Proposal for a

DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

on the retrofitting of mirrors to heavy goods vehicles registered in the Community

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(presented by the Commission)
EXPLANATORY MEMORANDUM

1 CONTEXT OF THE PROPOSAL

Grounds for and objectives of the proposal

The proposal for a directive aims at improving the safety of road users, in particular vulnerable road users such as pedestrians, cyclists and motorcyclists. This group bears a heavy risk of being involved in accidents with heavy goods vehicles, which have a lateral blind spot on the passenger's side. Legislation making an improved set of mirrors mandatory from 2006/2007 onwards for new heavy goods vehicles is already in place. However, existing trucks will remain in circulation without any improvement of their field of indirect vision. The Commission proposes to extend requirements for the lateral field of indirect vision, which currently only apply to new vehicles, to the existing fleet of heavy goods vehicles.

General context

A number of accidents are caused by drivers of larger vehicles who are not aware that other road users are very close or beside their own vehicle. These accidents are often related to a change of direction at crossings, junctions or roundabouts when drivers fail to detect other road users in the blind spots which exist in the area immediately around their vehicles. It is estimated that in Europe every year about 400 people are killed in such circumstances. Therefore, the European Parliament and the Council adopted Directive 2003/97/EC 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 71/127/EEC. According to this directive, in 2006 new vehicle types and respectively in 2007 new vehicles can only be granted approval by the Member States' authorities if they are equipped with a set of mirrors and other systems of indirect vision fulfilling certain requirements in order to reduce their blind spots.

For several Member States the obligation for new vehicles and new vehicle types only, not including existing vehicles, was not far-reaching enough. Three Member States - the Netherlands, Belgium and Denmark - implemented therefore national schemes (legislation or tax rebates or other financial incentives) for the retrofitting of certain vehicle categories causing a particular danger in this context, i.e. heavy goods vehicles. In addition, these Member States encouraged the Commission to initiate relevant legislation at EU level. This was also welcomed by a number of other Member States

Existing provisions in the area of the proposal

European legislation on the type approval of systems for indirect vision dates back to 1971. The first Directive 71/127/EEC was progressively amended by a number of directives adding more and advanced mirrors and extending its scope to other vehicle categories. The directive laid down requirements on how rear view mirrors should be fitted on vehicles and their construction. National requirements remained nevertheless untouched by this directive. Only in 2003, a new directive, 2003/97/EC, repealing Directive 71/127/EEC, made a set of mirrors or other systems for indirect vision exclusively mandatory.
Directive 2003/97/EC has been amended by Commission directive 2005/27/EC to extend the general requirement for fitting Class IV and Class V mirrors down to vehicles weighing 3.5 tonnes instead of the previous 7.5 tonnes.

**Consistency with other policies and objectives of the Union**

In its White Paper titled "European transport policy for 2010: time to decide" the European Commission set the target of halving the number of road fatalities by 2010. In its third Road Safety Action Programme the Commission committed itself to investigate the issue of retrofitting heavy vehicles already in circulation with devices for indirect vision to reduce their blind spots.

In December 2005, the CARS 21 High Level Group adopted a 10 year roadmap for a competitive EU car industry. With regard to road safety, the group recommended an integrated approach involving vehicle technology, infrastructure and the road user. This integrated approach included the compulsory introduction of new safety features, among others the improvement of heavy goods vehicles' blind spots.

2 CONSULTATION OF INTERESTED PARTIES AND IMPACT ASSESSMENT

**Consultation of interested parties**

**Consultation methods, main sectors targeted and general profile of respondents**

Stakeholders were consulted during the cost-benefit study by the contractor of the study in 2004. Their comments have been taken into account in the study report.

A public stakeholder consultation was launched in 2006 via Internet. Most of the respondents of this consultation had already been contacted during the study.

