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**COMMISSION STAFF WORKING DOCUMENT**

**IMPACT ASSESSMENT**

*Accompanying the*

**Proposal for a Regulation of the European Parliament and the Council  
on the approval and market surveillance of motor vehicles and their trailers, and of  
systems, components and separate technical units intended for such vehicles**

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## Executive Summary Sheet

### Impact assessment on the review of Directive 2007/46/EC on the type-approval of motor vehicles

#### A. Need for action

##### Why? What is the problem being addressed?

This initiative aims at addressing **regulatory failures arising from non-compliant or unsafe automotive products** on the market. The **size of this problem is** estimated to represent between 5% and 15% of the annual turnover of automotive products in the EU, with a corresponding value of **between 5 billion € and 30 billion €**. The **main underlying driver is the lack of efficient ex-post control mechanisms (market surveillance)** in the internal market legislation governing the automotive sector.

The presence of unsafe automotive products **risks endangering safety or the environment**. As a result citizens (vehicle users as well as other road users) and society as a whole are affected. The presence of non-compliant products results in an **unevaluated playing field to the detriment of those economic operators complying with the rules**. It also creates an **additional burden for enforcement authorities in taking remedial action**.

##### What is this initiative expected to achieve?

The initiative is expected to **achieve a substantial reduction** in the market volume and value of **non-compliant and unsafe automotive products on the EU market**. With an effective implementation of the preferred combination of policy options this initiative could result in a reduction of the value of non-compliant and unsafe products **by almost 50%**.

##### What is the value added of action at the EU level?

Although Member States are responsible for the implementation of the automotive product legislation in their territory, a **harmonised and co-ordinated approach based on commonly applicable criteria and uniformly applied by Member States is essential for ensuring a level playing field across the EU**. If Member States would take remedial actions individually at national level, this may entail the risk of creating obstacles to the free movement of motor vehicles within the Internal Market. Hence it is more appropriate to take co-ordinated action at EU level. This initiative concerns the revision of existing EU legislation and would not mean that EU legislation is established in a new area.

#### B. Solutions

##### What legislative and non-legislative policy options have been considered? Is there a preferred choice or not? Why?

**Five areas** in the automotive type approval legislation have been identified **with a potential for improvement** to reduce the problem of unsafe and non-compliant automotive products. **For each of these five areas three policy options have been considered**, and an additional fourth option for area B, **resulting in a preferred combination of policy options** (see below).

Areas for improvement	Policy Options	Preferred Combination
A: traceability of products and responsibilities of economic operators	1: No action, Status quo	A3b
B: responsibilities and cooperation of enforcement authorities	2: Self-regulatory initiatives	B3 + B4
C: quality of type approval tasks carried out by Technical Services	3: Regulatory initiatives at EU-level	C3
D: post safeguard measures and recalls	4: Co-regulatory initiatives (joint actions by MS and EC)	D3
E: procedures for ensuring conformity of production		E3

Non-legislative options (e.g. self-regulatory initiatives by industry) have been considered, but the analysis concluded that such an approach would be not sufficient for reaching the initiative's objectives. This conclusion is based on the consideration that the improvements in the areas identified are unlikely to be effective and cannot guarantee a level playing field for all economic operators unless they are legally enforceable.

##### Who supports which option?

The majority of the economic operators are supporting regulatory initiatives for areas A and B, a self-regulatory initiative for area C, and no action for area D. For area E there is equal support for no-action, self-regulatory and regulatory action in this field. Technical services are supporting regulatory initiatives for areas A and D, and co-regulatory as well as regulatory initiatives for areas B, C, and E. The majority of the national authorities are in support of co-regulatory and regulatory initiatives for areas A, B, and C. For area D about half of the authorities support the do-nothing option, whilst the other half is supporting co-regulatory and regulatory initiatives. The majority of them support a regulatory initiative for area E.

#### C. Impacts of the preferred option

##### What are the benefits of the preferred option (if any, otherwise main ones)?

The preferred combination of policy options could reduce the value of the market taken up by non-compliant and unsafe automotive products by €656 million and €12 billion per year respectively (see table below).

Benefits in terms of reducing the value of non-compliant and unsafe automotive products on the EU Market (€million)							
Reduction of ↓	Option →	A3b	B3 + B4	C3	D3	E3	Combination
Non-compliant products		188	94	125		250	656
Unsafe products		1500	4500	3750		2250	12000

It could also reduce the number of vehicle models recalled by between 4 and 38 per year, leading to cost savings of about €2.1 million to €34.2 million per year for the economic operators and the authorities involved, and reduce the nuisance for the owners of the vehicles concerned.

**What are the costs of the preferred option (if any, otherwise main ones)?**

The costs of the preferred combination of policy options are in the range of €15 million to €130 million.

Summary of Costs of implementing the Preferred Combination of Options (€ million)			
Estimate →	Lower	Central	Upper
Costs to non-EU importers of having an EU representative – Option A3b	0.1	3.0	90.0
Costs of additional surveillance – Option A3/Option B3 (MS authorities)	1.4		10.1
Cost of ensuring technical & economic Independence of Technical Services– Option C3	0.1	2.0	3.0
Costs of transposition into national legislation (MS)	13.5		27.0
Overall costs of implementing the preferred combination of options	15.6		130.1

**How will businesses, SMEs and micro-enterprises be affected?**

The impacts the preferred policy options may have on enterprises in terms of their cost of doing business, their capacity to innovate and their international competitiveness have been assessed in detail by means of a competitiveness proofing study. From this study emerges that the envisaged policy options may have relatively greater impact on those sectors in the industry dominated by SMEs, such as manufacturers of certain categories of vehicle, distributors of vehicles and components and also some Technical Services. However, the expected impacts are not significant to the extent that specific mitigation measures for SMEs would be necessary.

**Will there be significant impacts on national budgets and administrations?**

As can be seen from the table above with the summary of costs, the impact on national budgets and administrations stem from the market surveillance requirements and the transposition costs. However these costs are not significant and it should be noted that for options A3 and B3 additional costs would only arise to the extent where an existing national market surveillance system would not yet cover automotive products.

**Will there be other significant impacts?**

The most significant impact identified would be for non-EU importers to designate an EU representative for market surveillance purposes (at least in the upper cost estimate). It should be noted that a similar obligation already exists for type-approval purposes, where manufacturers from 3<sup>rd</sup> countries have to designate an authorised representative in the EU. For these economic operators the lower cost estimate would rather apply.

**D. Follow up**

**When will the policy be reviewed?**

The type-approval framework has been substantially updated in 2007 with Directive 2007/46/EC, followed by a simplification exercise in 2009 with the General Safety Regulation No 661/2009. A fitness check on this framework, carried out in 2013, has demonstrated that a reasoned review of all the framework provisions was not possible due to a number of transitional provisions not yet having entered fully into force and the lack of experience with regard to the implementation of the newly introduced provisions. The lesson to be drawn from this is that the next review would only make sense if sufficient time is allowed to collect sufficient evidence of the effects the current revision of the framework may bring (i.e. at least 5 years after its entry into force).

## **1. PROCEDURAL ISSUES AND CONSULTATION OF INTERESTED PARTIES**

### **1.1. Identification**

Lead DG: ENTR

Other involved DGs: SG, SANCO, CLIMA, MOVE, ENV, RTD

Agenda Planning/WP Reference: 2011/ENTR/011

### **1.2. Organisation and timing**

Work on this impact assessment started in 2010 with the preparation of the Impact Assessment Roadmap and the setting up of the steering group to which representatives of following DGs were invited: SG, SJ, ECFIN, ENV, MOVE, SANCO, TRADE, RTD. The steering group met 3 times in September and October 2010 and in October 2011. This steering group also monitored the fitness check pilot project on the type-approval framework for motor vehicles, and was extended with a representative of DG CLIMA. In that capacity the Steering Group met 4 times in March, May, July and November 2012, and the DGs concerned were also consulted in July 2013 on the draft Commission staff working document on the fitness check. Another meeting of the IA Steering Group took place on 30 January 2014 to discuss the draft Impact Assessment Report.

### **1.3. Consultation and expertise**

A public consultation was held from 7 December 2010 to 16 February 2011. For this purpose, a dedicated consultation web-page<sup>1</sup> was set up and the Commission services prepared a consultation document, which was discussed and agreed with the IA Steering Group. The aim of this public consultation was to verify whether the five areas identified by the Commission services as having a potential for improving the enforcement of EU type-approval legislation for motor vehicles would provide the right scope and focus for the envisaged review of Framework Directive 2007/46/EC.

Forty relevant responses<sup>2</sup> were received which, overall, indicated a strong support for the aims of the initiative. Whilst 74% of the respondents concurred that the current type-approval framework was already of fairly high quality, 57.6% of them considered that nonetheless more could be done to emphasise and properly focus the legal application of market surveillance principles, with 47% of respondents saying that existing market surveillance principles are ineffective, while just 2.9% agreed it was effective. This outcome clearly demonstrates that stakeholders share the view that more can and should be done to complement the ex-ante controls offered by the type-approval framework with ex-post market surveillance provisions<sup>3</sup>.

The Commission services also commissioned a number of external studies to accompany and feed in to the Impact Assessment process. An ex-post evaluation (EPE) study on the framework directive 2007/46/EC was carried out in the first half of 2011<sup>4</sup>, followed by an impact assessment (IA) study in the second half of 2011<sup>5</sup>.

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<sup>1</sup> [http://ec.europa.eu/enterprise/sectors/automotive/documents/consultations/2010-internal-market/index\\_en.htm](http://ec.europa.eu/enterprise/sectors/automotive/documents/consultations/2010-internal-market/index_en.htm)

<sup>2</sup> Industry sector organisations (15), individuals (10), private companies (8), Member State authority (1), public organisation (1), NGO's (3), others (2)

<sup>3</sup> More detailed information on the results of the public consultation can be found @ [http://ec.europa.eu/enterprise/sectors/automotive/files/consultation/internal-market/statistics\\_en.pdf](http://ec.europa.eu/enterprise/sectors/automotive/files/consultation/internal-market/statistics_en.pdf)

<sup>4</sup> [http://ec.europa.eu/enterprise/sectors/automotive/files/projects/report-internal-market-legislation\\_en.pdf](http://ec.europa.eu/enterprise/sectors/automotive/files/projects/report-internal-market-legislation_en.pdf)

This study assessed the impact of the possible options developed for each of the five problem areas identified by the Commission services and which were confirmed to be relevant by the public consultation. Based on the results of the public consultation and the IA study, a preferred combination of policy options for these five areas has been identified.

Further work on the impact assessment and the preparation of the review of the Framework Directive was put on hold in 2012/2013 when the regulatory framework for the type-approval of motor vehicles was selected by DG ENTR for running a fitness check (FC) pilot project. A study contract has been awarded for that purpose and the FC study has been finalised in March 2013<sup>6</sup>. A Commission Staff working document reporting on the outcome of the fitness check pilot project was published in November 2013<sup>7</sup>, highlighting the priorities for the envisaged revision of Directive 2007/46/EC.

Finally, and in line with the commitments the European Commission made in its CARS 2020 Action Plan, a competitiveness proofing (CP) study has been run in the second half of 2013 to complement the above mentioned actions<sup>8</sup>. The need for mitigating measures for SMEs has been considered in the context of this study, which demonstrated that for the options retained there would not be any significant impacts for the SMEs in the sector to the extent that mitigating measures would be necessary. Micro enterprises have not been considered as there is no evidence available that any such enterprises operating in these sectors would likely be affected by the envisaged measures.

Stakeholders have been continuously informed and involved in all the above mentioned studies.

High level involvement of stakeholders has taken place in the context of the CARS 21 High Level Group, resulting in a number of recommendations in relation to the type-approval framework that have been taken up by the Commission in its CARS 2020 Action Plan adopted in November 2012<sup>9</sup>.

In addition, specific exchanges with Member States' authorities have taken place during the entire impact assessment process at meetings of the Technical Committee Motor Vehicles (TCMV) and the Type-Approval Authorities Experts Group (TAAEG). Exchange of views with industry and user associations about the initiative have taken place in the framework for the Motor Vehicles Working Group (MVWG). All stakeholders have also been consulted by the external study contractors for the collection of data and views.

This extensive consultation process has enabled stakeholders to express their positions, which have been taken into account for the identification, assessment, comparison and final selection of the preferred combination of policy options. It also enables to conclude that the Commission's minimum consultation standards have been met.

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<sup>5</sup> [http://ec.europa.eu/enterprise/sectors/automotive/files/projects/impact-assessment-internal-market-legislation\\_en.pdf](http://ec.europa.eu/enterprise/sectors/automotive/files/projects/impact-assessment-internal-market-legislation_en.pdf)

<sup>6</sup> [http://ec.europa.eu/enterprise/sectors/automotive/files/projects/report-cses-fitness-check\\_en.pdf](http://ec.europa.eu/enterprise/sectors/automotive/files/projects/report-cses-fitness-check_en.pdf)

<sup>7</sup> [http://ec.europa.eu/enterprise/sectors/automotive/files/fitness-check-swd-2013-466\\_en.pdf](http://ec.europa.eu/enterprise/sectors/automotive/files/fitness-check-swd-2013-466_en.pdf)

<sup>8</sup> [http://ec.europa.eu/enterprise/sectors/automotive/documents/calls-for-tender-and-studies/index\\_en.htm](http://ec.europa.eu/enterprise/sectors/automotive/documents/calls-for-tender-and-studies/index_en.htm)

<sup>9</sup> [http://ec.europa.eu/enterprise/sectors/automotive/cars-2020/index\\_en.htm](http://ec.europa.eu/enterprise/sectors/automotive/cars-2020/index_en.htm)

## 1.4. Scrutiny by the Commission Impact Assessment Board

The Impact Assessment Board of the European Commission assessed a draft version of the present impact assessment and issued its opinion on 28 March 2014. The Impact Assessment Board made several recommendations and, in the light of the latter, the final impact assessment report:

- Has been redrafted to highlight that this impact assessment is mainly based on a qualitative rather than a quantitative approach. The main reason being that the data that could be collected to build a quantitative assessment were limited and not sufficiently robust to draw reasoned conclusions. The second reason is that the main objective of this initiative is to improve the effectiveness of the current legal framework by streamlining and enhancing procedures and processes, rather than to introduce new safety and environmental requirements to be complied with. It has proven difficult to quantify in a reliable manner the impact of such procedural changes, as no or very little data are available. Nevertheless an attempt for a quantitative assessment has been made to provide a rough idea about the order of magnitude of the benefits that could be generated by improving these processes and procedures. However, as these estimates are building on assumptions about the likely reduction of the presence on the market of non-compliant products and products that represent a serious risk, and are mainly based on stakeholders' views, they are not sufficiently precise to be used as a basis for comparison with the estimated costs the proposed changes to the framework may entail. For these reasons these quantitative estimates have been shifted to the Annexes of this Impact Assessment Report and are provided for information only.
- Clarifies better the causes of the problems and their impacts. It also describes more in detail the extent to which the proposed options are based on the provisions of existing horizontal legislation (New Legislative Framework) or provide tailor-made, sector specific, solutions.

## 2. CONTEXT

2.1. *General political and regulatory context: See Annex 4*

2.2. *Specific regulatory context*

The legal framework for the type-approval<sup>10</sup> of automotive products covers three categories of vehicles: motor vehicles and their trailers, motorcycles (two and three-wheelers as well as certain quadri-cycles), and agricultural or forestry tractors. The scope of this impact assessment is limited to the legal framework for the type approval of the first category of vehicles (motor vehicles and their trailers) since the legal framework for the two other vehicle categories has been the subject of a major overhaul in 2013<sup>11</sup>.

The legal framework for the type approval of motor vehicles aims at facilitating the free movement of automotive products in the internal market by laying down

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<sup>10</sup> Type-approval is the certification system under which a type of vehicle is tested and approved by a national authority. Vehicles manufactured in accordance with this approved type and the arrangements for ensuring conformity of production can be placed on the market in all EU Member States without further testing and inspections.

<sup>11</sup> <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:060:0052:0128:EN:PDF> and <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:060:0001:0051:EN:PDF>



common requirements designed to achieve environmental and safety objectives which are specified in several separate legal acts. These legal acts deal with a multitude of detailed technical requirements for different vehicle systems and components and are frequently updated to adapt them to technical progress while at the same time minimising the regulatory burden on industry.

The EU type-approval framework has been significantly revised over the recent years, mainly with the aim to achieving simplification and alignment with the international regulatory framework established by the United Nations' Economic Commission for Europe (UNECE).

Over time, also new requirements have been introduced to increase the level of safety, environmental protection and energy performance of motor vehicles. As a result, the EU type-approval legislation in place today is providing a coherent and robust framework fully adapted to the principles of better regulation and simplification, and providing an adequate response to the societal demands for protecting the citizens and the environment.

The cornerstone of this type-approval legislation is Directive 2007/46/EC, which provides the framework under which the separate legal acts with specific safety and environmental requirements are operating. An ex-post evaluation, carried out in 2011, concludes that the Directive has proven its relevance. However, from the analysis also emerged that there are still problems with unsafe and/or non-compliant automotive products being placed on the market in the EU. The analysis pointed out that the effectiveness of the Directive relies significantly on the quality and the performance of technical services<sup>12</sup> (TS) and also on their ability to ensure proper verification of the conformity of production (CoP) arrangements. These findings are particularly relevant for the envisaged review of Directive 2007/46/EC, since addressing these particular issues will contribute to the main objective of further enhancing the functioning of the internal market for automotive products.

A more holistic ex-post evaluation was carried out in 2012 by means of a Fitness Check (FC) pilot project, in which not only framework directive 2007/46/EC has been assessed, but also all other main pieces of automotive internal market legislation which are closely interlinked with this Directive. The FC confirmed that the EU type-approval legal framework is appropriate for achieving the main goals of harmonisation, effective operation of the internal market and fair competition. However, differences in interpretation and strictness in application of the requirements across Member States (MS) are reducing the effectiveness of the framework. The Commission Staff Working document on the FC acknowledges room for improvement and singles out the review of Directive 2007/46/EC as a matter of priority, with as subjects of main focus:

- the introduction of market surveillance provisions to complement the type-approval requirements;
- the clarification of its recall and safeguard procedures;
- the suitability of alternative type-approval schemes in providing appropriate flexibility for niche markets and SMEs; and

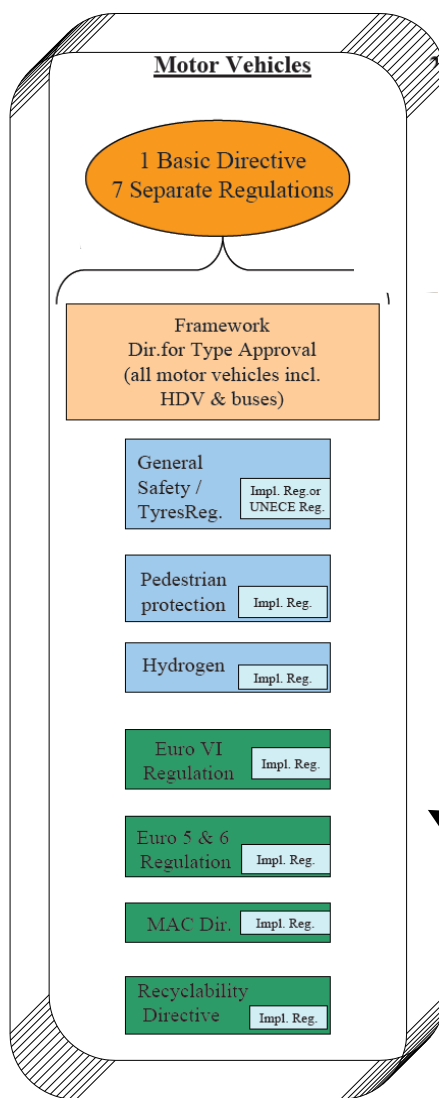
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<sup>12</sup> Technical services are third party conformity assessment bodies designated by Member States' authorities to perform the necessary testing and inspections for type-approval of motor vehicles and their parts.

- the need to harmonise and enhance the type-approval and conformity of production procedures applied by MS authorities and technical services, and to clarify their roles and responsibilities.

2.3. *Scope of the initiative:*

The scope of this initiative is limited to the legal framework for the type approval of motor vehicles and their trailers, which is currently governed by Directive 2007/46/EC (See "basic directive" in the figure below). Under this framework seven separate Regulations have been adopted, which are the main technical acts setting out the relevant environmental and safety requirements automotive products have to comply with under this framework.



