles	Adoption Cost				
3.5 to 7.5 tonnes	1 x Class IV 1 x Class V	£546	20,044	£10,944,024				
7.5 to 12 tonnes	1 x Class V	£273	9,699	£2,647,827				
Over 12 tonnes	None	£0	None	£0				
All Vehicles			29,743	£13,591,851				

Installation Costs for Each Vehicle Type									
Vehicle Type	Additional Mirror Requirement	Cost per Vehicle Including Installation	Number of Vehicles	Adoption Cost					
3.5 to 7.5 tonnes	1 x Class IV 1 x Class V	£546	20,044	£10,944,024					
7.5 to 12 tonnes	1 x Class IV 1 x Class V	£158.00 / £273.00	9,699	£4,459,144					
Over 12 tonnes	1 x Class IV 1 x Class V	£316.00 / £546.00	127,622	£47,666,932					
All Vehicles			157,365	£63,070,100					

#### **ANNEX 3 - COMPETITION ASSESSMENT**

The competition filter below provides an indication of whether the proposal would risk a negative effect on competition.

Q1. In the market(s) affected by the new regulation, does any firm have more than a 10% market share?	YES
Q2 In the market(s) affected by the new regulation, does any firm have more than a 20% market share?	NO
Q3. In the market(s) affected by the new regulation, do the largest three firms together have at least a 50% market share?	NO
Q4. Would the costs of the regulation affect some firms substantially more than others?	NO
Q5. Is the regulation likely to affect the market structure, changing the number or size of firms?	NO
Q6. Would the regulation lead to higher set up costs, for new or potential firms, that existing firms do not have to meet?	NO
Q7. Would the regulation lead to higher ongoing costs, for new or potential firms, that existing firms do not have to meet?	NO
Q8. Is the market characterised by rapid technological change?	NO
Q9. Would the regulation restrict the ability of firms to choose the price, quality, range or location of their products?	YES. But only insofar as mirrors, which are currently supplied as an option, would need to be supplied on a mandatory basis.

It is concluded from the above that there is unlikely to be a negative competitive impact from the regulation.

Summary: Intervention & Options			
Department /Agency:	Title:		
Department for Transport	Impact Assessment of the Amendments to the Speed Limiter Regulations (36A and 36B) of the Road Vehicles (Construction and Use) Regulations 1986		
Stage: Consultation	Version: 2	Date: July 2008	
Related Publications:			

#### Available to view or download at:

http://www.dft.gsi.gov.uk

Contact for enquiries: Rob Haggar Telephone: 020 7944 2457

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

An amendment is needed to the Road Vehicles (Construction & Use) Regulations 1986 dealing with requirements for speed limiters on certain heavier vehicles. The amendment is to remove a time-expired 'savings-provision' in the Regulations affecting goods vehicles registered between October 2001 and December 2004. (The savings provision was originally inserted to preserve the benefit of existing GB legislation whilst transitional provisions implementing EU legislation – which affected the same group of vehicles – were taking effect). As the second amendment in the SI - concerning HMPS vehicles - does not affect private businesses no IA has been undertaken.

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

Speed limiters are required by European legislation. The intended effect of the amendment to the Regulations is to bring GB legislation fully in line with European Directive 2002/85/EC.

However the proposed changes would also grant an exemption from the requirements for vehicles used by HM Prison Service. This would be similar to the exemption that already exists for Police, Ambulance and Fire service vehicles when responding to emergencies.

What policy options have been considered? Please justify any preferred option.

There are two options – either amend the Regulations or do nothing.

The preferred option is to amend the Regulations. There would be legal implications if the amendment to the Regulations to remove the transitional provisions were not made due to requirements that are specified in EC Directive. Unless this action is taken, infraction proceedings could be taken against the Department. We could also face potential actions in damages brought by any vehicle operator who claimed to have suffered a loss as a result of our failure to implement the amending Directive correctly. Failure to implement the HMPS exemption would inhibit the ability of that agency and its Police escorts to respond to public order emergencies

When will the policy be reviewed to establish the actual costs and benefits and the achievement of the desired effects? Within 2 years of implementation.

#### Ministerial Sign-off For SELECT STAGE Impact Assessments:

I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.