- 10 of these replies come from manufacturers of vehicle equipment with mirrors or other devices to improve the field of indirect vision;
- 8 come from road safety organisations, including one Member of the European Parliament
- 6 from national and international haulage associations (DK, NL, BE, ES, UK, IRU)
- 7 from national or regional governments (CY, DE, EL, NL, FI, NO, Baden-Württemberg/German Land)
- 2 from manufacturers and manufacturers' associations (ACEA and a manufacturer who modifies Volvo trucks)
- 3 user associations (FEMA/motorcyclists, FIVA/historic vehicles; ECF/cyclists)

**Summary of responses and how they have been taken into account**

The replies in general acknowledged the benefits of retrofitting of devices increasing the field of indirect vision. They differed with regard to the approach and the scope of such an initiative. Some stakeholders would prefer a voluntary retrofitting, a smaller field of vision or
a larger variety of options to achieve this field of vision. Others wanted to apply all requirements of the directive for new vehicles to more vehicle types or to older vehicles.

The Commission has considered all these comments carefully. A purely voluntary initiative does not guarantee the expected results. Further, the Commission foresees a simple and straightforward solution, minimising costs and maximising benefits. The solutions proposed by many commentators would possibly be beneficial for their stakeholders, but at the detriment of the overall effectiveness of the proposal. Finally, and most importantly, the Commission took note that all comments of vulnerable users, the target group of this measure, were overwhelmingly positive. Further details of the results of the stakeholder consultation can be found in the Impact Assessment, accompanying this proposal.

An open consultation was conducted over the internet from 12/04/2006 to 24/05/2006. The Commission received 36 response(s). The results are available on http://ec.europa.eu/transport/road/roadsafety/index_en.htm.

**Collection and use of expertise**

*Scientific/expertise domains concerned*

Market survey, Cost-Benefit Analysis

*Methodology used*

Study contract

*Main organisations/experts consulted*

National governments, mirror manufacturers, vehicle manufacturers, Road Safety Institutes

*Summary of advice received and used*

The stakeholder consultation did not bring forward potentially serious risks of the proposal with irreversible consequences.

The hauliers suggested accompanying awareness raising campaigns both for drivers and vulnerable road users, a recommendation which was included in the directive. Furthermore, it was stated that some Member States' vehicle fleets have a higher average age than others. Therefore, Member States are free to extend the scope of the directive to vehicles over 10 years.

*Means used to make the expert advice publicly available*

The cost-benefit study was published on the EUROPA and can be downloaded: http://ec.europa.eu/transport/road/publications/projectfiles/mirrors_en.htm

- **Impact assessment**

The "do nothing" option means missing a window of opportunity to save lives with a straightforward and not overly expensive measure. The retrofitting exercise makes only sense if it is finalised before the whole HGV fleet is replaced by new HGV which have mirror sets
in line with Directive 2003/97/EC. It can be estimated that this is the case after 2020. The impact of a retrofitting directive is limited in time and decreasing every year.

The application of the full set of requirements of Directive 2003/97/EC for the lateral field of vision to all HGV (>3.5 tonnes) is the second option. Considering the overall vehicle fleet, it can be assumed that this measure is highly cost-beneficial. However, it is expected that the installation of the required devices might differ between different vehicle types. For some vehicle types, in particular older ones, the application of the full set of requirements of Directive 2003/97/EC may require substantial modifications in the cabin structure due to the higher wind loads of larger mirrors. This may cause substantial costs in the order of magnitude of a couple of thousands of Euros.

A third option is therefore to apply a differentiated set of requirements on the basis of Directive 2003/97/EC for the lateral field of vision to all HGV. For more than 50% of the HGV circulating on Europe's roads, it is possible to replace the old mirror glasses by new ones which are in conformity with Directive 2003/97/EC and cover the required field of indirect vision. Another 25% could be equipped with new glasses if the requirements for retrofitting with regard to the field of vision are slightly reduced (>99%). The costs for the retrofitting in these cases are normally below 150 €. Most of the remaining 20-25% can be retrofitted with new mirrors at higher yet reasonable costs. In some cases (<10%), it is permitted to install additional devices to cover at least the field of vision of Directive 2003/97/EC. This might be the case if exchanging mirrors required substantial changes in the cabin structure or if there is no mirror available which would fulfil the requirements.

3 LEGAL ELEMENTS OF THE PROPOSAL

Summary of the proposed action

The objective of this Directive is to improve the field of indirect vision of existing heavy goods vehicles and help saving lives on Europe's roads. Since improving the field of indirect vision of existing heavy goods vehicles involves technical modifications in an already approved and legally authorised system, particular attention is given to the technical feasibility and the economic efficiency of a retrofitting.