2.4. *Purpose of this initiative:*

The main purpose of this initiative is to enhance the implementation and enforcement of the legislative framework for the free movement of motor vehicles.

The introduction of market surveillance, based on the solutions offered by the NLF and adapted where necessary to take account of the specificities of the automotive sector, is considered to address the areas identified as having a potential for improvement.

As explained in Annex 4 this approach will build - to the greatest extent possible – on the reference provisions of the NLF "toolbox" Decision 768/2008/EC and will aim to achieve the highest level of coherence with the recently revised type-approval legislation for L-category and T-category legislation, and in particular with the newly introduced provisions on market surveillance in these two new Regulations. These market surveillance provisions have also been based on the NLF, but have been adapted during the inter-institutional discussions to take account of the specificities of the automotive sector. In particular the fact that the current internal market legislation is based on a rigorous ex-ante control system before automotive products can be placed on the market requires an adaptation of the generic provisions on market surveillance, to ensure that ex-post controls carried out in the context of market surveillance activities take duly into account that automotive products must be type-approved before being placed on the market. This implies that clear provisions are necessary to ensure proper and efficient information exchange and co-operation between market surveillance authorities and type-approval authorities, and that the pivotal role and responsibilities of the type-approval authorities have to be recognised.

The key driver for this initiative is therefore to provide tailor-made solutions for complementing the type-approval requirements (ex-ante controls) with market surveillance provisions (ex-post controls), whilst aiming at ensuring the highest level of coherence with the approaches that have been followed for introducing market surveillance provisions in the type-approval framework for motor cycles and tractors.

#### 2.5 *Links with other initiatives:*

The NLF is currently being reviewed in the context of the Product Safety and Market Surveillance Package (PSMSP). Annex 4 provides more details why this initiative has not been taken into account for the review of the legal framework for the type-approval of motor vehicles.

#### 2.6 *Key features of the sector concerned*<sup>13</sup>:

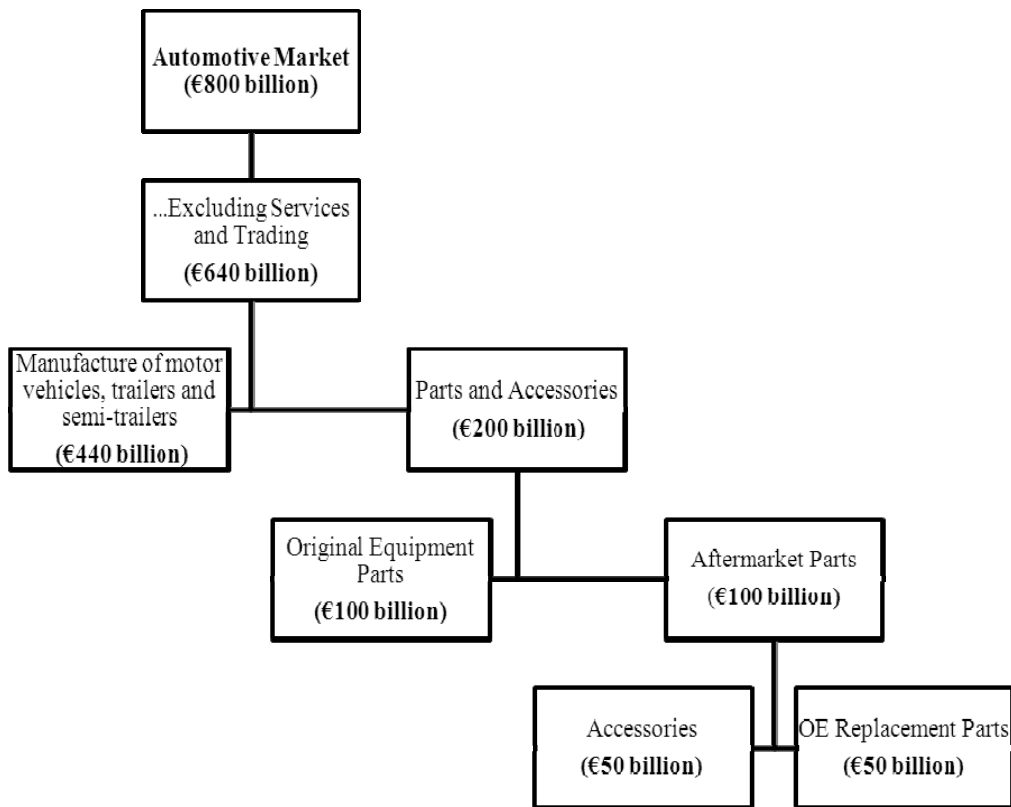
The EU automotive sector has an annual turnover of around €800 billion, of which the part associated with “industrial activities” (excluding services and trading) is around €640 billion<sup>14</sup>.

Of this total for industrial activities, the manufacture of motor vehicles, trailers and semi-trailers accounts for around €440 billion, and the manufacture of parts and accessories accounts for around €200 billion. The latter amount can be further separated to distinguish the market share between original equipment parts and aftermarket parts (See figure below).

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<sup>13</sup> More details about the sector can be found in the final report of the competitiveness study (§2.2 - Analysis of the automotive sector structure) @:

<sup>14</sup> <http://ec.europa.eu/DocsRoom/documents/4781/attachments/1/translations/en/renditions/pdf>  
The overall structure of the EU automotive industry is described in greater detail in Annex 7.



(Source: IA study, based on analysis of EUROSTAT data (pp 10 + 11))

### 3. PROBLEM DEFINITION

#### 3.1. The problem that requires action

This initiative aims at addressing the problem of non-compliant or unsafe automotive products<sup>15</sup> still found on the market, despite the existence of an EU legal framework based on an ex-ante control of the safety and environmental performance of automotive products before they can be placed on the market.

##### 3.1.1. Stakeholders' views on the problems requiring action:

The importance of the problem has been recognised in the context of the public consultation, as more than 75% of the respondents indicated to have knowledge of/or experience with non-compliant and/or unsafe automotive products on the EU market.

<sup>15</sup> The term “automotive products” is used here as a common denominator for products covered by the type approval legislation for motor vehicles, i.e. whole vehicles, their trailers, systems, components and separate technical units. For the respective definitions of these products, see Article 2 of Directive 2007/46/EC

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:2007L0046:20130110:EN:PDF>

Non-compliant products are those who fail to meet the safety and/or environmental performance requirements of the type-approval legislation.

Unsafe products are those who are giving rise to recalls because they represent a safety or environmental risk. It should be noted that even compliant products can represent such a risk, when this risk concerns an aspect that is not covered by the type-approval legislation. Likewise a non-compliant product can – but not necessarily always does - represent a safety or environmental risk that would justify a recall. As such, a part of the non-compliant products represent a subset of unsafe products.

More than 80% of the respondents consider that this problem is leading to a distortion of competition between economic operators, poses serious challenges to the enforcement of the current legislation and has significant negative impacts on our society (health and safety, environment). So respondents to the public consultation appear to have a commonly shared understanding of this regulatory failure (see table IPM.1 in Annex 1).

With regard to the current legal framework and its procedures for taking actions against non-compliant and unsafe automotive products across the EU market, 47% consider these neither effective nor sufficient, against 41% considering them effective and sufficient. These results clearly indicate the acknowledgement of another regulatory failure, which is confirmed by the fact that more than 76% of respondents agree or agree fully on the need for increasing the focus on market surveillance, against 12% disagreeing. (see table IPM.2 in Annex 1)

From the replies to the EPE study questionnaire appeared that the majority of respondents equally acknowledged that there exists a problem with unsafe automotive products being placed on the EU market, considering it to be serious or even highly serious. Only a minority of the national authorities consider this not to be a problem (see table EPE.1 in Annex 1).

With regard to the estimated size of the problem with non-compliant and unsafe products, half of the national authorities responding to the to the ex-post evaluation study questionnaire and considering the problem of unsafe products to be serious, believe that unsafe automotive products account for less than 10% of automotive products on the market, while the other half believe that unsafe automotive products account for more than 25% of automotive products (see table EPE.2 in Annex 1).

A similar pattern emerged with regard to the problem of non-compliant automotive products being placed on the market, with no single corresponding stakeholder considering this is not a problem (see table EPE.3 in Annex 1).

As for the estimated size of the problem with non-compliant products the replies to the ex-post evaluation study questionnaire provided a similar pattern as for the problem of unsafe products (see table EPE.4 in Annex 1).

### 3.1.2. *Possible reasons for the problems identified:*

Although the existence of the problem is widely recognised, there are no reliable data available that would enable to identify to which extent the presence of unsafe and non-compliant products on the market can be attributed to general irregularities (e.g. due to lack of awareness about the applicable requirements) or to genuine illegal activities (e.g. intentional trespassing of the rules or circumventing the requirements)<sup>16</sup>.

In view of this limitation, the approach followed for identifying the problem drivers and selecting policy options that could contribute to minimising the occurrence of such problems has been based on a detailed assessment of the current provisions of the legal framework and their effectiveness in avoiding such problems occurring (see § 3.1.7 for further details). The overall result of this assessment was that on the one

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<sup>16</sup> There are also no data available that would enable to identify the share of imported products among the non-compliant and unsafe products found on the market, neither to make such a distinction between original equipment manufacturers (OEM) parts and spare parts.

hand a number of the type-approval procedures and requirements needed to be strengthened and on the other hand that these type-approval requirements needed to be complemented with market surveillance provisions to ensure that whenever problems with unsafe or non-compliant automotive products on the market occur, adequate remedial action can be taken.

These relatively high percentages can be explained to a very large extent by the fact that the vast majority of recalls in the automotive sector are of a voluntary nature and are undertaken by the manufacturer to address quality issues, which not necessarily have a bearing on safety or environmental performance and therefore on the compliance of the product with the relevant requirements of the type-approval framework. As the problem drivers have been identified to select the policy options that would enable to enhance the type-approval framework, it is to be expected that still a large percentage of the automotive recalls will not be avoided by addressing the problem drivers. It is therefore important to ensure that the procedures for recalls are maintained in the type-approval framework and further clarified and strengthened to ensure that the recall procedures provide a meaningful and complementary tool to protect citizens from the safety risks that automotive products may represent despite the fact that they comply with the type-approval requirements

### 3.1.3. *Problem drivers:*

The Commission services have – in consultation<sup>17</sup> with the Member State authorities responsible for the enforcement of the type-approval legislation - singled out five problem drivers having a potential to correct the regulatory failures. Three of these problem drivers can be directly associated with the requirements of the type-approval legislation as such (areas C,D and E), whilst the other two relate to the overall need to enhance the implementation and enforcement of the type-approval framework, by means of complementary measures derived from a comparative analysis of the reference provisions of the NLF "toolbox" decision and taking into account the approach that has been followed for the introduction of market surveillance provisions in the parallel Regulations on the type-approval and market surveillance for motorcycles and tractors. (see areas A and B below)<sup>18</sup>.

#### A) *Difficulties to trace the origin of non-compliant and unsafe products encountered on the market and lack of clarity about the respective responsibilities of economic operators involved in the supply chain for such products:*

Currently, traceability is not ensured throughout the whole supply distribution chain. Directive 2007/46/EC requires only that for the purpose of type-approval the manufacturer or his authorised representative is identified, but there are currently no legal means available to identify the other economic operators in the distribution chain - such as importers and distributors - let be to hold them accountable for the safety and compliance of the products they are placing on the market. These

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<sup>17</sup> These consultations have been carried out in the context of the Technical Committee for Motor Vehicles (TCMV). See: [https://circabc.europa.eu/sd/a/6058f568-d5f3-45d0-a6f2-b8edc072afa0/note%20for%20TCMV%20meeting%20of%2020%20october%202009\(rev%202\).pdf](https://circabc.europa.eu/sd/a/6058f568-d5f3-45d0-a6f2-b8edc072afa0/note%20for%20TCMV%20meeting%20of%2020%20october%202009(rev%202).pdf) and [https://circabc.europa.eu/sd/a/23a74654-15c8-4225-a9ca-db204331e6e7/note%20on%20market%20surveillance%20for%20TCMV%20meeting%20of%2026%20March%202010%20\(rev%201%20-%20cc\).pdf](https://circabc.europa.eu/sd/a/23a74654-15c8-4225-a9ca-db204331e6e7/note%20on%20market%20surveillance%20for%20TCMV%20meeting%20of%2026%20March%202010%20(rev%201%20-%20cc).pdf)

<sup>18</sup> For the sake of coherence and easy referencing the five problem drivers are here described in the same order as they have been presented for the public consultation and the impact assessment study.

operators are, however, important contact and information points for the enforcement authorities, in particular when the manufacturer is not established in the EU.

This lack of information to identify and trace the origin of non-compliant and unsafe products on the market and the economic operators in the supply chain to be held accountable is detrimental for an effective enforcement strategy, as it hampers enforcement authorities in identifying and taking effective remedial action against non-compliant products and economic operators not respecting the rules.

The difficulty to trace products and the responsible economic operators has also been recognised and highlighted in the Impact Assessment Report accompanying the proposals for the New Legislative Framework<sup>19</sup>. Globalisation is mentioned as one of the reasons why it has become increasingly difficult to determine how and by whom a product is manufactured or who has placed it on the market.

The IA report for the NLF mentions that often enforcement authorities cannot find the economic operator from whom the necessary information about the safety and compliance of the product can be obtained and who could be held accountable for ensuring that mitigating measures are taken to remedy the non-compliance or the safety risk.

- B) *Lack of clarity about the respective responsibilities of and the co-operation between the different national authorities that may be involved in the enforcement of the technical harmonisation legislation for the free movement of motor vehicles (in particular type-approval-, market surveillance- and border control authorities):*

The current type-approval legislation focuses mainly on pre-market control procedures for type-approval and the conformity of production, and therefore defines and refers exclusively to type-approval authorities and the competent authorities for the assessment and designation of technical services. However, for the purpose of addressing post-market problems with non-compliant and unsafe products, and in particular for the application of the procedures for safeguard measures and the recall of vehicles, the respective roles and responsibilities of other authorities which may be involved in the implementation and enforcement of the legislation are not clearly defined and streamlined.

The lack of exchange of information and co-operation between enforcement authorities from the different Member States has also been highlighted in the IA Report accompanying the proposals for the NLF package. As the competence of the enforcement authorities is limited to their national territory, the functioning of the Internal Market in terms of ensuring that only compliant and safe products can be placed on the market is determined by the weakest link in the chain. Weaknesses in the organisation of enforcement in one single Member State can seriously undermine the efforts by others to keep non-compliant and unsafe products from the market.

Where remedial action is needed beyond the national border, enforcement authorities must be able to rely on co-operation and exchange of information with their colleagues in the other Member States. The absence or poor functioning of such exchange of information and co-operation hampers an effective and uniform enforcement of automotive legislation across the EU. The existing fora for exchange of information between type-approval authorities of the Member States<sup>20</sup> are mainly

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[http://ec.europa.eu/governance/impact/ia\\_carried\\_out/docs/ia\\_2007/sec\\_2007\\_0173\\_en.pdf](http://ec.europa.eu/governance/impact/ia_carried_out/docs/ia_2007/sec_2007_0173_en.pdf)

<sup>20</sup>

TAAEG (Type Approval Authorities Experts Group) & TAAM (Type Approval Authorities Meetings)

addressing issues related to the interpretation of the type-approval requirements and procedures specified in the legislation, but are not suited for exchange of information and co-operation between enforcement authorities on issues related to non-compliant and unsafe automotive products (as not all enforcement authorities are represented).

C) *Divergence in quality of the type-approval and conformity assessment tasks carried out by technical services:*

Technical services are a key player in the type-approval process and for verifying that manufacturers ensure an adequate level of conformity of production. Varying degrees of stringency and quality standards applied by technical services are issues that have emerged from the public consultation and the EPE study, and are considered to contribute substantially to hampering the harmonised implementation of the type-approval legislation.

Around 50% of the technical services and national authorities responding to the ex-post evaluation study questionnaire considered that the effectiveness of refusal or withdrawal of type-approval has been reduced by ‘type-approval hopping’ (i.e. economic operators selecting more lenient type-approval authorities over more stringent authorities) and ‘selective selection of type-approval authority’ (i.e. automotive products for which type-approval has been refused or withdrawn being presented to other technical services and/or authorities to obtain type-approval).

D) *Lack of clarity and harmonisation in the post-market safeguard procedures and the provisions for the recall of vehicles:*

Currently the recall provisions in article 32 of the FWD refer in general terms to the General Product Safety Directive.

The FWD however does not provide clarity on how the different authorities who could be involved in the procedure should co-operate. For instance, when a border control authority in one Member State would encounter a non-compliant product, there are no clear provisions in the type-approval legislation describing how and to which other concerned authorities in the same or other Member State(s) this should be reported.

Under the GPSD, as well as under NLF Regulation (EC) No 765/2008, MS have an obligation to notify measures taken against products which pose a safety risk for the health and safety of consumers and other users, and/or to the environment. The IA report for the PSMS package reports that only 44% of MS fully comply with this obligation. It also refers to shortcomings in the practical implementation of the safeguard clause procedure. According to the NLF Regulation all compulsory safeguard measures taken by Member States against products which are covered by Union harmonisation legislation and which are presenting a risk have to be notified to the Commission. The data regarding the number of safeguard notifications under Directive 2007/46/EC indicate that the safeguard clause has never been invoked. In



contrast, the RAPEX<sup>21</sup> notifications concerning recalls in the motor vehicles sector indicated that all recalls, without exemption, were of a voluntary nature<sup>22</sup>.

In addition, the post-market safeguard procedures and the information procedures provided for the recall of vehicles in the current motor vehicle type-approval legislation are specified in a general manner as obligations for Member States, without addressing the respective competences of the different national authorities that may be involved. As such, they do not take into account the involvement of market surveillance and custom authorities and the valuable contribution they can make to an effective enforcement of the relevant legislation to ensure that any remedial action undertaken will guarantee an adequate solution to the safety, environmental or compliance problem encountered.

E) *Shortcomings in the legal provisions for ensuring conformity of production:*

The procedures for ensuring conformity of production are an indispensable part of the overall type-approval process since they aim at ensuring that all vehicles are produced in accordance with the approved type and as such also comply with the applicable requirements. Therefore, they constitute a very important connecting link between the ex-ante type approval procedure and the ex-post market surveillance activities, and – if properly specified and implemented - a powerful tool in minimising the risk of non-compliant products being placed on the market and the need for restrictive post-market actions to remedy the problems associated with such products.

The current CoP provisions, however, give too much room for diverging interpretation and application. In particular weaknesses in the criteria for the assessment of the quality assurance system to be set up by the manufacturer and for the frequency of periodical audits and the possibility of unexpected visits to the manufacturers' premises to verify the conformity of production arrangements result in a varying degree of rigour applied by enforcement authorities. As an example, the current provisions for establishing the frequency of periodical audits are based on "*the climate of trust between the manufacturer and the approval authority*".

3.1.4. *Stakeholders' views on problem drivers:*

From the public consultation emerged that respondents acknowledge these five problem drivers as being relevant. Only for problem driver D concerning the procedures for safeguard measures and recalls this acknowledgement is less outspoken (see table IPM.3 in Annex 1).

From the EPE study emerged that the majority of national authorities responding expected that developments or changes in the market for motor vehicles are likely to either increase or significantly increase the importance associated with four of the five problem drivers. (See table EPE.5 in Annex 1). The only exception is problem driver B 'responsibilities of and co-operation between the different national authorities within the Member States involved in the enforcement of the legislation',

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<sup>21</sup> RAPid EXchange of information between Member States and the Commission on measures taken to prevent or restrict the marketing or use of products posing a serious risk to the health and safety of consumers.

<sup>22</sup> An explanation for this situation could be that enforcement authorities may prefer to remedy the situation by using RAPEX notifications and through voluntary recalls, rather than to pursue the more formal safeguard procedure. There is however no evidence to substantiate this assumption.

for which the majority of national authorities responding to this question believe that changes in the market will not affect the significance of this area.

Specific issues raised by national authorities include:

- concerns regarding the further opening of the global market for technical services. Conflicts between their role in conducting type approval testing and reporting on the one hand and competition between technical services to secure clients on the other could lead to some TS producing approval work of questionable quality; and
- increased harmonisation through information exchange and co-operation,, which will mean that each national authority will get more cases to manage (including cases in other countries).

Most technical services responding to the EPE study questionnaire indicated that expected developments or changes in the market for motor vehicles are likely to increase the importance associated with three of the five problem areas; the difference between these technical services expecting an increase and those that predict no change is, however, marginal (60:40). A marginal difference (60:40) in favour of no change can also be seen in the area of “quality and performance of technical services”. The clearest indication is in problem area A for which 80% of responding TS expects an increase or significant increase in importance due to market changes.