#### Signed by the responsible Minister:

Jim Fitzpatrick

......Date: 29th January 2009

#### **Summary: Analysis & Evidence**

**Policy Option: Description:** 

#### **ANNUAL COSTS** One-off (Transition) Yrs £460,000 1 **Average Annual Cost** (excluding one-off) **£**None

Description and scale of **key monetised costs** by 'main affected groups' The cost of adjusting the setting of a speed limiter for the vehicles affected by the removal of the 'savings provision' varies from approximately £35-£125 per vehicle (average £80). 5.777 HGVs fall into the class and age of vehicle that require recalibration. Therefore the likely cost to GB operators is approximately £460,000

> Total Cost (PV) £460.000

Other **key non-monetised costs** by 'main affected groups' There will be some time and money costs associated with taking the vehicle to the authorised agent for re-calibration. As the number of operators who make a special trip to undertake the change is not known, this cannot be effectivley quantified. Operators also face the opportunity cost of being unable to use the vehicle

#### **ANNUAL BENEFITS** One-off Yrs **£**None **SENEFITS Average Annual Benefit** (excluding one-off) **£**None

Description and scale of **key monetised benefits** by 'main affected groups'

> **£**None Total Benefit (PV)

Other key non-monetised benefits by 'main affected groups' The reduction in speeds for this small group of vehicles is likely to lead to some slight reduction in the level of speed-related accidents caused by HGVs. There are also potential emissions benefits and fuel savings due to slight running speed reductions. Potential congestion savings due to accidents avoided.

Key Assumptions/Sensitivities/Risks If we do not comply with EC Directive 2002/85/EC we risk infraction proceedings. We also risk proceedings from groups or organisations that feel they have suffered loss due to our incorrect implementation

Price Base Time Period Net Benefit Range (NPV) **NET BENEFIT** (NPV Best estimate) Year 2008 Years 10 £-460,000

What is the geographic coverage of the policy/option?			Great Britain		
On what date will the policy be implemented?		October 2008			
Which organisation(s) will enforce the policy?		DfT/VOSA			
What is the total annual cost of enforcement for these organisations?			£	£	
Does enforcement comply with Hampton principles?			Yes	Yes	
Will implementation go beyond minimum EU requirements?			No	No	
What is the value of the proposed offsetting measure per year?			£ None		
What is the value of changes in greenhouse gas emissions?			£ Negligible		
Will the proposal have a significant impact on competition?			No		
Annual cost (£-£) per organisation (excluding one-off)	Micro none	Small none	Medium none	Large none	
Are any of these organisations exempt?	No	No	N/A	N/A	

Impact on Admin Burdens Baseline (2005 Prices) (Increase - Decrease) Increase of £n/a Decrease of £n/a **Net Impact £**None

> Key: Annual costs and benefits: Constant Prices

(Net) Present Value

Please see the consultation document to which this is annexed for a detailed explanation of the proposals to amend the Road Vehicles (Construction and Use) Regulations, why they need to be amended and how we propose to make the change.

A summary of the costs, benefits and risks are as follows:

#### Costs

These are based on the cost to the vehicle owner of adjusting the setting of a speed limiter. The normal charge for this activity is one hour's labour. Labour rates vary by companies and areas of the country. The lowest cost found was £35 and the highest was £125. Therefore we have taken £80 as an average.

In addition there is the cost of travel time to the operator in taking the vehicle out of regular service and getting the vehicle to and from the authorised speed limiter sealer centre. These costs include driver's wages for travel and wait time, fuel and other operating costs and the opportunity cost of being unable to use the vehicle, as well as any external costs associated with the journey, such as contributions towards congestion and increased emissions.

These are 'one-off' costs, and in some cases could be carried out during the routine servicing schedule for vehicles, which would therefore impose no travel costs.

Enforcement costs on VOSA would be minimal given the small number of vehicles and the fact that VOSA would have to check them anyway to ensure that the speedlimiter is set - whether it is set at 60 mph or 56 mph

#### **Benefits**

The value of accidents and injuries can be established by reference to the Department's standard method of the valuation of the benefits of the benefits of prevention of road accidents and casualties given in the Department's Highways Economics Note No. 1 'The Total Value of Prevention of Road Accidents in Great Britain 2005' (accessible at the DfT website: http://www.dft.gov.uk/pgr/roadsafety/ea/archive/highwayseconomicsnoteno11996).

In 2008 Prices, these are:

Accident Category	Cost of Prevention (Today's Prices)
Fatal	£1,745,464
Serious	£200,483
Slight	£20,428
Damage only	£1,815

It is not possible to estimate the extent of the fall in the level of accidents caused by decreasing the maximum set speed of these vehicles.