For the time being, there is no technical solution which can cover 100% of the area around a vehicle at ground level. This is the case for passenger vehicles and even more for heavy goods vehicles. Furthermore, although mirrors are an excellent means to cover the fields of indirect vision, which is in use practically since automobiles exist, there are physical limits for certain areas, e.g. behind a heavy goods vehicles.

The most important constraint is the limited ability of the driver to gather, perceive and process different information while moving. Already with the current set of mirrors a driver of a left-hand driven truck performing a right turn, besides watching out ahead and to the left, has to look in two rear mirrors on the right side and one close proximity mirror above the right door. In a truck built after 2007, there will be an additional frontal mirror to cover also the area directly in front of the vehicle at ground level.

Additional electronic systems to cover the so-called blind spots, which would, especially on existing vehicles, require considerable structural modifications and incur significant costs, will most likely not play a major role for retrofitting. However, if these systems are in
conformity with the requirements of Directive 2003/97/EC, they may be installed. The technical approach of the directive for new vehicles, which can be considered to be the current state of art, is the frame of reference for any possible retrofitting exercise.

From a cost-benefit point of view it does not make sense to apply the full set of requirements for new vehicles also to existing vehicles. Retrofitting light good vehicles or buses with mirrors or cameras has a benefit-cost ratio which is in all the cases far below 1. For heavy good vehicles, the benefit-cost ratio is only higher than 1 in the case of the lateral field of indirect vision. On the basis of the results of the cost-benefit analysis, only the scenario heavy goods vehicles/side-view is considered.

In order to make most use of the closing window of opportunity (the benefit of the measure decreases over time), to let manufacturers cope with the demand and to give owners of older trucks more flexibility, it makes sense to foresee a progressive implementation of this retrofitting directive. Heavy goods vehicles registered after 2004 have to be retrofitted one year after entry into force of the directive, heavy goods vehicles registered after 2001 two years and heavy goods vehicles registered after 1998 three years after entry into force at the latest.

Cost-effectiveness is the underlying principle of this proposal. With regard to enforcement of the requirements of this directive, Member States are requested to provide reliable and effective, and in some cases flexible control procedures, to make sure that all vehicles registered in their country comply with these requirements. For the majority of vehicles, the retrofitting can be done at reasonable costs and with devices which are already available on the market. In some cases, retrofitting may be technically more difficult. In particular in these cases, Member States should provide for flexibility and case-by-case solutions for the inspection authority to grant approval for alternative solutions.

Some Member States have already taken measures at national level to increase the lateral field of indirect vision for drivers of heavy goods vehicles in addition to the requirements according to European legislation in force. These approaches do not or not fully comply with the technical approach of Directive 2003/97/EC. Nevertheless, the result, sufficient coverage of the lateral blind spot, may also be achieved through these approaches. Therefore, the directive gives an exemption to heavy goods vehicles registered in these countries, i.e. the Netherlands, Denmark and Belgium, which have been equipped with systems for indirect vision in compliance with the national schemes before this directive comes into force. Nevertheless, all Member States have to make sure that all heavy goods vehicles that are retrofitted after entry into force of this directive are retrofitted with systems for indirect vision in compliance with it.

Furthermore, vehicles registered more than 10 years before entry into force of this directive are exempt from this directive. It is likely that the costs to retrofit older vehicles would be higher than the expected benefits the latter obviously decreasing with the remaining time until scrapping of the vehicle.

Legal basis

The measure is proposed on the basis of Article 71 of the EC Treaty.
Subsidiarity principle

The subsidiarity principle applies insofar as the proposal does not fall under the exclusive competence of the Community.

The objectives of the proposal cannot be sufficiently achieved by the Member States for the following reasons.

With Directive 2003/97/EC, mirrors are harmonised at European level. Retrofitting initiatives at Member State level would only concern vehicles registered in the relevant Member State. Heavy goods vehicles are highly involved in European or even international traffic. A purely national solution would not be satisfying.