Economic operators who responded to the questionnaire of the EPE study expect no changes to occur with regards to three of the five problem areas. However, for the quality and performance of technical services as well as for the traceability of products and responsibilities of operators, 33% of the respondents expect an increase in importance due to market changes.

Consumer organisations replied that expected developments/changes in the market for motor vehicles are likely to increase the importance of each of the five identified problem areas.

### 3.1.5. *Specific needs for action:*

In addition to these five problem areas identified and discussed above, some more specific issues may need to be addressed as well. Recent problems associated with the implementation of the MAC Directive (Directive 2006/40/EC)<sup>23</sup> have revealed the need to bring greater clarity in the type-approval framework for motor vehicles with regard to the conditions for granting extensions to type-approvals for existing types of vehicles. Situations encountered such as the same vehicle model being approved at the same time as a "new type" and as an "existing type" through an extension of an existing type-approval result in legal confusion and could in some cases be perceived as a way to circumvent compliance with new requirements that have come into force for new vehicle types.

Also the current safeguard procedures, which are designed on the assumption that the type-approval authority who issued the approvals for a type of vehicle would take timely and appropriate remedial action whenever the type of vehicle would be found not to comply with the requirements may need to be revised to address also those

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<sup>23</sup> Directive 2006/40/EC of the European Parliament and of the Council of 17 May 2006 relating to emissions from air conditioning systems in motor vehicles and amending Council Directive 70/156/EEC, OJ L 161, 14.6.2006, p. 12–18.

cases where no such appropriate and timely remedial action would have been taken by the issuing type-approval authority. In particular the rights and obligations of the other Member States and the role of the Commission in such cases may need to be clarified (this issue is linked to problem area D).

### *3.1.6. Link between policy objectives, problem drivers, problems and consequences:*

Annex 5 provides a schematic presentation of the links between the problem and its drivers, as well as the resulting consequences. It also provides an overview of the policy objectives that have been identified to remedy/reduce the problem and which will be described in more detail in the sections below.

### *3.1.7. Estimated size of the problem:*

For estimating the size of the problem it is important to make a distinction between non-compliant and unsafe automotive products.

Non-compliance refers to the situation where the automotive products covered under the FWD do not meet the safety or environmental requirements set out in the specific technical acts adopted under this framework legislation.

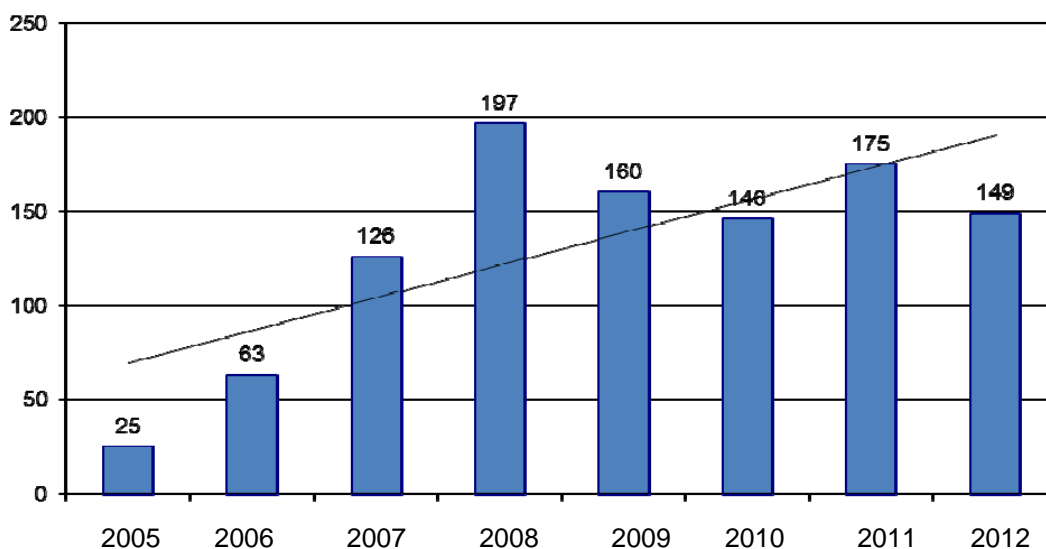
Reference to unsafe automotive products is made in the context of recalls of automotive products which present a “serious risk to road safety, public health or environmental protection” (irrespective of whether they are compliant or not).

The exact proportion of non-compliant and unsafe automotive products on the EU market is not known. However, the consultation of stakeholders in the context of the EPE study provided some estimates of the market share for non-compliant and unsafe products. These estimates have been used as a basis for attempting to quantify the possible benefits that could be generated by the envisaged policy options in reducing the market share of unsafe and non-compliant products. More details on this attempt for a quantitative assessment are provided in Annex 8.

### *3.1.8. Current tools and their shortcomings to address the problem:*

The current tools available are mainly based on ex-ante compliance verification through type-approval combined with conformity of production arrangements. They have been built on the mutual confidence between all stakeholders involved and may have been sufficient for an automotive market where the major players were mainly established in the European Union and hence compliance with safety and environmental requirements could reliably be ensured with this approach. However, the global automotive market is changing drastically: its centre of gravity is shifting to emerging countries, and the EU manufacturers are increasingly faced with fierce global competition. These developments have also an impact on the way the authorities in the Member States and the Commission services need to organise themselves to continue ensuring that automotive products placed on the EU market – and in particular those imported into the EU – comply with the safety and environmental requirements of the type-approval legislation.

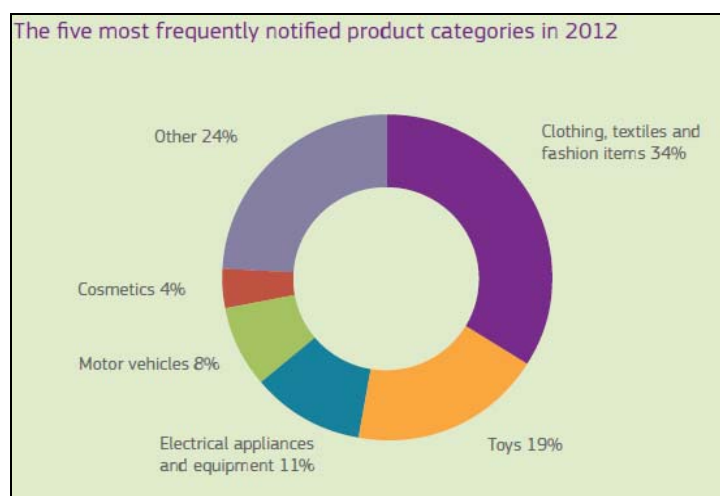
In addition, the fierce competition on the global automotive market is also having an impact on the way manufacturers are addressing safety quality control issues. Data from the RAPEX system indicates a rising trend in the number of notifications on recalls in the motor vehicle sector over the last decade. (See graph below)



A review of the RAPEX annual reports for the past 5 years indicates that motor vehicles (including motorcycles) account for between 8 and 15% of notifications of products presenting a serious risk as shown in the table below.

Year	No. of notifications of products presenting a serious risk	No. of notifications of automotive products presenting a serious risk	% Notifications associated with Motor Vehicles
2012	2278	149	8%
2011	1803	171	11%
2010	1963	175	9%
2009	1699	146	9%
2008	1545	160	10%
2007	1355	197	15%
2006	924	126	14%

As such, motor vehicles are ranked in the top five of most frequently notified product categories in RAPEX<sup>24</sup>.



<sup>24</sup>

2012 annual report on the operation of the Rapid Alert system for non-food dangerous products [http://ec.europa.eu/consumers/safety/rapex/docs/2012\\_rapex\\_report\\_en.pdf](http://ec.europa.eu/consumers/safety/rapex/docs/2012_rapex_report_en.pdf)

The problems that have prompted these recall actions indicate that automotive products which are placed on the market can give rise to some safety or environmental risks even when they comply with the applicable type-approval requirements.

It should be noted that all of these recalls have been notified as being voluntary ones, which may raise the question about the efficiency of the Framework Directive's provisions on mandatory recalls. The concern most commonly raised is that these provisions are not sufficiently clear and firm, resulting in different procedures and criteria being adopted by different Member States. For instance, it is reported that some vehicles may be recalled in some MS but not in others. Further to that, a number of MS consider that the process can be rather slow and complicated in situations where the type approval has been issued by another Member State.

The recent problems arising from the implementation of the MAC Directive raise the question about the need to enhance the recall system in the legal framework with a view to better ensure common minimum levels of consumer protection and health and safety standards across the EU.

The experience with recent recall actions has demonstrated so far that the procedure established by the automotive framework legislation for the exchange of information on the remedial measures taken appears to function properly. However, it has at the same time highlighted that the respective roles of the authorities and economic operators involved need to be better clarified and specified, and that in particular such problems could be better anticipated by increasing the focus on market surveillance.

It should be noted that these problems and needs are not exclusive to the automotive sector but are common to most of the consumer and professional products covered by technical harmonisation legislation, and possible solutions for addressing them have been specified in the NLF. This impact assessment aims at exploring and providing adequate answers to these problems by assessing to what extent the approach followed in other product sectors and harmonised by the NLF could contribute to achieving this objective.

There is however no evidence available that would indicate that the presence of non-compliant and unsafe automotive products on the market could be due to poor enforcement and/or weak administrative capacity in some Member States. From the experience gained and the evidence available emerges that there is rather a need to clarify and strengthen the procedures in the type-approval framework, so as to leave less room for divergence in interpretation and to enhance further harmonisation of the enforcement by the Member States.

It should also be noted that there is no evidence so far that Member States would have failed to comply with their obligation to implement and enforce the FWD in their territory. Therefore it is unlikely that the presence of non-compliant and unsafe automotive products could be attributed to enforcement failures by Member States. Therefore the problem of non-compliant automotive products found on the market cannot be solved by using infringement procedures.

### **3.2. Who is affected, in what ways and to what extent?**

A range of different groups are affected by the market failures and regulatory shortcomings resulting in the presence of non-compliant and unsafe automotive products on the EU market.

- European citizens (vehicle users as well as other road users) are affected by poor safety and environmental performance of motor vehicles in those instances where unsafe and non-compliant automotive products are involved, which are contributing to road accidents and poor air quality, both resulting in harm to personal health.
- Economic operators in the automotive supply chain suffer from an unlevelled playing field and unfair competition from those ignoring or not complying with the rules of the game. Especially EU automotive manufacturers and suppliers may be affected from the unlevelled playing field if the rules cannot equally enforced upon non-EU manufacturers and suppliers.
- National enforcement authorities will be affected by the regulatory shortcomings, putting additional burden upon them to remedy these shortcomings by taking corrective actions against non-compliant and unsafe products on their markets. A lack of cross-border information exchange and co-operation will reduce considerably the effectiveness of such remedial measures, since the problem may be shifted to other Member States where no the same level of rigour against non-compliant and unsafe products is applied<sup>25</sup>.
- Technical services are operating in a competitive environment and are subject to economic pressure from operators in the automotive sector who are keen in obtaining type-approval for their products in the cheapest way possible. This pressure can only be countered if clear and effective criteria are established to safeguard the independence of technical services and to ensure the quality of their type-approval related inspection and testing activities. Otherwise bona fide technical services will suffer from the unlevelled playing field and lose market share to the advantage of those not respecting the criteria<sup>26</sup>.
- SMEs in the automotive sector are the most vulnerable to suffer from the market failures and regulatory shortcomings and particular attention is given to the potential impact the envisaged policy options may have on them.

### 3.3. EU right to act

The FWD is based on Article 114 of the TFEU and contributes to the implementation of the internal market for goods. Although Member States are responsible for the enforcement of the legislation in their territory, a harmonised and co-ordinated approach based on commonly applicable criteria (such as those as offered by the NLF) and uniformly applied by Member States is essential for ensuring a level playing field across the EU.

The differences in national organisation of type-approval and market surveillance may give rise to a non-harmonised enforcement when viewed in the framework of

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<sup>25</sup> The weak coordination of market surveillance authorities of the Member States and the sub-optimal functioning of EU procedures for exchange of information on product risks have also been singled out in the Impact Assessment for the Product Safety and Market Surveillance Package as important regulatory failures contributing to the problems created by the presence of unsafe and non-compliant products on the market, see [http://ec.europa.eu/governance/impact/ia\\_carried\\_out/docs/ia\\_2013/swd\\_2013\\_0033\\_en.pdf](http://ec.europa.eu/governance/impact/ia_carried_out/docs/ia_2013/swd_2013_0033_en.pdf)

<sup>26</sup> The lack of confidence in these third party conformity assessment bodies has already been recognised as a problem in the Impact Assessment for the NLF Regulation, which provides some further insight into the reasons for unfair competition between these service providers, see [http://ec.europa.eu/governance/impact/ia\\_carried\\_out/docs/ia\\_2007/sec\\_2007\\_0173\\_en.pdf](http://ec.europa.eu/governance/impact/ia_carried_out/docs/ia_2007/sec_2007_0173_en.pdf)

the European single market which no longer has internal borders and where controls at national borders have practically disappeared. To avoid that non-compliant products circulate on their territory, Member States depend to a large extent on the effectiveness of the enforcement policy of their neighbours. Consequently, weaknesses in enforcement by one single Member State can seriously undermine the efforts taken by other Member States to keep non-compliant products from the market. This interdependence is reinforced by the fact that the competence of enforcement authorities is limited to the national territory. Where action is needed beyond the border, these authorities must rely on their colleagues in other Member States. In view of the global nature of automotive sector, with substantial imports of automotive products from outside the EU, this cross-border dimension is highly important.

If actions were to be taken individually by Member States at national level to address market problems, this may entail the risk of creating obstacles to the free movement of motor vehicles aimed by the automotive product framework legislation. Hence there is clear added value to take action at EU level.

## **4. OBJECTIVES<sup>27</sup>**

### **4.1. General policy objectives**

The overall policy objective of reviewing Directive 2007/46/EC is to safeguard and strengthen the functioning of the internal market for motor vehicles by ensuring that all necessary mechanisms are in place for an effective and uniform application and enforcement of the type-approval framework legislation.

It aims at ensuring that by means of ex-ante as well as by post-market controls all motor vehicles as well as systems, components and separate technical units intended for such vehicles which are placed on the EU market fulfil the applicable requirements, with a view to ensure a high level of safety and environmental protection, and to provide for adequate procedures to remedy the situation where non-compliant and/or unsafe products would nevertheless have been placed on the market. As such it is contributing to the general policy objectives of enhancing road safety and reducing pollutant and CO<sub>2</sub> emissions. Finally it also aims at enhancing the competitiveness of the EU automotive industry, and that a level playing field is maintained for the economic operators involved.

### **4.2. Specific policy objectives**

Three specific objectives are envisaged with this initiative:

- Ensure a better enforcement of the safety and environmental requirements governing the design and construction of motor vehicles and their parts and systems.
- In accordance with the principles of smart regulation, ensure the highest degree of coherence with the recently updated type-approval legislation for motorcycles and tractors and with the reference provisions of the New Legislative Framework.
- Reduce the number of non-compliant and unsafe automotive products on the market.

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<sup>27</sup> See also the problem driver-consequences tree chart in Annex 5

### 4.3. Operational policy objectives

Reduce the number of non-compliant and unsafe motor vehicles, systems, components and separate technical units intended for such vehicles being placed on the EU market, by:

- Enhancing the traceability of automotive products;
- Specifying and clarifying the respective responsibilities of the economic operators in the automotive supply chain with regard to the compliance and safety of these products;
- Specifying the respective responsibilities of the different authorities involved in this process, with a view to ensure effective and uniform action against non-compliant and unsafe products across the EU market and the equal treatment of economic operators in the enforcement of the requirements;
- Increasing the credibility of the type-approval tests and inspections by enhancing the criteria for the designation of technical services and for monitoring their performance;
- Ensuring reliable and high-quality type-approvals procedures, including the conformity of production arrangements.

### 4.4. Consistency with other policies and objectives

The objectives of the envisaged initiative are consistent with the integrated industrial policy for the globalisation era<sup>28</sup>, which is one of the seven flagship initiatives under the Europe 2020 strategy<sup>29</sup>.

The initiative also ties in with the European Commission's strategic initiative to re-launch the internal market and in particular with its proposals to improve product safety in the EU by strengthening market surveillance in the Member States<sup>30</sup>.

The Commission announced this initiative in its CARS 2020 action plan for the automotive industry as an important initiative to meet its commitments on smart regulation<sup>31</sup>.

## 5. POLICY OPTIONS

Building on the problem description in section 3.1, the following policy options have been identified for each of the five problem driver areas.

### 5.1. Problem driver A: insufficient traceability of automotive products and lack of clarity about responsibilities of economic operators in the supply chain

Three possible policy options have been identified for further assessment:

Option A1 (baseline scenario): business as usual.

Option A2: Introduce voluntary agreements and awareness raising campaigns to improve the overall traceability of automotive products and clarity about the responsible actors in the supply chain.

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<sup>28</sup> COM(2010) 614 - An Integrated Industrial Policy for the Globalisation Era - Putting Competitiveness and Sustainability at Centre Stage

<sup>29</sup> COM(2010) 2020- EUROPE 2020 - A strategy for smart, sustainable and inclusive growth

<sup>30</sup> COM(2013)74 - More Product Safety and better Market Surveillance in the Single Market for Products

<sup>31</sup> COM(2012)636 - CARS 2020: Action Plan for a competitive and sustainable automotive industry in Europe



Option A3: specify legal provisions for the traceability of products and the responsibilities of economic operators in the supply chain.

This could be done at different levels of ambition with regard to the scope, extent of information and technological tools for ensuring traceability being used. The following levels of ambition have been considered:

- a) low ambition level approach: use as a reference the current systems already in place in some parts of the industry.

Currently, each company is regulating individually the identification and traceability of its products, but at the interface between companies it becomes more difficult. There is no clear agreement on delimitation accuracy required for parts and their components, who stores which process/quality data relative to which references, and which references are to be communicated to the customer and linked to the customer's product.

The question is however whether applying these systems across the automotive product sector could make the traceability processes more transparent and more reliable throughout the supply chain. It should be noted that the systems are used on a voluntary basis mainly for supply chain management purposes and are not tailored to suit the needs of market surveillance. Therefore this option is not taken forward for the further impact assessment.

- b) medium ambition level approach: introduce harmonised product traceability requirements to ensure that automotive products (or their packaging/documentation, due to size/nature of the product) bear a type, batch or serial number or other element allowing their identification. For reasons of coherence and in line with the principles of smart regulation these requirements should be based on the reference provisions of the NLF Decision<sup>32</sup>.

The same principles would apply for specifying the provisions with regard to the identification of the actors in the supply chain and their respective responsibilities in terms of ensuring that the products they are placing on the market are compliant and safe. In line with the NLF provisions, manufacturers established outside the EU would have to appoint an authorised representative for market surveillance provisions. As the type-approval framework already contains a similar provision for type-approval purposes, the manufacturer can use the same representative for both purposes. Importers and distributors would have specific responsibilities with respect to approval and market surveillance as do manufacturers, particularly those that modify or rename (to their own name or trademark) automotive products<sup>33</sup>.

- c) high ambition level approach (going beyond application of NLF provisions): use as a reference for the traceability requirements current high-technology traceability systems for automotive products, such as Radio Frequency Identification (RFID) tags.

RFID is a technology that uses radio waves to transfer data from an electronic tag (which can be attached to an object) to an electronic reader, for the purpose of identifying and tracking the object (using a unique serial number). RFID tag

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<sup>32</sup> See Chapter R2 of Annex I to Decision No 768/2008/EC

<sup>33</sup> See Chapter II of Regulation (EU) No 168/2013, in particular Art. 9.8 and Articles 11 to 17 included.

technology is currently used in a wide variety of applications and can be affixed to any object that requires tracking or to assist with inventory management. This technology would be useful for tracking and recording non-compliant and unsafe automotive products on the market.

Due to cost considerations (see section 6.1.2.3.) the high ambition level approach (Option A3c) has to be discarded.

## **5.2. Problem driver B: lack of clarity about the responsibilities & cooperation of enforcement authorities**

Four possible policy options have been identified for further assessment:

Option B1: (baseline scenario): business as usual

Option B2: awareness campaigns and/or voluntary agreements with and between enforcement authorities in the Member States to clarify and agree on their respective roles and responsibilities and to enhance the information exchange and co-operation between them, both at national and cross border level.