#### Risks

The amendment to remove the savings-provision is necessary to ensure that the Road Vehicles (Construction and Use) Regulations 1986 reflect the requirements of European legislation (under Directive 2002/85/EC). The Directive came into full effect for the relevant class of vehicles on 1 January 2007. By not removing the savings provision there is a small risk of infraction proceedings.

## **Specific Impact Tests: Checklist**

Use the table below to demonstrate how broadly you have considered the potential impacts of your policy options.

Ensure that the results of any tests that impact on the cost-benefit analysis are contained within the main evidence base; other results may be annexed.

Type of testing undertaken	Results in Evidence Base?	Results annexed?
Competition Assessment	No	No
Small Firms Impact Test	No	No
Legal Aid	No	No
Sustainable Development	No	No
Carbon Assessment	No	No
Other Environment	No	No
Health Impact Assessment	No	No
Race Equality	Yes	Yes
Disability Equality	Yes	Yes
Gender Equality	Yes	Yes
Human Rights	No	No
Rural Proofing	No	No

#### **Annexes**

Race Equality, Disability Equality, Gender Equality

We have considered whether the potential changes are likely to have any impact on race, disability or gender equality. We consider that there will be no such impacts.

#### TRANSPOSITION NOTE

To accompany the Road Vehicles (Construction and Use) (Amendment) Regulations 2009 which implement Directive 2007/38/EC.

The Regulations do what is necessary to implement the Directive, including making consequential changes to domestic legislation to ensure its coherence in the area to which they apply.

Directive 2007/38/EC of 11 July on the retrofitting of mirrors to heavy goods vehicles registered in the Community.

Articles	Objectives	Implementation	Responsibility
		The main implementation measures are in regulation 3. They amend regulation 33 of the Road Vehicles (Construction and Use) Regulations 1986 (C&U) by inserting new paragraphs (6A) to (6H), new subparagraphs (7)(e) and (f) and new paragraph (9).	The Secretary of State
Article 2	Sets out which vehicles are covered by the directive	New sub-paragraph 7(f) which defines what is meant by "relevant vehicle" for the purposes of regulation 33.	
Article 3(1)	Requires:		
	Certain goods vehicles over 3.5 tonnes to be fitted with one wide angle mirror and one close proximity mirror on the passenger side that comply with the field of view requirements under Directive 2003/97;	New paragraphs (6C) and (6D) which impose the requirements arising under article 3(1) on relevant vehicles.	
Article 3(2)	Instead of complying with article 3(1) vehicles may be fitted with one wide angle mirror and one close proximity mirror on the passenger side whose combined field of view covers not less than 95% of that for the class IV mirror and not less than 85% of that for the class V mirror as required under Directive 2003/97;	New paragraphs (6F) and (6G) which provide that instead of complying with (6C) or (6D), vehicles may comply with the requirements of article 3(2).	
Article 3(3)	If the vehicle cannot, for want of available, economically viable, technical solutions, be	New paragraphs (6F) and (6H) which provide that if the vehicles cannot comply with	

equipped with mirrors complying with articles 3(1) and 3(2), may be fitted with supplementary mirrors or other devices provided that the combination of devises covers not less than 95% of the field of view for the class IV mirror and not less than 85% of that for the class V mirror as required under Directive 2003/97.

article 3(1) (as implemented by new paragraphs (6C) and (6D)) or article 3(2) for the reasons set out in article 3(3), it may comply with the requirements in respect of the fitting of mirrors and other indirect vision devices set out in article 3(3).

#### Article 4

Requires Member States to furnish proof in accordance with article 3 of Directive 96/96/EC that vehicles are complying with the requirements of article 3 of 2007/38/EC Article 3(1) of 96/96 reads "Member States shall take such measures as they deem necessary to make it possible to prove that a vehicle has passed a roadworthiness test complying with at least the provisions of this Directive...".

The relevant roadworthiness test is provided for by the Goods Vehicles (Plating and Testing) Regulations 1988. Regulation 33 of C&U as amended by these Regulations will be a prescribed construction and use requirement for the purposes of the 1988 regulations (see Part 1 of Schedule 3 to the 1988 Regulations) and hence compliance with regulation 33 is necessary in order for a vehicle to obtain a goods vehicle test certificate under the 1988 Regulations. This framework will assist the UK in complying with its obligations under article 4 of 2007/38/EC.