A national retrofitting obligation could also be considered as a barrier to trade, especially since there is harmonised European legislation in place. A common European approach on the retrofitting provides for a level playing field in a highly competitive European road transport market.

Community action will better achieve the objectives of the proposal for the following reasons.

A common European obligation has economy-of-scale advantages. It prohibits different technical solutions at national level which may cause problems when old trucks are sold to other European countries, which have different requirements.

European legislation will reduce the number of blind spot accidents involving heavy goods vehicles registered in another EU country.

Heavy goods vehicles are the vehicle category which is most often involved in international traffic. This should be the first vehicle category to be considered for European harmonisation of requirements.

The proposal therefore complies with the subsidiarity principle.

Proportionality principle

The proposal complies with the proportionality principle for the following reasons.

Whereas the technical approach is prescribed in detail, the directive leaves plenty of room to the Member States to create their own schemes how to ensure compliance.

The preferred option leaves a large margin of manoeuvre to the Member States in order to find the most cost-effective means to transpose the directive in terms of enforcement and control procedures.

Choice of instruments

Proposed instruments: directive.

Other means would not be adequate for the following reasons.

The alternative to a legal obligation is awareness campaigns and voluntary agreements of the sector. Since the retrofitting exercise makes only sense within a certain window of
opportunity (about 4 to 6 years from 2007 on), a voluntary agreement of the haulage sector does not seem to be appropriate. Furthermore, the haulage sector is apparently not in a position to make such a commitment. Awareness campaigns seem to be successful in the short term. They should accompany the introduction of mirrors.

4 BUDGETARY IMPLICATION

The proposal has no implication for the Community budget.

5 ADDITIONAL INFORMATION

Simulation, pilot phase and transitory period

There was or there will be a transitory period for the proposal.

Correlation table

The Member States are required to communicate to the Commission the text of national provisions transposing the Directive as well as a correlation table between those provisions and this Directive.
Proposal for a

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on the retrofitting of mirrors to heavy goods vehicles registered in the Community

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 71(1)(c) thereof,

Having regard to the proposal from the Commission1,

Having regard to the opinion of the European Economic and Social Committee2,

Having regard to the opinion of the Committee of the Regions3,

Acting in accordance with the procedure laid down in Article 251 of the Treaty4,

Whereas:

(1) A number of accidents are caused by drivers of heavy goods vehicles who are not aware that other road users are very close or beside their vehicle. These accidents are often related to a change of direction at crossings, junctions or roundabouts when drivers fail to detect other road users in the blind spots which exist in the area immediately around their vehicles. It is estimated that every year about 400 people are killed in such circumstances, most of them being vulnerable road users such as cyclists, motorcyclists and pedestrians.

(2) In its White Paper of 12 September 2001 "European transport policy for 2010: time to decide"5 the Commission set the target of halving the number of road fatalities by 2010. In its third Road Safety Action Programme6 the Commission committed itself to investigating the issue of retrofitting heavy goods vehicles already in circulation with devices for indirect vision to reduce their blind spots and thus to contribute to the reduction of road fatalities.

(3) In its 10 year roadmap in the Final Report "A Competitive Automotive Regulatory System for the 21st century" the CARS 21 High Level Group recommended an integrated approach with regard to road safety including the compulsory introduction

1 OJ C , p.
2 OJ C , p.
3 OJ C , p.
4 OJ C , p.
of new safety features, such as mirrors to reduce the blind spots of heavy goods vehicles.


(5) It follows for vehicles which are already in circulation that they are not subject to the obligations set out in Directive 2003/97/EC. It can be estimated that those vehicles will not be fully replaced until 2023.

(6) In order to help reduce road fatalities caused by those vehicles and involving vulnerable road users, it is appropriate, in the meantime, to provide that the vehicles concerned be retrofitted with improved devices for indirect vision.

(7) Such existing vehicles should be equipped with mirrors reducing the lateral blind spots whilst fulfilling the technical requirements of Directive 2003/97/EC. That is technically feasible for the majority of the vehicles concerned.

(8) It is however appropriate and proportionate to provide exemptions for vehicles whose remaining lifespan is short, vehicles which are equipped with lateral mirrors whose field of vision covers only marginally less than the fields of vision laid down in Directive 2003/97/EC, and vehicles which it is technically impossible to equip with mirrors complying with that Directive.