Option B3: this option would envisage to specify the role of the different authorities involved in the enforcement of the type-approval legislation and to establish clear procedures for information exchange and co-operation between them to effectively mitigate the presence of non-compliant products on the market. These provisions would be aligned with those of Regulation (EU) No 168/2013<sup>34</sup>.

Option B4: joint actions by the Commission and the Member States, by:

- providing targeted training for enforcement authorities; and
- developing guidelines on the legal provisions for type-approval, conformity of production, recall of vehicles, safeguard measures and market surveillance.

Option B4 can either stand alone or complement Options B2 or B3 and goes beyond pure application of NLF provisions.

In responding to the ex-post evaluation study questionnaire, the majority of national authority respondents (75%) were in favour of joint actions by the Commission and the Member States as the most appropriate for addressing problems relating to the responsibilities of and co-operation amongst the different national authorities.

## **5.3 Problem driver C: varying degrees of stringency and quality applied by technical services**

Three possible policy options have been put forward in the impact assessment roadmap:

- Option C1 (baseline scenario): business as usual.
- Option C2: the around 250 technical services across the EU would be invited to sign a voluntary agreement which clarifies their respective roles and responsibilities and aims to achieve a uniform level of stringency in type-approval testing and verification of conformity of production. The agreement would include mechanisms for information exchange and co-operation between technical services, as well as define a body (or bodies) responsible for

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<sup>34</sup> See Chapter II (in particular Articles 6 and 8), as well as Chapter XII (Articles 46 to 52 included)

managing and monitoring the agreement. The awareness campaign would be aimed at disseminating the details of this agreement to technical services and economic operators.

In practice, this policy option would be difficult to define further, due to the non-representative number of responses received from technical services in the context of the impact assessment study, and unlikely to be effective for the following reasons:

- it appears there is no common understanding amongst TS either that there is a problem to be addressed or what the solution might be;
  - because of this, the willingness of TS to sign up to a voluntary agreement is uncertain (especially for those which perceive they have nothing to gain);
  - the ability of all TS to co-operate is also uncertain, given the large number of them involved and the question who should develop and monitor the agreement.
- Option C3: would envisage developing provisions to clarify and strengthen the requirements technical services have to comply with to be entitled to perform type-approval testing and verification of conformity of production. These provisions would in particular aim at clarifying the criteria governing the technical independence (e.g. technical services are not allowed to be the designer, manufacturer, supplier, installer, purchaser, owner, user or maintainer of the vehicles or devices tested) and their financial independence (e.g. the remuneration of the top level management and assessment personnel is not to depend on the number of assessments carried out or on the results of those assessments). Alignment with the reference provisions of the NLF Decision and coherence with the provisions of Regulation (EU) No 168/2013<sup>35</sup> would be envisaged.

#### **5.4. Problem area D: lack of clarity in safeguard measures & recall procedures**

Three possible policy options have been put forward in the IA roadmap:

- Option D1 (baseline scenario): business as usual.
- Option D2: awareness campaigns and/or voluntary agreements with and between the different authorities in the Member States involved in the implementation and enforcement of the internal market legislation for motor vehicles to clarify and agree on their respective roles and responsibilities in post-market safeguard measures and recall actions, and the communication channels and procedures for exchange of information and co-operation.

Two points have to be noted with regard to Option D2:

- there are substantial similarities and possible overlaps between Option D2 and Option B2 (with the latter covering the overall roles and responsibilities of enforcement authorities, including those relating to post-market safeguard measures and recall actions).

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<sup>35</sup> In particular with its Chapter XVI (Articles 61 to 71 included)

- Option D2 cannot be used to improve the safeguard measures, primarily because a voluntary agreement cannot supersede a legally binding procedure involving decisions by the Commission.

For these reasons, Option D2 has not been assessed in detail in section 6 below. Any impacts relating to clarifying the roles and responsibilities of enforcement authorities have been captured under Option B2 (and Option B3) and the double-counting of impacts under two similar or at least interconnected options needs to be avoided.

- Option D3: amend the existing type-approval legislation relating to motor vehicles by including provisions to specify the role of and interaction between the different authorities involved in post-market safeguard measures and recall actions, as well as the cross border information exchange and co-operation between national enforcement authorities (type-approval authorities, market surveillance authorities, border control authorities, etc.).

In addition, changes to the current provisions on safeguard measures would be introduced, in line with the two step approach of the NLF Decision and as already incorporated in the type-approval legislation for motor cycles<sup>36</sup>. Under this approach Member States (or their approval authorities) would only be required to inform the Commission and other Member States of safeguard measures taken where they consider that the established non-compliance is not restricted to their national territory. In particular, the procedure to deal with safeguard measures taken at national level which give rise to objections from other Member States or the European Commission should be clarified.

## **5.5. Problem driver E: weaknesses in the procedures for ensuring conformity of production**

Three possible policy options have been put forward in the IA roadmap:

- Option E1 (baseline scenario): business as usual.
- Option E2: awareness campaigns and/or voluntary agreements with and between the different stakeholders involved in the conformity of production (manufacturers, technical services and type-approval authorities in the Member States) to clarify and agree on the criteria and procedures to be applied for verifying and ensuring the conformity of production.

It should be noted that Options A2, B2 and C2 already consider the possibilities for introducing a voluntary agreement amongst economic operators, enforcement authorities and technical services respectively. Some of the key points made in that respect are summarised in Annex 6. .

Option E2 could also not be used to enhance the CoP provisions, because a voluntary agreement cannot replace the current requirements in Directive 2007/46/EC, unless the latter would be amended for that purpose through a regulatory initiative. In conclusion, option E2 has not been taken forward for further assessment

- Option E3: this option would envisage developing within the type-approval legislation on motor vehicles provisions to clarify and strengthen the CoP provisions, through the application of the principles and provisions of the NLF

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<sup>36</sup> See in particular Chapter XII of Regulation (EU) No 168/2013 (Articles 46 to 53)

related to the verification of conformity during the production stage. These provisions cover the assessment of quality management systems for production, and product related controls through inspection and testing, under surveillance by the competent authorities<sup>37</sup>. The current provisions for ensuring CoP could be improved by incorporating the concept that the quality assurance system of the manufacturer has to be assessed by the type-approval authority (or an appointed body acting on its behalf) based on the detailed quality assurance system documentation to be approved by that authority or appointed body.

## **5.6. Specific needs for action**

The specific needs referred to in § 3.1.5 have not been addressed in a separate option as it is considered that these needs can to a very large extent be covered in the policy options for the five problem areas identified (in particular with those concerning safeguard clauses in area D).

## **5.7. Instruments for the policy options**

Each of the identified options for the five problem areas are considered to be fully in line with the proportionality principle as they envisage addressing regulatory failures in the automotive sector within the context of the overall policy objectives set out for the re-launch of single market strategy, in particular with regard to market surveillance, and by taking due account of the principles and boundaries of the horizontal framework for the marketing of products.

To enhance the harmonised implementation of the type-approval requirements by the Member States, and in line with the principles of smart regulation, it is envisaged to replace the FWD by a Regulation, directly applicable in the Member States.

## **6. ANALYSIS OF IMPACTS**

### **6.1 Problem driver A: insufficient traceability of automotive products and lack of clarity about responsibilities of economic operators in the supply chain**

#### *6.1.1. Summary of impacts assessed for the options under problem driver area A:*

The baseline scenario (Option A1) would do nothing to address the current, estimated market share of non-compliant and unsafe products on the EU market. Responsible economic operators would continue to be disadvantaged by competition from less scrupulous operators. There would be no change to the lack of coherence in the implementation of the type-approval framework. There would be no costs associated with this option, but no benefits.

The self-regulatory option (A2) would provide clarity regarding the responsibilities of economic operators. However, neither voluntary agreements nor awareness campaigns are likely to affect the behaviour of less scrupulous economic operators. The coverage and enforcement of voluntary agreements is also uncertain, given that many SMEs in particular are not members of industry associations. The option would improve coherence with the principles of the NLF, and the costs would be low; however, there is considerable uncertainty that any benefits would be achieved.

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<sup>37</sup> See Annex II to Decision No 768/2008/EC (Module D)

The regulatory option (A3) is likely to be the most effective. It would provide legal clarity on the responsibilities of economic operators and clear rules on traceability of products are likely to assist enforcement authorities in taking effective remedial action against non-compliant and unsafe products found on the market. Overall the costs are likely to be outweighed by the benefits. (For more details on estimated benefits and costs, see Annexes 8 and 9)

6.1.2. *Details of impacts assessed for the options under problem driver area A:*

See table IA.1 of Annex 1 and Annex 9.

6.1.3. *Assessment of effectiveness, efficiency and coherence of the options:*

Do Nothing Option	Self-regulatory Option	Regulatory Option
<p style="text-align: center;"><i>Option A1 – NEUTRAL (0)</i></p> <ul style="list-style-type: none"> <li>• <b>Effectiveness:</b> no change from current situation - does not clarify the responsibilities of economic operators nor address issues relating to traceability and proper enforcement of type-approval framework</li> <li>• <b>Efficiency:</b> no change from current situation - current value of non-compliant and unsafe products (<b>€375 m - €4.5 bn</b>)* likely to continue into the future and responsible economic operators will continue to be disadvantaged in competing with less scrupulous economic operators.</li> </ul>	<p style="text-align: center;"><i>Option A2 – NEUTRAL (0)</i></p> <ul style="list-style-type: none"> <li>• <b>Effectiveness:</b> Neutral (0); provides <b>clarity</b> regarding the responsibilities of economic operators; however, voluntary agreements and/or awareness campaign are unlikely to impact on less scrupulous economic operators. Coverage and enforcement of industry-wide VA is also uncertain</li> <li>• <b>Efficiency:</b> Neutral (0); while cost of setting up a voluntary agreement may be low; it is unclear that any costs incurred would be justified by the results in terms of actual reductions in non-compliant and unsafe automotive products – or in terms of impacts on less scrupulous operators ignoring the rules</li> </ul>	<p style="text-align: center;"><i>Option A3 – SATISFACTORY (+)</i></p> <ul style="list-style-type: none"> <li>• <b>Effectiveness:</b> Highly Satisfactory (++); increased <b>legal clarity</b> for economic operators regarding their responsibilities. Clear rules on traceability implemented and enforced universally are likely to assist enforcement authorities</li> <li>• <b>Efficiency:</b> Satisfactory (+); level of non-compliant and unsafe products likely to reduce to <b>€281 million and €3.4 billion</b> * respectively. Responsible operators will also be less disadvantaged in competing with less scrupulous economic operators</li> </ul>

Do Nothing Option	Self-regulatory Option	Regulatory Option
<ul style="list-style-type: none"> <li>• <b>Coherence:</b> does not increase coherence of type-approval framework with NLF. Also, risk of MS taking additional measures at the national level to counter non-compliant and unsafe products and thus risk of increased regulatory fragmentation</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Coherence:</b> Satisfactory (+) if responsibilities of economic operators are consistent with NLF.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Coherence:</b> Satisfactory (+); consistent with NLF and reinforces type-approval framework.</li> </ul>
<p>* For more details on quantified benefits and costs and the limitations of their robustness, see Annexes 8 and 9</p>		

**6.2 Problem area B: lack of clarity about the responsibilities & cooperation of enforcement authorities**

*6.2.1. Summary of impacts assessed for the options under problem driver area B:*

The baseline scenario (Option B1) would do nothing to clarify the responsibilities of enforcement authorities nor address issues relating to information exchange and cooperation between them. It would have no impact on the current, estimated market share of non-compliant and unsafe products on the EU market. No costs would be incurred with this option, but there would be no benefits.

The self-regulatory option (B2) would provide clarity on the roles and responsibilities of enforcement authorities. The extent to which actions would actually be modified from the current situation is highly uncertain; however, this option could reduce to some extent the current, estimated market share of non-compliant and unsafe products on the EU market. It would provide consistency with the NLF. Some costs would be incurred by the authorities in developing and implementing voluntary agreements, but these are likely to be balanced by the benefits of a reduction in the presence of non-compliant and unsafe products on the market and benefits to the authorities and economic operators from better communication.

The co-regulatory option (B3) would improve enforcement capabilities through training, while the guidelines would provide more clarity. Its effectiveness would be enhanced if it was combined with either the self-regulatory or the regulatory initiative. It would provide consistency with the NLF. The costs would be relatively low and would be significantly out weighted by the benefits generated through a further reduction of the market share taken by non-compliant and unsafe products.

The regulatory option (B4) would provide increased legal clarity for enforcement bodies regarding their responsibilities. Clear rules on information exchange and cooperation are also likely to assist enforcement. It will provide consistency with the NLF, which will be of particular benefit to authorities that are also responsible for other products already covered by the NLF. The costs incurred by stakeholders are likely to be outweighed by the benefits to stakeholders from the potential of reducing the market share of non-compliant and unsafe products.

6.2.2. Details of impacts assessed for the options under problem driver area B:

See table IA.2 of Annex 1 and Annex 9.

6.2.3. Assessment of effectiveness, efficiency and coherence of the options:

Do Nothing Option	Self-regulatory Option	Co-regulatory Option	Regulatory Option
<p><b>Option B 1 – NEUTRAL (0)</b></p> <ul style="list-style-type: none"> <li>• <b>Effectiveness:</b> no change from current situation - does not clarify the responsibilities of enforcement authorities nor address issues relating to information exchange and co-operation between them</li> <li>• <b>Efficiency:</b> no change from current situation - current level of non-compliant and unsafe products (<b>€125 m - €6 bn</b>)* likely to continue into the future</li> <li>• <b>Coherence:</b> does not increase coherence of type-approval Directive with NLF. Also, inconsistent level of market surveillance across MS will continue</li> </ul>	<p><b>Option B2 - SATISFACTORY (+)</b></p> <ul style="list-style-type: none"> <li>• <b>Effectiveness:</b> Satisfactory (+); provides <b>clarity</b> regarding the responsibilities of enforcement authorities; however, the extent to which actual actions taken go beyond the current situation is doubtful</li> <li>• <b>Efficiency:</b> Satisfactory (+); likely to result in a reduction in of non-compliant and unsafe products on the market</li> <li>• <b>Coherence:</b> Satisfactory (+); consistent with NLF and information exchange to be underpinned by NLF and existing structures</li> </ul>	<p><b>Option B4 – SATISFACTORY/ HIGHLY SATISFACTORY (+/+++)</b></p> <ul style="list-style-type: none"> <li>• <b>Effectiveness:</b> Satisfactory (+); training would improve enforcement capabilities, while guidelines provide more clarity; effectiveness as a stand-alone measure is far less than when combined with B2 or B3</li> <li>• <b>Efficiency:</b> Highly Satisfactory (++) assuming overlaps with B2/B3, level of non-compliant and unsafe products is likely to reduce to <b>€4 million and €6.8 billion</b> *respectively</li> <li>• <b>Coherence:</b> Satisfactory (+); consistent with NLF and reinforces type-approval framework</li> <li>• <b>Preferred by national authorities for information exchange and co-operation</b></li> </ul>	<p><b>Option B3 - SATISFACTORY/ HIGHLY SATISFACTORY (+/+++)</b></p> <ul style="list-style-type: none"> <li>• <b>Effectiveness:</b> Highly Satisfactory (++); increased <b>legal clarity</b> for enforcement bodies regarding their responsibilities. Clear rules on information exchange and co-operation likely to assist enforcement authorities</li> <li>• <b>Efficiency:</b> Satisfactory (+); level of non-compliant and unsafe products likely to reduce to <b>€3 million and €3 billion</b> *respectively</li> <li>• <b>Coherence:</b> Highly Satisfactory (++) consistent with NLF and reinforces type-approval framework. Also ensures consistency in regulatory requirements for authorities overlooking other products covered by NLF and in particular motorcycles and tractors</li> <li>• <b>Preferred by National Authorities for addressing their roles and responsibilities</b></li> </ul>
<p>* For more details on quantified benefits and costs and the limitations of their robustness, see Annexes 8 and 9</p>			



**6.3 Problem area C: varying degrees of stringency and quality applied by technical services**

*6.3.1. Summary of impacts assessed for the options under problem driver area C:*

The baseline scenario would do nothing to address the disparities in the level of quality and performance of TS. Responsible TS would continue to be disadvantaged by competition from those that are less stringent and TS with other products in their portfolio would not benefit from consistency with the NLF. There would be no costs and no benefits under this option.

The potential impacts of a self-regulatory option have not been assessed in detail as, in practice, it would be difficult to agree and enforce a voluntary agreement across a large number of TS, especially where there appears to be no common understanding of the problem and no existing body to agree and enforce a VA. Because of this, even though the potential costs are low, they are still likely to outweigh the benefits which are highly uncertain, bearing in mind that the likely impact of self-regulation in encouraging less stringent TS to improve their performance is doubtful.

The regulatory option would provide increased legal clarity for TS on the requirements they need to meet. Although TS could incur some costs in ensuring legal, physical or personnel separation of conformity assessment from other activities, these costs are likely to be outweighed by a potential reduction in the market share of non-compliant and unsafe products. TS could also benefit from consistency with the NLF, if their portfolio includes other products covered by the NLF.

*6.3.2. Details of impacts assessed for the options under problem driver area C:*

See table IA.3 of Annex 1 and Annex 9.

*6.3.3. Assessment of effectiveness, efficiency and coherence of the options:*

<b>Do Nothing Option</b>	<b>Self-regulatory Option</b>	<b>Regulatory Option</b>
<p><i>Option C1 – Do Nothing</i></p> <ul style="list-style-type: none"> <li><b>Effectiveness:</b> no change from current situation - does not address disparities in the level of quality and performance of TS</li> </ul>	<p><i>Option C2 – UNSATISFACTORY (-)</i></p> <ul style="list-style-type: none"> <li><b>Effectiveness:</b> Unsatisfactory (-); effectiveness of a voluntary initiative in encouraging TS to perform at high level of quality is doubtful, especially where financial pressures are involved</li> </ul>	<p><i>Option C3 – HIGHLY SATISFACTORY (++)</i></p> <ul style="list-style-type: none"> <li><b>Effectiveness:</b> Highly satisfactory (++) increased <b>legal clarity</b> for TS regarding the requirements they have to comply with.</li> </ul>

Do Nothing Option	Self-regulatory Option	Regulatory Option
<ul style="list-style-type: none"> <li>• <b>Efficiency:</b> no change from current situation - current level of non-compliant and unsafe products (<b>€250 m - €7.5 bn</b>)* likely to continue into the future and responsible TS will continue to be disadvantaged in competing with less stringent TS</li> <li>• <b>Coherence:</b> does not increase coherence of framework Directive with NLF. Also, TS with other products in their portfolio would not benefit from consistent regulatory requirements set out under NLF and type-approval legislation for motor cycles and tractors</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Efficiency:</b> Unsatisfactory (-); difficult to agree and enforce a VA across numerous TS and need for enforcement body raises a number of legal, commercial &amp; organisational issues and increases costs</li> <li>• <b>Coherence:</b> Neutral (-);</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Efficiency:</b> Satisfactory (+); level of NCDs and/or UADs likely to reduce by up to <b>€125 million and €5.6 billion*</b> respectively. For TS undertaking certification and other functions, some costs may be incurred in order to ensure personnel, legal or physical separation</li> <li>• <b>Coherence:</b> Highly Satisfactory (++) consistent with NLF and reinforces framework Directive. Also, ensures consistency in regulatory requirements for TS with other automotive products in portfolio (motor cycles and tractors)</li> </ul>
<p>For more details on quantified benefits and costs and the limitations of their robustness, see Annexes 8 and 9</p>		

#### 6.4 Problem area D: lack of clarity in safeguard measures & recall procedures

##### 6.4.1. Summary of impacts assessed for the options under problem driver area D:

The baseline scenario would involve no change from the existing situation. However, there is some uncertainty over the significance of this problem area and it would also be partly addressed by the options for Problem Area B.

The self-regulatory option would not be practicable, as a voluntary agreements cannot supersede legislation and is unlikely to have sufficient legal standing in the event of a recall.

The regulatory option is unlikely to have a significant impact, unless it would result to a large number of challenges from other Member States in response to national procedures.

##### 6.4.2. Details of impacts assessed for the options under problem driver area D:

See table IA.4 of Annex 1 and Annex 9.

##### 6.4.3. Assessment of effectiveness, efficiency and coherence of the options:

Do Nothing Option	Self-regulatory Option	Regulatory Option
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Do Nothing Option	Self-regulatory Option	Regulatory Option
<p data-bbox="284 226 485 293"><i>Option D1 – NEUTRAL (0)</i></p> <ul data-bbox="204 349 564 1111" style="list-style-type: none"> <li data-bbox="204 349 564 528">• <b>Effectiveness:</b> no change from current situation – there is some uncertainty over the significance of this problem area</li> <li data-bbox="204 577 564 757">• <b>Efficiency:</b> no change from current situation and no direct impact on level of NCDs and/or UADs on market</li> <li data-bbox="204 936 564 1111">• <b>Coherence:</b> no change from current situation and does not increase coherence of WVTA Directive with NLF</li> </ul>	<p data-bbox="624 226 951 293"><i>Option D2 - UNSATISFACTORY (-)</i></p> <ul data-bbox="592 349 967 562" style="list-style-type: none"> <li data-bbox="592 349 967 562">• <b>Effectiveness:</b> Unsatisfactory (-); as a voluntary agreement cannot supersede legislation which specifies post-market safeguard measures</li> </ul>	<p data-bbox="1062 226 1350 327"><i>Option D3 – NEUTRAL (0)/ SATISFACTORY (+)</i></p> <ul data-bbox="1007 349 1406 1122" style="list-style-type: none"> <li data-bbox="1007 349 1406 450">• <b>Effectiveness:</b> neutral (0) as no change from current practice</li> <li data-bbox="1007 577 1406 902">• <b>Efficiency:</b> neutral (0); no impact on level of non-compliant and unsafe products; however, economic operators and authorities may avoid additional costs from challenging en being challenged on national procedures</li> <li data-bbox="1007 943 1406 1122">• <b>Coherence:</b> Satisfactory (+); in line with NLF, consistent with aim for better information exchange between national authorities</li> </ul>

**6.5 Problem area E: weaknesses in the procedures for ensuring conformity of production**

*6.5.1. Summary of impacts assessed for the options under problem driver area E:*

The baseline scenario would do nothing to address the disparities in the quality criteria and procedures for CoP. The costs to stakeholders associated with this would continue and there would be no increase in coherence with the NLF.

The self-regulatory option would be unlikely to have a significant impact on the proportion of non-compliant and unsafe products on the market. It would be difficult to agree and enforce a voluntary agreement across numerous economic operators and TS and the need for a body to monitor and enforce a VA raises a number of legal, commercial and organisational issues which could increase costs. In addition, the options identified for problem areas A and B address the key responsibilities of economic operators, enforcement authorities and TS, which should also help to address this problem area.

The regulatory option is likely to ensure consistency and coherence with the principles and provisions of the NLF. While the vast majority of vehicle manufacturers are likely to have robust quality assurance (QA) structures in place already, this may not be the case for manufacturers of some vehicle parts and for some SMEs. These companies would incur some costs to improve QA structures; these costs are, however, likely to be outweighed by a potential reduction in the value of non-compliant and unsafe products on the market. Having a more robust QA

system in place could also benefit economic operators, by increasing the efficiency of production and ensuring that fewer poor quality products are produced.

6.4.2. *Details of impacts assessed for the options under problem driver area E:*

See table IA.5 of Annex 1 and Annex 9.

6.4.3. *Assessment of effectiveness, efficiency and coherence of the options:*

<b>Do Nothing Option</b>	<b>Self-regulatory Option</b>	<b>Regulatory Option</b>
<p><b>Option E1 – NEUTRAL (0)</b></p> <ul style="list-style-type: none"> <li>• <b>Effectiveness:</b> no change from current situation</li> <li>• <b>Efficiency:</b> no change from current situation - current level of non-compliant and unsafe products (<b>€500 m - €6.8 bn</b>)* likely to continue into the future</li> <li>• <b>Coherence:</b> no change from current situation and does not increase coherence of framework Directive with NLF</li> </ul>	<p><b>Option E2 - UNSATISFACTORY (-)</b></p> <ul style="list-style-type: none"> <li>• Difficult to agree and enforce a voluntary agreement across numerous economic operators and TS and need for enforcement body raises a number of legal, commercial and organisational issues and increases costs</li> </ul> <p>Also, Options A2, A3, B2, B3 and B4 already address the key responsibilities of economic operators, enforcement authorities and technical services</p>	<p><b>Option E3 – NEUTRAL/ SATISFACTORY (0/+)</b></p> <ul style="list-style-type: none"> <li>• <b>Effectiveness:</b> Neutral (0); no significant change from current approach</li> <li>• <b>Efficiency:</b> Neutral (0); formalises current best practice but may imply some costs for a few companies</li> <li>• <b>Coherence:</b> Satisfactory (+); improves consistency and coherence of framework Directive with NLF</li> </ul>
<p>* For more details on estimated benefits and costs, see Annexes 8 and 9</p>		

**7. COMPARING THE OPTIONS**

**7.1. Summary of impacts of the policy options assessed**

The tables in section 6 provide a comparison of the policy options, against four key performance criteria:

- the potential effectiveness, in terms of addressing the general problem, the specific problem areas and/or enhancing enforcement of the type-approval legislation.
- the potential efficiency (or cost-effectiveness), in terms of the costs likely to be incurred in relation to the potential reduction in non-compliant and unsafe automotive products on the market.
- the coherence of the policy options, in terms of the extent to which the proposed intervention contributes to and/or mutually reinforces the existing type-approval framework
- the benefits associated with the policy options considered

The boxes with the policy options which rank best for each problem area are highlighted.

## 7.2. Preferred Combination of Policy Options

Given the overlap between the problem areas, a combination of policy options is likely to be the most effective in addressing the problems of non-compliant and unsafe automotive products on the market. From the result of the analysis of options in section 6, the preferred combination of policy options that emerges is as follows:

Problem area	Policy Options	Preferred Combination
A: traceability of products and responsibilities of economic operators	1: baseline, business as usual 2: Self-regulatory initiatives 3: Regulatory initiatives 4: Co-regulatory initiatives (joint actions between MS and EC)	A3b
B: responsibilities and cooperation of enforcement authorities		B3 + B4
C: quality of type approval tasks carried out by Technical Services		C3
D: post safeguard measures and recalls		D3
E: procedures for ensuring conformity of production		E3

Self-regulatory initiatives by industry and enforcement authorities have been considered, but the analysis concluded that such an approach would be not sufficient for reaching to the fullest the initiative's objectives. This conclusion is based on the consideration that the improvements in the problem areas identified are unlikely to be effective and cannot guarantee a level playing field for all economic operators unless they are legally enforceable.

## 7.3. Comparison of impacts of preferred combination of policy options in terms of estimated reduction of the market share of non-compliant and unsafe automotive products

This preferred combination of policy options could, based on the estimates<sup>38</sup>, reduce the value of the market taken up by non-compliant and unsafe products by between €56 million and €12 billion per year. The estimated impacts of each of the preferred policy options on the proportion of non-compliant and unsafe products on the market, compared with that of the separate policy options, is summarised in the table below.

It has to be stressed again that these figures only capture the approximate benefits of the reduction of market distortions caused by the presence of unsafe and non-compliant products. They do not reflect benefits in terms of reduced accidents, loss of life, environmental damage, etc. caused by these products.

<i>Policy Option 1: Do Nothing</i>						
Market value* of ...	Option A1	Option B1	Option C1	Option D1	Option E1	TOTAL
Non-compliant products	375	125	250		500	<b>1 250</b>
Unsafe products	3 000	6 000	7 500		4 500	<b>21 000</b>
<i>Policy Option 2: Self-regulatory Initiatives</i>						

<sup>38</sup> See caveat mentioned in § 3.1.7 and Annex 8

Market value* reduction of	<b>Option A2</b>	<b>Option B2</b>	<b>Option C2</b>	<b>Option D2</b>	<b>Option E2</b>	<b>TOTAL</b>
Non-compliant products		6				<b>6</b>
Unsafe products		300				<b>300</b>
<b><i>Policy Option 4: Co-regulatory Initiatives</i></b>						
Market value* reduction of		<b>Option B4</b>				<b>TOTAL</b>
Non-compliant products		94				<b>94</b>
Unsafe products		4 500				<b>4 500</b>
<b><i>Policy Option 3: Regulatory Initiatives</i></b>						
Market value* reduction of	<b>Option A3</b>	<b>Option B3</b>	<b>Option C3</b>	<b>Option D3</b>	<b>Option E3</b>	<b>TOTAL</b>
Non-compliant products	188	63	125		250	<b>625</b>
Unsafe products	1 500	3 000	3 750		2 250	<b>10 500</b>
<b><i>Preferred Combination of Options</i></b>						
Market value* reduction of	<b>Option A3</b>	<b>B3 + B4**</b>	<b>Option C3</b>	<b>Option D3</b>	<b>Option E3</b>	<b>TOTAL</b>
Non-compliant products	188	94	125		250	<b>656</b>
Unsafe products	1 500	4 500	3 750		2 250	<b>12 000</b>
* in million Euro						
**In this context, Option B4 is implemented as a complementary option to Option B3 and provides additional or benefits by reducing non-compliant and unsafe products by €31 million and €1.5 billion respectively						

The estimated value of the main costs for implementing the combination of preferred policy options is summarised in the table below:

Summary of Costs of Implementing the Preferred Options (€million)			
	Lower Estimate	Central Estimate	Upper Estimate
Indicative Costs to Non-EU Importers of Having an EU Representative – Option A3	0.1	3.0	90.0
Indicative costs of additional surveillance – Option A3/Option B3	1.4		10.1
Indicative costs of transposition into national legislation	13.5		27.0
Total Cost of Option B3 of developing the guidance and training material and delivering the training	0.1	0.4	0.9
Total cost of Ensuring Technical and Economic Independence – Option C3	0.1	2.0	> 3.0
Overall Costs of Implementing the Preferred Options	15.2	n/a	131.0

Despite the high degree of uncertainty about the robustness of the estimates made for the benefits the policy options could generate, one can nevertheless conclude that in most cases, the estimated costs of implementing the options are at least an order of magnitude lower than the estimated benefits.

## **8. MONITORING AND EVALUATION**

In order to identify the key indicators for monitoring progress and achievement of the aims of the intervention, it is important to bear in mind that any changes resulting from revisions to the framework Directive for the type-approval of motor vehicles, voluntary action and/or joint action are likely to affect consumers, the automotive industry and regulators. The indicators have, therefore, been chosen to reflect not only the regulatory intent of the intervention but also potentially negative consequences of the intervention, which may indicate a failure (e.g. an increase in court cases after introduction of a voluntary agreement).

The key indicators are as follows:

- changes in the views of/complaints from consumers received by enforcement authorities relating to motor vehicles and vehicle components;
- changes in the number/percentage of non-compliant and unsafe automotive products present on the EU market (e.g. compared with existing surveys);
- changes in the number/percentage of safeguard measures taken by EU authorities against non-compliant and unsafe products both from intra-EU and extra-EU manufacturers/importers (i.e. taking into account increased traceability requirements for automotive products);
- changes in trends in RAPEX notifications for vehicles; and
- changes in trends in voluntary recalls of motor vehicles (as an indicator for the effectiveness of the policy options retained in reducing the number of automotive products on the market representing a safety or environmental risk).

A reasonable timeline to review the selected indicators for monitoring and evaluation (taking into account the nature and effect of the preferred policy options) would be in five years after the revised Directive has come into force.

## **9. ANNEXES**

- 1) Tables
- 2) Case Studies
- 3) Acronyms used
- 4) General policy and regulatory context of the initiative
- 5) Schematic representation of the problem and its drivers, the consequences and the policy objectives identified aimed at remedying the problem
- 6) Key considerations concerning the possible introduction of a voluntary agreement amongst economic operators, enforcement authorities and technical services
- 7) Overall structure of the European automotive industry sector
- 8) Attempt to quantify the impact of the envisaged policy options: methodology used
- 9) Detailed assessment of the impacts of the policy options

## Annex 1:

### TABLES

#### CHAPTER 3: PROBLEM DEFINITION

#### Responses to the public consultation (IPM)

Table IPM.1

The presence of non-compliant and/or unsafe automotive products on the market...	Agree fully	Agree	No opinion	Disagree	Disagree fully	Don't know
Is distorting competition	<b>54%</b>	<b>31%</b>	13%	10%	2%	0%
Is creating serious challenges for the enforcement of the current legislation	<b>44%</b>	<b>44%</b>	8%	20%	5%	0%
has significant negative impacts on our society (health & safety, environment)	<b>38%</b>	<b>49%</b>	5%	5%	3%	0%

Table IPM.2

The current type-approval system for motor vehicles in the EU...	Agree fully	Agree	No opinion	Disagree	Disagree fully
is reliable and of high quality	<b>26%</b>	<b>49%</b>	8%	17%	0%
creates a level playing field	<b>3%</b>	<b>59%</b>	6%	28%	3%
is not effective neither sufficient for taking actions against non-compliant products	<b>0%</b>	<b>47%</b>	12%	38%	3%
needs increased attention to market surveillance	<b>48%</b>	<b>28%</b>	12%	12%	3%

Table IPM.3

Problem drivers / needs identified	Relevance		
	Yes	No	No opinion
A: traceability of products & responsibilities of economic operators	<b>76%</b>	16%	8%
B: responsibilities & co-operation of enforcement authorities	<b>64%</b>	15%	21%
C: quality of type approval tasks carried out by technical services	<b>79%</b>	9%	12%
D: safeguard measures & recall procedures	32%	38%	30%
E: procedures for ensuring conformity of production	<b>53%</b>	14%	33%



## Replies to the Ex-Post Evaluation study questionnaire (EPE)

Table EPE.1

How serious is the issue of unsafe automotive products being placed on the EU market?	Highly Serious	Serious	Exists, but minimal	Not a problem
Economic Operators	<b>25%</b>	0%	<b>75%</b>	0%
National Authorities	<b>10%</b>	<b>20%</b>	<b>40%</b>	<b>10%</b>
Technical Services	0%	<b>50%</b>	<b>50%</b>	0%
Consumer Organisations	<b>50%</b>	<b>50%</b>	0%	0%

Table EPE.2

what is the estimated share of unsafe automotive products currently on the EU market?	Less than 1%	1 – 5%	5 – 10%	10 – 25%	More than 25%
National Authorities	0%	0%	<b>50%</b>	0%	<b>50%</b>
Technical Services	0%	<b>50%</b>	0%	<b>50%</b>	0%

Table EPE.3

How serious is the issue of non-compliant automotive products being placed on the EU market?	Highly Serious	Serious	Exists, but minimal	Not a problem
Economic Operators	<b>50%</b>	0%	<b>50%</b>	0%
National Authorities	<b>20%</b>	<b>30%</b>	<b>50%</b>	0%
Technical Services	0%	<b>75%</b>	<b>25%</b>	0%
Consumer Organisations	<b>50%</b>	<b>50%</b>	0%	0%

Table EPE.4

what is the estimated share of non-compliant automotive products currently on the EU market?	Less than 1%	1 – 5%	5 – 10%	10 – 25%	More than 25%
National Authorities	<b>25%</b>	0%	<b>50%</b>	0%	<b>25%</b>
Technical Services	0%	<b>33%</b>	0%	<b>33%</b>	<b>33%</b>

Table EPE.5

Problem Area	Importance will ...	Percentage of Responses		
		Economic Operators	Technical Services	National Authorities
A) Traceability of products and responsibilities of economic operators	Significantly increase	0%	<b>20%</b>	22%
	Increase	<b>33%</b>	<b>60%</b>	33%
	No change	<b>67%</b>	20%	<b>44%</b>
	Decrease	0%	0%	0%
	Significantly decrease	0%	0%	0%
B) Responsibilities of and co-operation between the different national authorities within the Member States involved in the enforcement of the legislation (type-approval, recalls, market surveillance, border controls)	Significantly increase	0%	0%	22%
	Increase	0%	<b>60%</b>	11%
	No change	<b>100%</b>	<b>40%</b>	<b>67%</b>
	Decrease	0%	0%	0%
	Significantly decrease	0%	0%	0%
C) Quality and performance of technical services	Significantly increase	0%	0%	11%
	Increase	33%	<b>40%</b>	33%
	No change	<b>67%</b>	<b>60%</b>	33%
	Decrease	0%	0%	22%
	Significantly decrease	0%	0%	0%
D) post-market safeguard measures and obligatory recall of vehicles (and components)	Significantly increase	0%	0%	0%
	Increase	0%	<b>60%</b>	<b>44%</b>
	No change	<b>100%</b>	<b>40%</b>	<b>44%</b>
	Decrease	0%	0%	11%
	Significantly decrease	0%	0%	0%
E) Verification procedures for ensuring conformity of production	Significantly increase	0%	0%	0%
	Increase	0%	<b>60%</b>	<b>67%</b>
	No change	<b>100%</b>	<b>40%</b>	<b>33%</b>
	Decrease	0%	0%	0%
	Significantly decrease	0%	0%	0%

## CHAPTER 6: ANALYSIS OF OPTIONS

### **Impact Assessment study results (IA):**

Table IA.1: summary of impacts assessed for options under problem area A<sup>39</sup>

Impact	Option A1 (baseline scenario)	Option A2 (self-regulatory)	Option A3b (regulatory)
Functioning of Internal Market	Lack of clear responsibilities for economic operators and on traceability of products results in non-compliant products with a total value of €75 million and unsafe automotive products with a total value of € billion placed on the EU market annually	Increased clarity for economic operators and enforcement authorities in identifying non-compliant and unsafe automotive products and economic operators responsible for them. However, high uncertainty in ensuring compliance for the whole sector.	Assuming that Option A3b is effective (i.e. 50% reduction) in addressing the problem of non-compliant and unsafe products, there would be a reduction in value achievable of between €188 million and €1.5 billion per year of such products on the market. It is anticipated that compliant automotive devices would be replace this volume.
Costs to Firms	Costs will continue to be incurred by reputable economic operators due to continued distortion of market caused by non-compliant and unsafe products	Main cost incurred by industry associations is for developing voluntary agreements (€8,000 to €38,000) and awareness campaigns (€6,000 to €21,000 – low estimate) to use the Odette recommendations on traceability	Costs for distributors and importers to ensure their obligations are met estimated costs range from €25,000 to €90 million)
Benefits to Firms	No benefits identified, other than to less scrupulous economic operators	Companies are likely to benefit from the clarity provided in terms of their roles and responsibilities	Increased traceability requirements will help economic operators to accurately link parts (subject to recall) and assembled vehicles, and to isolate the scope of a recall, improve customer service and reduce costs

<sup>39</sup>

For details about the calculation of the monetised figures in the table, see Annex 8

Impact	Option A1 (baseline scenario)	Option A2 (self-regulatory)	Option A3b (regulatory)
Costs to Authorities	No additional direct costs. However, potential losses relating to benefits which could be accrued by self-regulatory and regulatory action. Additional costs associated with more resources to be devoted to post-market control efforts and interventions due to increasing number of non-compliant and unsafe products encountered on the market	None identified	Costs incurred for verifying that economic operators are satisfying their requirements (between €1.4 million and €10.1 million). Also costs of amending national legislation
Benefits to Authorities	None identified	None identified	More tools available for effective enforcement of legislation, resulting in less ad hoc costs associated with post-market remedial actions against non-compliant and unsafe products
Costs to technical services	None identified	None identified	None identified
Benefits for technical services	None identified	None identified	None identified
Costs to Consumers	Consumers will continue to suffer from negative effects caused by recalls, faults and potentially increased safety risk	None identified	None identified
Benefits to Consumers	None identified	Improvement of current situation, however, this is not quantifiable	Improvement of current situation, however, this is not quantifiable
Social Impacts	Continuation or increase of the health risks and accidents resulting from non-compliant and unsafe vehicles	Small reduction in the share of non-compliant and unsafe vehicles on the market, with associated reduction of accidents and environmental harm	Reduction in the share of non-compliant and unsafe vehicles on the market, thus reducing the number of accidents and negative environmental impacts.
Environmental Impacts	The presence of non-compliant motor vehicles resulting in undesirable environmental impacts would continue or even increase in the future	Small reduction of non-compliant motor vehicles as a result of voluntary actions will generate a proportional positive environmental impacts	Reduction of non-compliant motor vehicles as a result of regulatory actions will generate an associated positive environmental impacts

Table IA.2: summary of impacts assessed for options under problem area B<sup>40</sup>

Impact	Option B1 (Baseline scenario)	Option B2 (Self-regulatory)	Option B3 (Regulatory)	Option B4 (Co-regulatory)
Functioning of Internal Market	Lack of clear responsibilities and procedures for exchange of information and co-operation between authorities results in continued presence of non-compliant products and unsafe products on the EU market, estimated to represent a value respectively of €125 million, and €6 billion on an annual basis.	It is estimated that Option B2 could result in a reduction of the value of non-compliant and unsafe products on the market of around €6.3 million per year and €300 million per year respectively. However the impact of Option 2 is highly uncertain.	Assuming Option B3 is effective (i.e. 50% reduction), it is estimated that there would be a reduction in the value of non-compliant and unsafe products on the market of around €63 million per year and €3 billion per year respectively	Assuming Option B4 - when applied in combination with Option B3 - is highly effective (i.e. 75% reduction), it is estimated that this would result in a reduction of the value of non-compliant and unsafe products on the market of around €4 million per year and €4.5 billion per year respectively
Costs to Firms	No additional costs expected for economic operators	No additional costs expected for economic operators.	No additional costs expected for complying economic operators. Less scrupulous operators may be faced with increased costs due to the better enforcement of the legislation achieved through this regulatory action	No additional costs expected for compliant economic operators. Less scrupulous manufacturer/traders may experience an increase in their operating costs (as they would now incur compliance costs)
Benefits to Firms	No benefits identified, other than to less scrupulous economic operators which would continue to profit from the lack of co-ordinated action by enforcement authorities	Better level playing field through the enhanced co-operation in the enforcement of the legislation	Increased regulatory clarity and better level playing field through the enhanced co-operation of enforcement authorities	Increased regulatory clarity and better level playing field through the enhanced understanding of the enforcement provisions by the authorities involved.