(9) In order to let the market cope with a very high demand for mirrors in a very short period of time transitional periods should be provided for.

(10) Heavy goods vehicles retrofitted before entry into force of Directive 2003/97/EC with devices of indirect vision which largely cover the field of vision required in that directive should be exempted from the requirements of this legislation.

(11) The retrofitting exercise should be accompanied by measures designed to raise awareness of the dangers linked to the existence of blind spots of heavy goods vehicles.

(12) Since the objectives of the action to be taken namely the retrofitting of existing vehicles in circulation in the Community cannot be sufficiently achieved by the Member States and can therefore, by reason of the scale and effects of the action, be better achieved at Community level, the Community may adopt measures, in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty. In accordance with the principle of proportionality, as set out in that Article, this directive does not go beyond what is necessary in order to achieve those objectives.

HAVE ADOPTED THIS DIRECTIVE:

Article 1

This Directive lays down requirements for the equipment with systems of indirect vision of vehicles of category N2 and N3 as referred to in Council Directive 70/156/EEC which are registered in the Community.

Article 2

1. This Directive shall apply to vehicles of categories N2 and N3 as referred to in point 2 of Annex II to Directive 70/156/EC which are not covered by Directive 2003/97/EC.

2. This Directive shall not apply to any of the following:

(a) Vehicles of categories N2 and N3 registered more than 10 years before the date set out in Article 7;

(b) Vehicles of categories N2 and N3 where it is impossible to mount class IV and class V mirrors in a way that ensures that the following conditions are fulfilled:

(i) no parts of the mirrors are less than 2 m (±10 cm) from the ground, regardless of the adjustment position, when the vehicle is under a load corresponding to its maximum technically permissible weight;

(ii) the mirrors are fully visible from the driving position.

(c) Vehicles of categories N2 and N3 that were subject, prior to the entry into force of Directive 2003/97/EC, to national measures requiring fitment of other means of indirect vision covering not less than 95% of the total field of vision at ground level of the class IV and the class V mirror under that Directive.

Article 3

With effect from the date set out in Article 7 Member States shall ensure that all vehicles referred to in Article 2(1) are equipped, on the passenger’s side, with close proximity and large angle mirrors which fulfil the requirements for class IV and class V mirrors under Directive 2003/97/EC respectively.

By way of derogation from the first paragraph compliance with the requirements of this Directive shall be deemed to be achieved where vehicles are equipped with mirrors, whose combination of field of vision covers not less than 99% of the total field of vision at ground level of the class IV and the class V mirror under Directive 2003/97/EC.

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Article 4

By way of derogation from the first paragraph of Article 3 Member States may provide the following:

(1) Vehicles registered from 4 to 7 years before the date set out in Article 7 shall comply with the requirements of this Directive at the latest 1 year after that date;

(2) Vehicles registered from 7 to 10 years before the date set out in Article 7 shall comply with the requirements of this Directive at the latest 2 years after that date.

Article 5

Vehicles of categories N₂ and N₃ which, by reason of the lack of available technical solutions, cannot be equipped with mirrors which comply with this Directive may be equipped with other devices of indirect vision, provided that such devices cover at least the same field of vision as set out in the second paragraph of Article 3.

Vehicles retrofitted in accordance with the first subparagraph shall be individually approved by the competent authorities of the Member States.

Article 6

Member States shall accompany measures under this Directive by initiatives to raise awareness of the dangers for road users arising from vehicle blind spots.

Article 7

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by [one year after entry into force of the Directive] at the latest. They shall forthwith communicate to the Commission the text of those provisions and a correlation table between those provisions and this Directive.

When Member States adopt those provisions, they shall contain a reference to this directive or be accompanied by such a reference on the occasion of their official publication. Member States shall determine how such reference is to be made.

2. Member States shall communicate to the Commission the text of the main provisions of national law which they adopt in the field covered by this Directive

Article 8

This Directive shall enter into force on the twentieth day following that of its publication in the Official Journal of the European Union.
Article 9

This Directive is addressed to the Member States.

Done at Brussels,

For the European Parliament
The President

For the Council
The President