<sup>40</sup>

For details about the calculation of the monetised figures in the table, see Annex 8

Impact	Option B1 (Baseline scenario)	Option B2 (Self-regulatory)	Option B3 (Regulatory)	Option B4 (Co-regulatory)
Costs to Authorities	Current level of costs associated with post-market controls will continue into the future or even increase. National authorities would lose the benefits that may be accrued through better mechanisms for their mutual co-operation and exchange of information.	Cost of developing a voluntary agreement is estimated to be between €3,000 and €250,000. Cost of producing guidelines for better application of the legislation is estimated to range between €10,000 and €20,000	Some costs may be incurred to ensure compliance with and participate in the mechanisms set up for enhanced co-operation and better exchange of information.	Costs of developing the guidance and training material and delivering the training are estimated to range between €17,000 and €32,000
Benefits to Authorities	None identified	Better cooperation and exchange of information, resulting in more efficient enforcement	Better co-operation and exchange of information, resulting in more efficient enforcement	National authorities with comparatively weaker structures and procedures are likely to benefit from knowledge transfer resulting in improved enforcement performance
Costs to technical services	No direct impact identified, but indirectly some of the costs incurred by national authorities may spill over to technical services	None identified	None identified	If the training and guidance document would lead technical services to change their operating procedures, this could result in some indirect costs.
Benefits for technical services	None identified	None identified	None identified	TS changing their operating procedures could benefit from cost savings due to improved efficiency and regulatory clarity
Costs to Consumers	Consumers, particularly buyers of new cars, will continue to suffer from vehicle recalls and quality and safety defects. Increased safety risks, fuel and time costs, impacts on vehicle depreciation are likely to continue under this option. Total cost relating to recalls is estimated to be between €10,000 and €10 million		Some consumers may face higher costs for replacement parts, as cheaper non-compliant products may not be longer available on the EU market	Some consumers may face higher costs for replacement parts, as cheaper non-compliant products may not be longer available on the EU market

Impact	Option B1 (Baseline scenario)	Option B2 (Self-regulatory)	Option B3 (Regulatory)	Option B4 (Co-regulatory)
Benefits to Consumers	None identified	reduction in recalls will result in less nuisance and risks for the consumers	Reduced risk of purchasing unsafe, non-compliant or inferior quality automotive products. Assuming a 20-50% reduction in vehicle recalls would result in time savings estimated to represent a value of between €540,000 and €7.2 million per year	Reduced risk of purchasing unsafe, non-compliant or inferior quality products. Costs associated with vehicle recalls are also likely to reduce.
Social Impacts	Continuation or increase of the health risks and accidents resulting from non-compliant and unsafe vehicles due to the lack of better cooperation of enforcement authorities. Reduced customers' confidence and satisfaction caused by continuing or even increasing recalls.	Reduction in the number of non-complaint and unsafe products and recalls will reduce the number of accidents and environmental harm. (could not be quantified at present)	Reduction in the number of non-complaint and unsafe products and recalls will reduce the number of accidents and environmental harm. (could not be quantified at present) It is likely estimated that between 30,000 and 450,000 car owners would no longer be affected by the risk, worry and inconvenience of having their vehicle recalled.	Reduction in the number of non-complaint and unsafe products and recalls will reduce the number of accidents and environmental harm. (could not be quantified at present)
Environmental Impacts	None identified which can be directly attributed to this problem area	None identified	None identified	None identified

Table IA.3: summary of impacts assessed for options under problem area C

Impact	Option C1 (business as usual)	Option C3 (Regulatory)
functioning of Internal Market	Assuming that shortcomings in the quality and performance of technical services accounts for between 5% and 25% of unsafe automotive products on the EU market, this option would result in non-compliant products representing a value of €250 million and unsafe automotive products representing a value of €7.5 billion per year remaining placed on the EU market	Assuming that Option C3 is effective (i.e. 50% reduction) in addressing the problems relating to the quality of technical services, it would result in a reduction of the value of non-compliant products with €125 million and of unsafe automotive products with €3.8 billion per year respectively. It is anticipated that compliant automotive devices would be sold to replace this volume.
Costs to Firms	Assuming that ‘defective products’ and ‘design flaws’ are the result of weaknesses in the quality of the type-approval and conformity of production verification tasks carried out by technical services, between 5 and 30 vehicle model recalls per year would continue to arise	Reinforcing the legal requirements governing the quality and performance of technical services may result in costs being passed down to some manufacturers; the extent of which would vary from technical service to technical service and depend on the specific actions taken to ensure compliance with these requirements.
Benefits to Firms	No benefits identified, other than to less scrupulous economic operators which may continue to profit from the lack of quality in the performance of technical services.	Option C3 is expected to result in more robust inspections and tests being applied by technical services, with an associated reduction in ‘defective products’ and ‘design flaws’ leading to recalls. Assuming a 20-50% reduction would mean between 30,000 and 450,000 vehicles per year would not have to be recalled, resulting in cost savings of between € and €13 million per year.
Costs to Authorities	No additional costs under baseline	Some costs may be associated with updating the national legislation and monitoring compliance of technical services (€4,800 per Member State)
Benefits to Authorities	None identified	
Costs to technical services	Loss of benefits likely to accrue from a regulatory initiative aimed at improving the performance of technical services.	Strengthening the technical and economic independence criteria for technical services is likely to result in costs for technical services. Total one-off costs estimated to range from €150,000 to over €3 million.
Benefits for technical services		Responsible technical services would benefit, as it will become more difficult for those operating less stringently to maintain/gain market share



Impact	Option C1 (business as usual)	Option C3 (Regulatory)
Costs to Consumers	Consumers will continue to suffer from vehicle recalls and faults. Increased safety risks, fuel and time costs, impacts on vehicle depreciation are likely to continue under this option. Total cost relating to the inconvenience of recalls is estimated to be between €1.4 million and €21 million.	It is possible that some consumers purchasing new vehicles or parts may experience a price increase from either cost pass down from technical services or due to the fact that low-cost non-compliant products are no longer/easily available on the market.
Benefits to consumers	None identified	Assuming a 20-50% reduction in vehicle recalls, the time costs avoided can be estimated at between €540,000 and €13.5 million per year
Social Impacts	Vehicle or product recalls (where these are the result of unsafe automotive products or non-compliant products) result in risks to health and safety, inconvenience and worry, impacts on job security, etc. These social impacts would continue or even increase in the future	While the exact impact of Option C3 cannot be known for certain, it is likely that a reduction in recalls would result in 30,000 to 450,000 fewer car owners affected by the risks, worry and inconvenience of a owning a recalled vehicle
Environmental Impacts	Approximately 180,000 to 270,000 vehicles per year result in undesirable environmental impacts and this would continue in the future	A 50% reduction in vehicle recalls with undesirable environmental impacts – as a result of more robust checks by technical services, is equivalent to between 90,000 and 120,000 fewer vehicles per year impacting on the environment

Table IA.4: summary of impacts assessed for options under problem area D<sup>41</sup>

Impact	Option D1 business as usual	Option D3 (Regulatory)
Functioning of Internal Market	Unlikely to result in any additional negative impacts, in terms of the ability of stakeholders to take effective action in the event of products posing risks and/or being recalled. However the shortcomings of the current framework would continue to exist, in particular with regard to the need of concerted mitigation action across the EU against automotive products representing a safety risk.	Scenario 1: no significant change compared to the current situation. Scenario 2: if there are challenges to national procedures, this could cause unnecessary disruption for economic operators. If the national measures are considered unjustified, economic operators would have the possibility of appeal through the EU procedure. If the national measures are found justified, the uniform application of safeguards across the EU against the automotive product concerned would strengthen the functioning of the internal market.
Costs to Firms	No additional adjustment, compliance or transaction costs on businesses	Scenario 1: no additional costs anticipated for economic operators. Scenario 2: costs will be incurred where national measure are considered to be unjustified, and even where a national measure is considered justified, the period of time during which the Commission is preparing its decision could give rise to opportunity costs.
Benefits to Firms	None identified	Streamlined safeguard recall and procedures provide more legal certainty for the economic operators who may be affected by a safeguard measure or a recall action applied to the products for which they bear the responsibility for their compliance. In addition, the 2-step approach for safeguard measures should contribute to reducing the administrative burden both for the economic operators, by avoiding that all cases would have to be dealt under the comprehensive procedure at Union level, involving all Member States and the Commission.
Costs to Authorities	Current level of costs associated with post-market safeguards and recalls will continue into the future	Scenario 1: no additional costs identified. Scenario 2: cost savings are likely to be minimal

<sup>41</sup> For details about the calculation of the monetised figures in the table, see Annex 8. Two scenarios have been considered under option D3: scenario 1 is the national safeguard procedure, having no effect on other Member States. Scenario 2 is the EU safeguard procedure, which would enter into application if a national safeguard procedure under scenario 1 would be challenged by another MS or the EU Commission..

Impact	Option D1business as usual)	Option D3 (Regulatory)
Benefits to Authorities	None identified	Scenario 1: reduction in administrative requirements for national authorities Scenario 2: benefits accrued from harmonised safeguard measures across the EU
Costs to technical services	None identified	None identified
Benefits for technical services	None identified	None identified
Costs to Consumers	None identified	Consumers in some Member States may be exposed to risks from vehicles/devices which have been addressed in one Member State, but not in others
Benefits to Consumers	None identified	National procedures may benefit consumers in the Member State using them (i.e. quicker processing times) EU procedure may result in mitigating the risk that no effective remedial action is taken in all EU Member States
Social Impacts	No change from the current situation	Social impacts not directly attributable to Option D3 as there would be no change in the number of parts resulting in recalls and/or number of accidents on the road. However, better and wider implementation of safeguard procedures is likely to reduce or even minimise the risk for society caused by automotive products representing a serious risk to health, safety and the environment
Environmental Impacts	Not directly attributable	No direct impacts identified, but indirectly the improved application of safeguard procedures against automotive products representing a serious risk to the environment may entail in a reduction of the environmental harm caused by such products.

Table IA.5: summary of impacts assessed for options under problem area E<sup>42</sup>

Impact	Option E1 (business as usual)	Option E3 (Regulatory)
Functioning of Internal Market	Assuming weaknesses in conformity of production requirements account for between 7.5% and 10% of unsafe automotive products on the EU market, the business as usual approach would result in non-compliant products with a value of €500 million and unsafe products with a value of €1.5 billion continuing to be placed on the EU market every year	Assuming Option E3 is effective (i.e. 50% reduction) in addressing the problems related to shortcomings in the provisions for the conformity of production; this would entail a reduction of non-compliant products with a value of €250 million and unsafe products with a value of €2 billion per year.
Costs to Firms	No additional costs, however, existing costs associated with non-compliant and unsafe products would continue into the future	Potential increase in costs (particularly for SMEs) of improving their quality assurance systems and for keeping production data for 10 years
Benefits to Firms	None identified	Strengthening of ex-ante verification procedures should also result in a reduction in costs and administrative burdens linked to safeguard measures and recall procedures. A more robust QA system could be beneficial for economic operators by increasing production efficiency and reducing waste by avoiding the production and rejection of poor-quality products.
Costs to Authorities	The current level of costs associated with post-market safeguards and recalls will continue into the future	Possible impact for authorities in terms of more resources needed to verify compliance with the enhanced conformity of production requirements
Benefits to Authorities	Avoid costs associated with any intervention, particularly those associated with an amendment of the current national legislation	Strengthening of ex-ante verification procedures should result in overall benefits for authorities, as these are more formalised and harmonised, compared to ad hoc ex-post market interventions against non-compliant products
Costs to technical services	None identified	None identified
Benefits for technical services	None identified	None identified
Costs to Consumers	Vehicle or product recalls (where these are the result of non-compliance due to shortcoming in the conformity of production) result in risks to health and safety, inconvenience and worry, impacts on job security, etc. These negative impacts would continue in the future	It is possible that some consumers purchasing new vehicles or parts may experience a minimal price increase from either costs passed down from technical services to manufacturers or due to the fact that non-compliant products will no longer be easily available.

<sup>42</sup>

For details about the calculation of the monetised figures in the table, see Annex 8

Impact	Option E1 (business as usual)	Option E3 (Regulatory)
Benefits to Consumers	None identified	Assuming a 30-50% reduction in vehicle recalls due to defective products and design flaws, the time losses avoided by consumers can be estimated to represent a value between €900,000 and €13 million per year.
Social Impacts	No change from the current situation	strengthening of the conformity of production procedures is likely to result in a decrease in the number of automotive parts resulting in recalls and thereon the number of accidents on the road and associated social impacts
Environmental Impacts	Approximately 60,000 to 90,000 vehicles per year are estimated to result in undesirable environmental impacts and this would continue in the future	A 50% reduction in vehicle recalls with undesirable environmental impacts is equivalent to around 30,000 fewer vehicles per year creating undesirable environmental impacts

### Competitiveness Proofing study results: (CP)

Table CP.1: competitiveness proofing results for option A3b

Affected sectors	Direct-indirect	Impact expected/identified	Size of impact	Duration of impact	Risks/uncertainty
<i>Impacts on costs of doing business</i>					
Manufacturers of vehicles (OEMs)	Direct	OEMs manufacturers should be able to comply with requirements with current systems in place – No sizeable / measurable impact expected Efficiency savings and improvement in management of supply chain not expected / limited. No recall savings expected	Limited/Zero	Short term	Low
Manufacturers of sport vehicles in small series	Direct	Same as above No recall savings expected, due to small volumes, not frequent, direct knowledge of customers	Limited/Zero	Short term	Low
Manufacturers of trailers and other special purpose vehicles	Direct	Same as for manufacturers of sport vehicles, but some SMEs may need to introduce more organised documentation (administrative costs) – Possible small increase of administrative costs	Limited	Short/Medium term	Low
Manufacturers of components (Tier 1)	Direct	Same as for Manufacturers of vehicles (OEMs)	Limited	Short term	Low
Manufacturers of tyres	Direct	Limited/zero impacts on costs: all tyre manufacturers should be able to comply with traceability and information collection requirements with the current systems in place (tyres already bear a serial number) Additional efficiency savings and improvement in management of supply chain not expected/limited – since already information systems in place Small recall costs savings could arise if requirement to distributors and importers are properly enforced to ensure that only compliant tyres can be placed on the market.	Limited	Short term	Low
Manufacturers of components (Tier 2&3)	Direct	Possible costs for adoption/extension of product traceability systems (equipment and maintenance)	Medium	Short/medium term	Medium/High

Affected sectors	Direct-indirect	Impact expected/identified	Size of impact	Duration of impact	Risks/uncertainty
Authorised Distributors/ Dealers of vehicles	Direct	Possibly sizeable additional administrative costs for managing information - Costs for introduction and operation of traceability systems and record management procedures	Medium	Short/medium term	Medium
Independent dealers of vehicles	Direct	Expected to maintain a limited role in process Very limited administrative costs expected	Limited	Long term	Low
Importers/ distributors of tyres	Direct	Requirement for proof of compliance will have some limited administrative costs for some distributors (already being done by many) Possible sizeable costs (equipment, resources or fees to external labs) if requirements for testing of products for importers apply (considered of low probability)	Limited	Long term	Medium (depends on whether requirements for testing will apply)
Spare parts dealers	Direct	Limited costs if product traceability information is limited to batch, production series level Sizeable additional administrative costs for managing information and introduction and operation of IT systems if individual product traceability required Requirement for proof of compliance will have some limited administrative costs for some distributors (already being done by many)	Medium/High	Long term	Medium/Low
<i>Impact on capacity to innovate</i>					
Manufacturers of vehicles & components	Direct	Limited contribution expected at this stage - Potential for improving organisational and supply chain innovation not linked with the requirements – Large OEMs already look into ways to improve supply chain and cut costs	Limited	Medium/Long term	Medium
Importers/ distributors	Direct	None expected	Limited	Medium/Long term	Low
Suppliers of traceability systems	Indirect	Possible increase market demand for traceability systems and incentive to innovation Contribution to the development of common standard for traceability systems	Limited	Medium/Long term	Low
<i>Impact on international competitiveness</i>					
EU manufacturers of vehicles	Indirect	Potential: Reduce/eliminate part of non-compliant products from EU market – level playing field (not real issue) Not expected to have a significant additional impact on the reputation of EU firms	Limited	Long term	High (actual impact is uncertain-non-EU firms will also respond)
EU manufacturers of components and tyres	Indirect	Potential: Reduce/eliminate part of non-compliant products with lower prices from EU market – level playing field Cost disadvantage for EU manufacturers if additional requirements (if introduced) are not evenly enforced to EU and non-EU manufacturers	Low	Long term	Low (response of non-EU firms and enforcement are uncertain)
EU manufacturers of components at Tier 2 and 3	Indirect	Introduction of full traceability capacity to provide a competitive advantage to suppliers of components (however, already demanded from main manufacturers)	Limited	Medium/Long term	Low

Table CP.2: competitiveness proofing results for option B3

Affected sectors	Direct/ Indirect	Impact expected/identified	Size of impact	Duration of impact	Risk/ uncertainty of assessment
<i>Impacts on costs of doing business</i>					
None identified					
<i>Impact on innovation</i>					
Manufacturers of vehicles and components		No impact expected Potential contribution from exchange of knowledge with authorities expected to be limited	Limited	Long term	Low
<i>Impact on international competitiveness</i>					
Manufacturers of vehicles	Direct	Eliminate/reduce competition from non-compliant products/manufacturers within the EU : marginal in the case of vehicles	Limited	Short/ Medium term	Low
Manufacturers of components/spare parts	Direct	Eliminate/reduce competition from non-compliant products/manufacturers for certain categories of components – increase market shares inside the EU	Small	Short/ Medium term	Medium (Depends on effectiveness of mechanisms and of national authorities)
Manufacturers of tyres	Direct	Eliminate/reduce competition from non-compliant products/manufacturers – increase market shares inside the EU	Small	Short/ Medium term	Medium (Depends on effectiveness of mechanisms and of national authorities)

Table CP.3: competitiveness proofing results for option C3

Affected sectors	Direct/ Indirect	Impact expected/identified	Size of impact	Duration of impact	Risk/ uncertainty of assessment
<i>Impacts on costs of doing business</i>					
Technical Services	Direct	Costs for restructuring of Technical Services to meet the independence criteria. Increase in operational costs for some – mainly small size – technical services Sizeable costs if strict physical separation required for independence criteria (highly unlikely scenario)	Moderate	Short/ medium term	Medium
Manufacturers of tyres	Direct	No costs under the dominant scenario. Costs for restructuring for in-house TS for tyres Sizeable costs in case that more demanding physical separation is required ( highly unlikely scenario ) Possible pass of costs to consumers through increased prices	Limited/Zero	Short/ medium term	Low/ Medium
Manufacturers of vehicles	Indirect	Increase of operational costs through the increase of fees to Technical Services. Limited impact on operational costs for original equipment manufacturers. More important in relative terms for SMEs but still limited	Limited/Zero	Short/ medium term	Medium
Manufacturers of components					
<i>Impact on innovation</i>					
Technical Services	Direct	Possible loss of transfer of experience between conformity assessment and product design departments in one and the same technical service	Limited/Zero	Medium/ Long term	Low
Manufacturers of tyres	Direct	Possible loss of transfer of experience between conformity assessment and product design departments. More significant if strict physical separation (highly unlikely scenario)	Limited/Zero	Medium/ Long term	Medium
<i>Impact on international competitiveness</i>					
Manufacturers of vehicles	Indirect	Possible reduction of competition from non-compliant products – level playing field (limited occurrence of non-compliance)	Limited	Medium term	Low
Manufacturers of components	Indirect	Possible reduction of competition from non-compliant products – ensure level playing field and possible market share gains	Moderate	Medium term	Medium (depends on effectiveness)

Affected sectors	Direct/ Indirect	Impact expected/identified	Size of impact	Duration of impact	Risk/ uncertainty of assessment
Manufacturers of tyres	Indirect	Possible reduction of competition from non-compliant products – level playing field – ensure level playing field and possible market share gains	Limited	Medium term	Medium (depends on effectiveness)
Technical Services	Direct	Strengthening of quality as a selling point for accessing non-EU market	Limited	Medium/ Long term	Low

Table CP.4: competitiveness proofing results for option D3

Affected sectors	Direct/ Indirect	Impact expected/identified	Size of impact	Duration of impact	Risk/ uncertainty of assessment
<i>Impacts on costs of doing business</i>					
Manufacturers of vehicles and components	Indirect	Avoidable costs from recalls or other actions in specific Member States	Limited	Long term (periodically)	Medium (uncertain reaction from the side of MS)
Manufacturers of tyres	Indirect	Avoidable costs from recalls or other actions in specific Member States	Limited	Long term (periodically)	Medium (uncertain reaction from the side of MS)
<i>Impact on innovation</i>					
All sectors	Indirect	Uncertainty in terms of action at national level may be considered to be not supportive for introducing innovative products	Limited (since most products sold across EU)	Long term	High (unclear nature of measures and reaction)
<i>Impact on international competitiveness</i>					
Manufacturers of vehicles and components	Indirect	Possible decision by some firms of not placing their products on the EU market due to uncertainty in terms of possible introduction of safeguard measures at national level	Limited	Long term	Medium (unclear nature of measures and the reaction of firms)

Table CP.5: competitiveness proofing results for option E3

Affected sectors	Direct/ Indirect	Impact expected/identified	Size of impact	Duration of impact	Risk/ uncertainty of assessment
<i>Impacts on costs of doing business</i>					
Manufacturers of vehicles (OEMs and sports cars), components (Tier 1) and tyres	Direct	Very limited/zero additional costs for introduction of additional quality management system (for the majority of firms in the sector already in place)	Limited/ Zero	Short term	Low
Manufacturers of trailers and semi-trailers, bodybuilders and special purpose	Direct	Additional costs for introduction/adoption of QA systems for some firms (around 50% or more do not follow CoP properly) Risk of additional operation costs from possible delays in CoP checking from authorities	Medium	Short term	Medium (uncertain share of firms that do not comply and uncertain effectiveness of enforcement)
<i>Impact on innovation</i>					
Manufacturers of vehicles and components (mainly small size)	Direct	Possible incentive for the adoption/improvement of production quality management system – firm level organisational innovation	Limited (most firms in the sector already have them in place)	Long term	High
<i>Impact on international competitiveness</i>					
Manufacturers of vehicles and components	Direct	Reduce/eliminate non-compliant products – increase relative competitive position	Limited/ Zero	Long term	Low
Manufacturers of components	Direct	Reduce/eliminate non-compliant products – increase relative competitive position Small market gains	Significant for certain segments (Low generally)	Long term	High (uncertainty of effectiveness)
Manufacturers of tyres	Direct	Reduce/eliminate non-compliant products – increase relative competitive position Possibly significant market gain	Significant	Long term	High (uncertainty of effectiveness and extent of non-compliant products)



## Annex 2: CASE STUDIES

### Case study 1:

The European Tyre and Rubber Manufacturers' Association (ETRMA) tested in 2011 tyres sold throughout the European Union for the use of oils with high content of Poly-Aromatic-Hydrocarbons (PAH). These high-PAH oils have been identified as carcinogenic and the EU REACH Regulation prohibits their use for all tyres produced and sold on the EU market after January 1st, 2010. The test revealed that 11% of all tested tyres were non-compliant.

The test program covered a variety of tyre types (passenger car, light truck, motorcycle and industrial tyres) produced in the main production countries, both within and outside the European Union. Markings on the tyres indicated that they were produced in 16 countries, including 9 EU countries and 7 non-EU countries and from a total of 92 different production plants in these countries. The 11% non-compliant tyres were all imported.

### Case study 2:

The European Association of Automotive Suppliers (CLEPA) carried out a survey on the compliance of replacement components for the lighting equipment of motor vehicles. These replacement light bulbs are subject to type-approval to ensure that they are providing the required level of safety and reliability. Their geometry and photometry must meet certain requirements in particular to ensure a low glare level (to avoid nuisance or even endangering other road users) and high beam level (to ensure sufficient illumination of the road in front of the vehicle to enable the driver to detect any obstacles and to avoid collision with these obstacles or other road users).

The results of this survey show that imported light bulbs failed to comply with the requirements. The associated safety problems with non-compliant light bulbs are increased risk of glare, insufficient illumination of the road, insufficient visibility and risk of explosion of the lamp.

Production location	Import to EU			EU	
	#1	#2	#3	#4	#5
Geometry	27 out of 30 FAILED	28 out of 29 FAILED	9 out of 10 FAILED		
Photometry	9 out of 30 FAILED	15 out of 29 FAILED			
<b>UN compliance</b>					

more than 50% of sample size was out of tolerance

up to 50% of sample size was out of tolerance

no failures or within tolerance

In order to manufacture high quality and compliant light sources, a number of key factors need to be taken into account which influence the quality (and cost) of the final product, such as materials, supplier quality-systems, machine selection, machine precision, online quality checks, offline quality checks and sorting. Depending on the light source type (i.e. some require higher precision than others), updating an aftermarket production line with the quality requirements of the original equipment manufacturer can cost between €150,000 to several €millions per production line (i.e. per product group). In addition to having the correct machine setup, it is important to continuously monitor the output and re-adjust where necessary, which is again a highly skilled task. Overall, it is estimated that all these quality measures can account for up to 50% of the total price. This is confirmed by the prices on the market, where aftermarket-quality lamps are sold for less than half of the price of quality lamps meeting the requirements. Even accounting for other overhead factors and perhaps varying profit margins, the industry considers that this situation is creating a price-for-production difference of greater than 30%. This suggests unfair competition in the aftermarket sales of automotive light sources, where compliant manufacturers are finding it increasingly hard to compete in the EU.

### **Annex 3:**

#### **ACRONYMS**

CARS2020	Action Plan for a strong, competitive and sustainable European car industry
CARS21	Competitive Automotive Regulatory framework for the 21st century
CLEPA	European Association of Automotive Suppliers
CLIMA	Directorate-General for Climate Action
CoP	Conformity of Production
CP	Competitiveness Proofing
ENTR	Directorate-General for Enterprise and Industry
ENV	Directorate-General for Environment
EPE	Ex-Post Evaluation
ETRMA	European Tyre and Rubber Manufacturers Association
EU	European Union
FC	Fitness Check
IA	Impact Assessment
IASG	Impact Assessment Steering Group
MAC	Mobile Air Conditioning
MOVE	Directorate-General for Mobility and Transport
MS	Member State
MVWG	Motor Vehicles Working Group
NLF	New Legislative Framework
ODETTE	Organisation for Data Exchange by Tele Transmission in Europe
PSMS	Product Safety and Market Surveillance
QA	Quality Assessment
QMS	Quality Management System
RAPEX	Rapid Alert System for Non-Food Consumer Products
REACH	Regulation on the Registration, Evaluation, Authorisation and Restriction of Chemicals
RFID	Radio Frequency Identification
RTD	Directorate-General for Research and Innovation
SANCO	Directorate-General for Health and Consumers
SG	Secretariat General
SME	Small and Medium-sized Enterprise
TAA	Type Approval Authority
TAAM	Type Approval Authorities Meeting
TAAEG	Type Approval Authorities Expert Group
TCMV	Technical Committee – Motor Vehicles
TFEU	Treaty on the Functioning of the European Union
TS	Technical Services
UNECE	United Nations Economic Committee for Europe
WVTA	Whole Vehicle Type Approval

## **Annex 4:**

### **GENERAL POLICY AND REGULATORY CONTEXT OF THE INITIATIVE:**

#### **4.1. General political context:**

In 2010 the European Commission identified the re-launch of the single market as one of the strategic initiatives for its work programme, following the call made by President Barroso in his Political Guidelines of September 2009<sup>43</sup> for a major analysis of the "missing links" in the internal market, and for a plan to bring forward a major package of measures to re-launch the single market in time for the 20th anniversary of the 1992 project.

At the request of President Barroso, Mr. Monti presented in May 2010 a report on a new strategy for the single market<sup>44</sup>, in which he pleads for reaping the full benefits of the single market for goods. To maintain a dynamic and expanding single market for goods, the Monti report considers it necessary that the goods package adopted in 2008 is fully implemented, in particular with regard to the mutual recognition principle and market surveillance, and that the application of the principles of the NLF should be extended to other areas of product legislation.

#### **4.2. General regulatory context:**

The NLF is designed to further facilitate harmonisation of EU legislation on the free movement of goods and includes two complementary instruments, Regulation 765/2008/EC on accreditation and market surveillance<sup>45</sup> and Decision 768/2008/EC establishing a common framework for the marketing of products<sup>46</sup>.

The NLF Regulation which lays down the main principles to be applied in the field of market surveillance and controls of products from third countries has become applicable on 1 January 2010.

The NLF Decision provides reference provisions which are to be commonly used in EU product legislation (e.g. definitions, obligations of economic operators, safeguard clause, etc.). These provisions aim at ensuring that internal market product legislation can be better implemented and enforced in practice. Defining clear obligations for economic operators in the supply chain is crucial to improve the functioning of the single market in harmonised product areas. The NLF Decision is designed as a toolbox containing the elements commonly used in technical harmonisation legislation in a standardised format. These elements should be used as consistently as possible in current and future internal market product legislation. Due to its "sui generis" nature the NLF Decision does not have legal effects for economic operators, individuals or Member States. To give practical effect to its provisions they need to be integrated into product specific legislation.

In 2013 the European Commission has proposed a new legislative package to improve consumer product safety and to strengthen market surveillance of products in the EU, including a proposal for a Regulation on Market Surveillance<sup>47</sup>, which aims, inter alia, at amending the NLF Regulation, to take account of the experience gained with the NLF.

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<sup>43</sup> [http://ec.europa.eu/commission\\_2010-2014/president/pdf/press\\_20090903\\_en.pdf](http://ec.europa.eu/commission_2010-2014/president/pdf/press_20090903_en.pdf)

<sup>44</sup> [http://ec.europa.eu/bepa/pdf/monti\\_report\\_final\\_10\\_05\\_2010\\_en.pdf](http://ec.europa.eu/bepa/pdf/monti_report_final_10_05_2010_en.pdf)

<sup>45</sup> <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:218:0030:0047:EN:PDF>

<sup>46</sup> <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:218:0082:0128:EN:PDF>

<sup>47</sup> [http://ec.europa.eu/consumers/safety/psmsp/docs/psmsp-surveillance\\_en.pdf](http://ec.europa.eu/consumers/safety/psmsp/docs/psmsp-surveillance_en.pdf)

The developments leading towards the adoption of the PSMS package by the Commission have been closely monitored with a view to ensure that if the PSMS package would be adopted by the Council and the EP, this would not entail the risk that the coherence in the approach towards market surveillance in the three main pillars of the type-approval framework for automotive products could not be ensured.

In order to avoid this risk, the Commission proposal for a Regulation on market surveillance of products included in the PSMS package provides explicitly in its recital (13) that *“some Union harmonisation legislation contains provisions on market surveillance and safeguard clauses. These may be based on the reference provisions on market surveillance and safeguard clauses contained in Decision No 768/2008/EC on a common framework for the marketing of products. This Regulation should contain all of the market surveillance provisions applicable to the products falling within its scope. This Regulation should therefore include the reference provisions on market surveillance and safeguard clauses contained in Decision No 768/2008/EC. Provisions in existing Union harmonisation legislation that relate to market surveillance and safeguard clauses, whether drafted before the adoption of Decision No 768/2008/EC or based on its reference provisions, should be removed from that harmonisation legislation unless there are specific sectoral reasons for retaining them.”*

As a result, Article 34 of the proposed Market Surveillance Regulation of the PSMS package does not include framework Directive 2007/46/EC in the list of legal acts to be amended through the adoption and entry into force of that Regulation. In addition, the same article 34 specifies that references to the provisions of Articles 15 to 29 of the NLF Regulation (EC) No 765/2008 shall be construed as references to this new Regulation. As the market surveillance provisions of the revised L- and T-cat Regulations are based on the NLF Regulation No 765/2008, and in view of the specific sectoral reasons to maintaining them, the same approach can be followed for proposing the introduction of market surveillance provisions as part of the review of Directive 2007/46/EC, without the risk of creating inconsistencies or overlaps with the PSMS package ( provided it will be adopted by the Council and the EP in line with the principles of the Commission proposal).

In view of the above and the uncertainty surrounding the adoption of the PSMS package by Council and European Parliament, the revision of the framework directive will use the relevant reference provisions of the NLF Decision as a basis. At the same time it is of utmost importance that for the introduction of market surveillance provisions in the type approval legislation for motor vehicles of categories M, N and O the same principles are applied as for the legislation already adopted for vehicles of category L and T. This to ensure the highest level of coherence and consistency across the respective pieces of internal market legislation for wheeled vehicles. Therefore, the starting point for this initiative are the reference provisions of the NLF Decision, where necessary adapted to take account of the specificities of the product sector concerned.

For addressing problem area A, the traceability requirements and responsibilities of the economic operators would be derived from the reference provisions of Chapter R2 of Annex I of NLF Decision No 768/2008/EC.

As for the regulatory option for addressing problem area B with regard to the responsibilities and co-operation of enforcement authorities, the proposals would be based on the principles of Articles 24 to 26 of NLF Regulation No 765/2008/EC, however with the necessary adaptations to take account of the pivotal role type-approval authorities have when the conformity of the product is put into question. These adaptations should be in line with the principles agreed by Council and European Parliament in the Regulations on the approval

and market surveillance of motorcycles (L category vehicles) and tractors (T-category vehicles). It should be noted that these principles are a combination of legal requirements which stipulate how authorities should exchange information and co-operate, complemented by supporting and co-ordination efforts provided by the Commission.

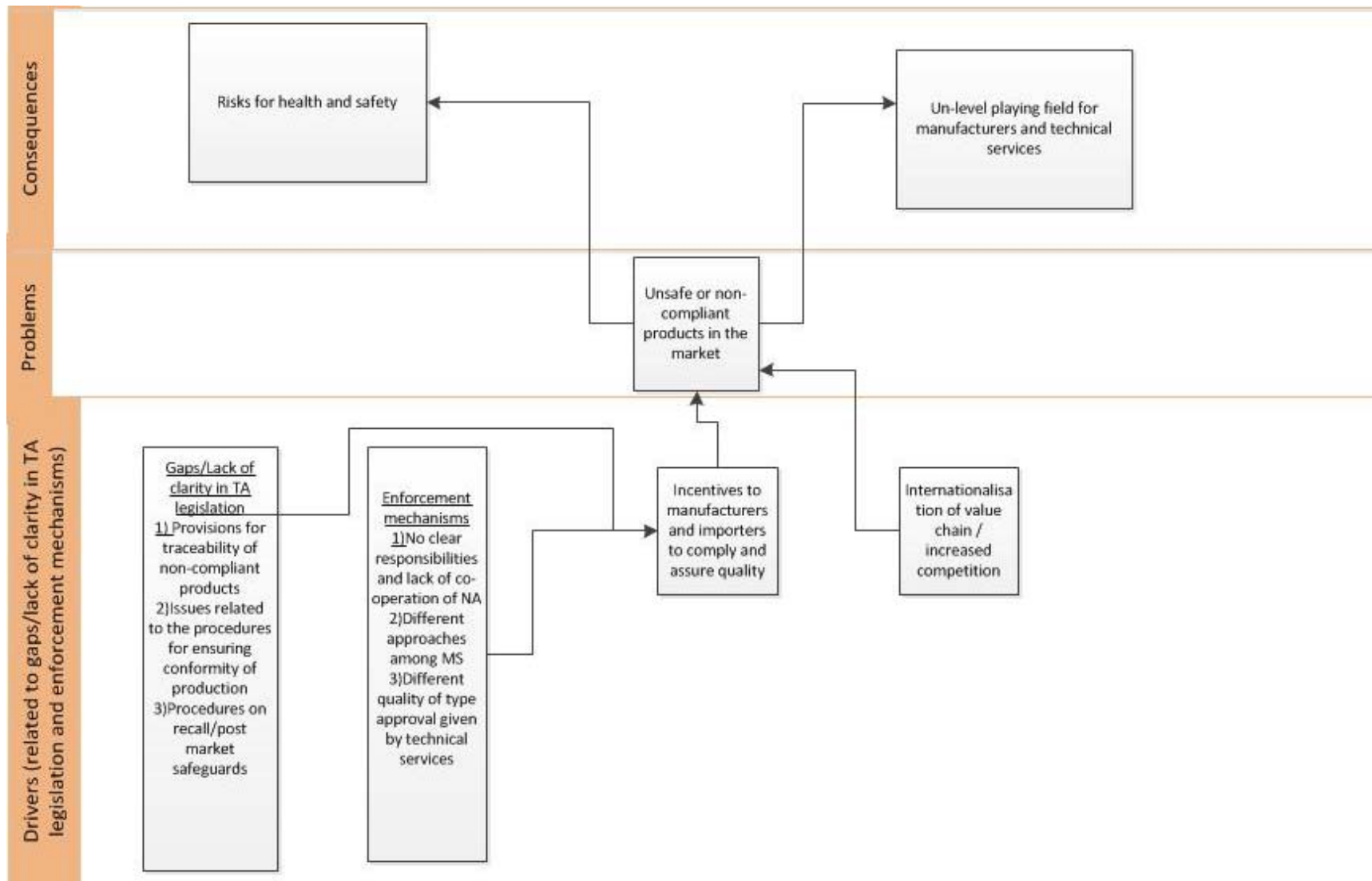
For Area C, concerning the quality and performance of technical services the regulatory option will be derived from an implementation of the reference provisions of Chapter R4 of Annex I of NLF Decision No 768/2008/EC.

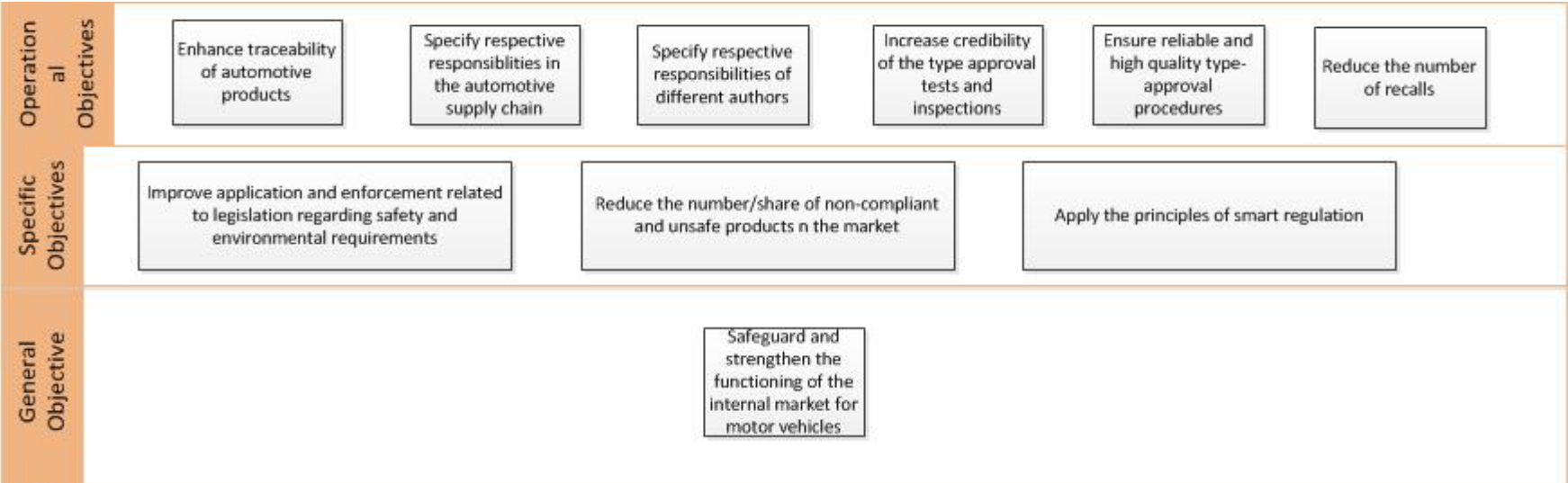
The regulatory option for the post-safeguard procedures (area D) will be derived from the reference provisions of Chapter R5 of Annex I of NLF Decision No 768/2008/EC.

Finally for the Conformity of Production procedures, the regulatory option will be derived from the implementation of some reinforcing elements provided for in the conformity assessment procedures specified in Annex II of NLF Decision No 768/2008/EC.

In conclusion, the regulatory options will not go beyond what is specified in the NLF Regulation and Decision, but will be adapted to the specificities of the sector (and in particular in view of the existence of an already well-established type-approval framework).

**Annex 5: Schematic representation of the problem and its drivers, the consequences and the policy objectives aimed at remedying the problem**





## **Annex 6:**

### **KEY CONSIDERATIONS CONCERNING THE POSSIBLE INTRODUCTION OF A VOLUNTARY AGREEMENT AMONGST ECONOMIC OPERATORS, ENFORCEMENT AUTHORITIES AND TECHNICAL SERVICES**

- Agreement:** for economic operators, the viability of this option would depend on industry associations being able to reach a mutually satisfactory agreement on how to improve the procedures for conformity of production. This is likely to pose considerable difficulties, considering that the approval and/or co-operation of over 100,000 economic operators in the automotive sector would be required.
- Coverage of the agreement:** the proportion of small firms that are not members of these associations is high so these firms would not necessarily be able to participate.
- Enforcement:** even if the approval of all participants is obtained, it is still uncertain whether the automotive sector will be able to adequately enforce any voluntary rules on all economic players on the market, bearing in mind that an increasing share of automotive products entering the EU market come from third countries. The global nature of the automotive industry, with some European manufacturers moving abroad to low-cost bases, means that it is also geographically difficult to monitor compliance with the voluntary agreement.
- Compliance:** non-complying manufacturers are likely to ignore any agreement and awareness campaigns will have little or no effect on those operators deliberately ignoring, or cutting corners on complying with, the rules. Therefore, this approach is unlikely to increase compliance rates. Where the industry is unable to enforce a voluntary agreement, it is possible that an even more uneven playing field could result in the market, between economic operators complying with the agreement and those flouting it. Also, because guidelines agreed within a voluntary agreement are by definition ‘non-legally binding’, there is no certainty that the responsibilities will indeed be taken up by all economic operators concerned.
- Uncertainty of outcome:** due to the voluntary nature of this option, the exact outcome (e.g. in terms of reductions in recalls and social impacts) cannot be quantified.
- Commitment:** While around half of technical services accept that current CoP procedures can be improved, it is still the case that a significant proportion did not believe that it was feasible and cost-effective for TS to develop and enforce a voluntary agreement. TS that are already performing highly would be more likely to agree to this approach, while those struggling to comply would oppose or ignore it. In such a situation, there is little certainty that any clarifications agreed as part of a voluntary agreement will be taken up by TS, particularly those the initiative would be targeted at.
- Enforcement amongst TS:** it has been questioned what would happen to TS who do not agree to sign up to the agreement, and who would supervise the implementation of the agreement. This highlights a need to have some form of sanctions and penalties, as well as an enforcement body or bodies, for the initiative to be effective, which would then bring it very close to a regulatory initiative.
- Concerns of national authorities:** only a third of responding national authorities believe that it is feasible and cost-effective for them to develop and enforce a voluntary agreement.



## Annex 7:

### OVERALL STRUCTURE OF THE EUROPEAN AUTOMOTIVE INDUSTRY SECTOR:

#### 1. Introduction - Key data on the automotive sector and its role in the EU economy

The automotive industry is one of Europe's key industrial sectors with extensive and complex value chain linkages with large number of sectors inside and outside the EU. The total automotive sector – manufacturers of vehicles, bodies, trailers and components - had a turnover of €740 billion in 2010 with a value added of around €140 billion, representing about 8% of European manufacturing value added. Motor vehicles manufacturers reached a total turnover of €526 billion and employed around 1 million people in 2009. The components sector occupied 1.1 million with a turnover of around €190 billion in 2010 and the bodies and trailers sub-sector occupied around 175,000 with a turnover of €25 billion. In addition, another 4.2 million indirect jobs are generated in sectors related to the use of motor vehicles (sale, distribution, maintenance and repair, retail sale of fuel), and 4.9 million jobs in the road transport sector. In total, in 2010 it accounted for 13 million jobs, 5.6% of the total EU employed population in 2010. Furthermore, according to data from 14 Member States for the period 2009-2010, vehicles generated around €114 billion in tax revenues for the whole of the EU (including VAT, sales and registration taxes, excise duties on fuels), and this represented around 4% of EU GDP<sup>48</sup>.

**Table 1.1.1**  
**Basic figures of the automotive sector in the EU**  
**(data for 2010 or most recent year available)**

Sector	Turnover (€billion)	Number of persons employed (millions)	Value added (€billions)
Motor vehicles	526	1.1	88
Bodies for motor vehicles, trailers and semi-trailers	25	0.17	6.6
Parts and components	188	1.0	46
<b>Total</b>	<b>740</b>	<b>2.2</b>	<b>141</b>

In 2010, a total of 17.1 million motor vehicles (passenger cars, trucks and buses) were produced in Europe, representing 22% of motor vehicles production worldwide<sup>49</sup>. In the passenger cars market segment European manufacturers represented 26% of the worldwide production in 2010, with a total of 15.3 million produced. In the commercial vehicles segment (vans, trucks, buses and coaches), EU is the third larger producer (1.8 million in 2010) behind US and China with a share of 9.3% of the total global production.

The financial crisis had a significant impact on the market for motor vehicles with a significant reduction in the level of cars registration and important production cutback measures adopted and capacity utilisation falling to 65% at the beginning of 2009. The total production of motor vehicles decreased by more than 30% of the pre-2007 levels in 2009, although it has picked up again since.

<sup>48</sup> ACEA (2011), ACEA tax guide 2011 highlights,  
[http://www.acea.be/images/uploads/files/20110330\\_TaxGuide2011Highlights\\_update.pdf](http://www.acea.be/images/uploads/files/20110330_TaxGuide2011Highlights_update.pdf)

<sup>49</sup> ACEA (2011), The European automobile industry pocket guide,  
[http://www.acea.be/images/uploads/files/20110921\\_Pocket\\_Guide\\_3rd\\_edition.pdf](http://www.acea.be/images/uploads/files/20110921_Pocket_Guide_3rd_edition.pdf)

**Table 1.1.2**  
**Evolution of production, registrations of motor vehicles in the EU27**  
**(number of units in millions)**

	2001 <sup>50</sup>	2005 <sup>51</sup>	2007	2008	2009	2010	2011
<b>Total Production</b>	17.2	20.8	19.7	18.4	15.3	17.1	17.7
Passenger cars	14.9	15.8	17.1	16.0	14.0	15.3	15.7
Commercial vehicles <sup>52</sup>	2.3	3.0	2.6	2.4	1.3	1.8	2.0
<b>Total registrations</b>	16.6	17.3	18.2	16.7	15.8	15.1	15.1
Passengers cars	14.4	14.9	15.6	14.3	14.2	13.4	13.1
Commercial vehicles	2.3	2.4	2.6	2.4	1.6	1.9	2.0

Source: ACEA and OICA statistics, various years

## 2. Overall structure of the automotive sector

The degree of integration of the sector into the European economy is indicated by the statistics on the structural characteristics of the sector:

There were 16 major car, truck and bus original equipment manufacturers (OEMs) in Europe operating in 2012 and 177 vehicle assembly and engine production plants, in 16 Member States<sup>53</sup>. The main car producers present in the European market are Volkswagen, PSA, Ford, Renault, GM, Fiat, Daimler and BMW, Nissan, Toyota, Honda, Hyundai. The six main producers for the European commercial vehicle market are DaimlerChrysler, MAN, Volvo, DAF, Scania, and Iveco.

Smaller size firms can be found in certain smaller or niche segments of the automotive market including luxury cars, motor homes, trailers and semi-trailers, etc.

The European automotive supply sector includes around 3,000 companies, of which 2,500 are small or medium-sized enterprises that together employ over 3 million people. Typically, around 75% of a vehicle's original equipment, components and technology are sourced from automotive suppliers.

In the tyres segment, 10 global tyre companies represent close to 66% of the total tyre production. 3 of these firms have their headquarters in the EU and they operate 82 manufacturing plants that produced 4.5 billion tyres in 2010, representing 26.5% of the world tyre production. According to data from the European Tyre and Rubber Manufacturers Association, from the total global sales of tyres of €150billion in 2010, 25% represented new motor vehicles tyres and around 75% replacement tyres.

<sup>50</sup> Data for EU15

<sup>51</sup> Data for EU25

<sup>52</sup> vans, trucks, buses, coaches

<sup>53</sup> ACEA (2013), Automobile assembly & engine production plants in Europe,

[http://www.acea.be/news\\_detail/automobile\\_assembly\\_engine\\_production\\_plants\\_in\\_europe/](http://www.acea.be/news_detail/automobile_assembly_engine_production_plants_in_europe/)

### 3. *Structure of the supply chain*

The automotive industry has a 'tiered' supply chain structure. Upstream from the small number of global car manufacturers (OEMs) are the so-called Tier 1 suppliers. They typically supply some of the largest components or sub-systems for the cars (e.g. powertrain systems, suspension assemblies, transmission and steering systems).

Tier 1 firms are still rather large size firms with multiple production plants and in some cases they are active not only in the manufacturing of motor vehicles, but also in other sectors (electronics, mechanical and electrical engineering, information technology, steel, chemicals, plastics, metals and rubber, etc). SMEs can be found in certain niche segments of the automotive market at this tier (e.g. body builders).

Tier 1 automotive suppliers are increasingly producing complex components or "modules" instead of mere spare parts, and are commonly developing components and share R&D costs jointly with motor vehicle manufacturers. In general there has been an increasing level of outsourced components and nowadays, according to CLEPA around 75% of every vehicle is made by automotive suppliers. Still, while there is an increasing trend for disintegration of the supply chain, in certain cases OEMs maintain control of the Tier 1 suppliers or develop their own proprietary hardware and software (e.g. powertrain management systems). Tier-1 suppliers typically have a plant close to the car manufacturers to support Just-In-Time type production processes although this is also determined by the balance between transport and production costs. In contrast, suppliers further upstream may be based anywhere in the world and the same generally applies to firms that offer specialised services like R&D and vehicle design.

Further upstream, Tier 2 suppliers typically provide components to the Tier 1 suppliers (e.g. pump units, electric motors or bearing assemblies) A significant proportion of SMEs are generally found in Tier 2. Tier 3 (4 etc.) suppliers provide the Tier 2 suppliers with anything from brackets and seals through to machined components etc. Raw material suppliers are also considered as Tier 3 suppliers although in many cases the supply directly to OEMs, representing an important share of the total spending of OEMs.

Downstream from the OEMs are the third party logistics providers that distribute finished vehicles to storage compounds and vehicle distribution hubs located around the world. These deliver to the franchised authorised dealers of cars.

### 4. *Aftermarket industry sector*

The motor vehicle sector is completed by the industry sector, known as the automotive aftermarket. According to data from the independent aftermarket association – FIGIEFA - this includes 765,000 companies with around 4 million employees and a total turnover in 2010 of around €890 million. It includes the authorised or independent manufacturers of spare parts and the relevant traders, the providers of maintenance and repair services– around one third linked to manufacturers and the remaining independent – and also vehicle repair companies, garage equipment manufacturers and engine remanufacturers and rebuilders. Table 2.1.3 summarises the data on the key segments of the motor vehicles aftermarket.

**Table 1.1.3**  
**Main data on the aftermarket sector (2010)**

	<b>Number of enterprises</b>	<b>Employees</b>	<b>Turnover ( million €)</b>
Manufacturers of spare parts and accessories for motor vehicles <sup>54</sup>	10,525	244,518	37,172
Garage equipment manufacturers	178	22,826	3,423
Trade of motor vehicle parts and accessories	103,468	659,769	141,097
Maintenance and repair of motor vehicles (garages)	407,389	1,448,204	122,055
Sale of motor vehicles (new + used)	195,125	1,518,702	559,957
Sale, maintenance and repair of <u>motorcycles</u> and related parts and accessories	36,166	100,633	21,803
Fleet garages/state owned garages	12,063	59,873	4,962
<b>Total</b>	<b>764,914</b>	<b>4,054,525</b>	<b>890,469</b>

Source: FIGIEFA

Adopting a broader classification, the components manufacturers association (CLEPA) refers to a total size of the automotive spare parts' aftermarket of around €100 million in sales. However, a more important aspect is that the aftermarket structure is split into two main distribution channels: Original Equipment Sales and the Independent Aftermarket. These are shared among Original Equipment Manufacturers, Parts Manufacturers and Independent Operators. Parts manufacturers often serve both parts of the market, producing components under the OEMs' brands but also selling in the independent market. Recent analysis of the automotive parts aftermarket suggests that original equipment sales and the authorised repair providers dominate (>75%) the market related to newer vehicles (<4 years). The 4-8 year segment is shared relatively equally while parts and services for older vehicles are dominated by the independent aftermarket (85%)<sup>55</sup>.

#### 5. *Characteristics of the firms in the different segments of the sector*

Data from Eurostat refer to individual enterprises rather than business groups of manufacturers. This is particularly important for the automotive sector, where large OEMs control a large number of enterprises operating in different countries. Still, the analysis of available data helps to illustrate the differing nature of the firms that dominate the various sub-sectors. Motor vehicle enterprises are predominantly large firms in comparison to body builders and trailer manufacturers that are dominated by small size enterprises with an average of 24 employees and €3.5 million average annual turnover. The parts and components sector – that includes all Tiers – has an average size of close to 100 employees. In the aftermarket segment the size of enterprises is much smaller - less than 10 employees per enterprise on average. Productivity and turnover levels are also markedly different in the motor vehicles sector in comparison to the other segments of the automotive market.

<sup>54</sup> Includes only manufacturers of spare parts

<sup>55</sup> Data provided by CLEPA

**Table 1.1.4****Eurostat data on average size of enterprises in the automotive sector (most recent data available)**

	<b>Manufacture of motor vehicles</b>	<b>Manufacturers of bodies, trailers and semitrailers</b>	<b>Manufacture of parts and accessories for motor vehicles</b>	<b>Maintenance &amp; repair of motor vehicles</b>	<b>Wholesale trade of motor vehicle parts &amp; accessories</b>
Number of individual enterprises	2,260	7,000	10,596	419,493	43,840
Turnover (million €)	526,000	24,934	188,849	119,183	90,107
Number of persons employed	1,016,438	170,000	1,036,259	1,523,600	376,600
Average firm size (no. of employees)	449.8	24.3	97.8	3.6	8.6
Average firm turnover (million €)	232.743	3.562	17.823	0.284	2.055
Apparent labour productivity (Gross value added/person employed - €)	90	41.4	45.5	25.8	38.2

Source: Own elaboration on the basis of Eurostat data

## 6. *R&D and innovation*

Investment in R&D and development of innovation represent a key aspect of the competitiveness of the EU automotive industry. The sector is Europe's largest private investor in research and development (around €20bn/annum) and this represents about 4% of the industry's turnover and close to 30% of EU industry's total R&D expenditure. In 2007 the EU automotive industry was the origin of more than 53% of the patents submitted to the European Patent Office, in comparison to the 21%, 15.6% and 0.4% of Japanese, US and Chinese manufacturers respectively<sup>56</sup>. About 50% of R&D investment comes from automotive suppliers, as do the majority of the patents. However, there is significant difference in the level of R&D investment among EU countries. German firms spend six times more on R&D than those from France and Italy put together and get more patents than all other EU countries put together.

Green technologies are a particular focus area of the European car industry. European automotive firms are leaders in transitional drive-train and fuel technologies and are investing in various new technologies, such as battery-powered hybrid vehicles, electric vehicles and hydrogen.

## 7. *National concentration of the sector inside the EU*

Examining the distribution of production of motor vehicles and components at the Member State level, Germany is by far the greatest producer (35% of total production in 2010) with 47 production plants. It is followed by Spain (14%) and France (13%). Other important producers include the UK (8% of production volume in 32 plants), the Czech Republic, Poland and Italy. Germany, France, the UK, Italy, Spain and Sweden also accounted for 93% of motor vehicle production in terms of value added with half of this gross value added coming from Germany. The same countries are also the main producers of parts and components (see table 2.1.5) although countries like Slovakia, Slovenia, Hungary and Romania are gradually assuming a higher share of total production, especially in relation to parts and components.

<sup>56</sup> ACEA (2010), European automobile industry report

**Table 1.1.5**  
**Volume of production of motor vehicles in the EU in 2010**  
**number of motor vehicles and number of production plants by Member State**

	Number of motor vehicles produced	Total Number of production plants
GERMANY	5,905,985	47
SPAIN	2,387,900	15
FRANCE	2,227,374	38
UNITED KINGDOM	1,393,463	32
CZECH REPUBLIC	1,076,385	11
POLAND	869,376	16
ITALY	857,359	20
SLOVAKIA	556,941	3
ROMANIA	350,912	1
BELGIUM	338,290	9
SWEDEN	217,084	15
SLOVENIA	205,711	1
HUNGARY	167,890	6
PORTUGAL	158,723	5
NETHERLANDS	115,487	9
AUSTRIA	104,814	6
FINLAND	6,500	2

Source: ACEA

Concerning the segment of trailers and semi-trailers, it is again more or less the same countries that dominate the market (Germany, France, UK, Italy, Spain and Netherlands), representing 80% of the annual turnover in the sector, 75% of employment and around 55% of the enterprises (see Table 2.1.6).

The industry has been plagued by worldwide overcapacity and a number of manufacturers have been forced to close plants in Europe. However, certain manufacturers have also opened new manufacturing sites in the EU – mainly in Central and Eastern Europe - taking advantage of the favourable cost situation in the newer Member States and their geographic proximity to Western European markets. Although still comparatively small, automotive production in the newer Member States increased by 25% in 2007 compared to the previous year and represented 15.2% of EU production (12.8% in 2006). This was driven by Foreign Direct Investment (FDI), which in 2006 represented around 22% of the total FDI stock of the manufacturing sectors for the countries of Central and Eastern Europe (CZ, HU, PL, SK, SL)<sup>57</sup>. While the majority of the investments originate from manufacturers of European origin, overseas investors have also been attracted with new plants in the Czech Republic (Hyundai), Hungary (Suzuki) and Poland (Toyota).

As component suppliers tend to follow vehicle manufacturers into a region this has also led to the development of industrial clusters, in particular in Southern Poland, the Eastern Czech Republic, Western Slovakia and the North of Hungary.

<sup>57</sup> E. Kawecka-Wyrzykowska, Evolving Pattern of Intra-industry Trade Specialization of the New Member States of the EU: The Case of the Automotive Industry, [http://ec.europa.eu/economy\\_finance/publications/publication\\_summary14307\\_en.htm](http://ec.europa.eu/economy_finance/publications/publication_summary14307_en.htm)

**Table 1.1.6**  
**Production of motor vehicles, bodies (coachwork) and trailers and components in the EU27 in 2010**  
**number of individual legal units (enterprises), production value and number of employees**  
**(main producing countries in bold)**

	Manufacture of motor vehicles			Manufacturers of bodies, trailers and semitrailers			Manufacture of parts and accessories for motor vehicles		
	Enterprises	Turnover (million)	persons employed	Enterprises	Turnover	persons employed	Enterprises	Turnover	persons employed
<b>EU27</b>	<b>2,260</b>	<b>526,000</b>	<b>1,016,438</b>	<b>7,680</b>	<b>25,300</b>	<b>161,192</b>	<b>10,596</b>	<b>188,848</b>	<b>1,036,259</b>
BE	38	10,722	18,955	<b>346</b>	<b>1,099.5</b>	<b>4,978</b>	156	5,041	11,032
BG	0	0	0	25	7.3	408	85	393.9	9,756
<b>CZ</b>	<b>120</b>	<b>12,431</b>	<b>33,291</b>	287	226.6	3,252	<b>984</b>	<b>15,027.7</b>	<b>103,822</b>
DK	17	79	336	77	236.0	1,290	75	639.7	2,773
<b>DE</b>	<b>284</b>	<b>252,205</b>	<b>464,357</b>	<b>1,318</b>	<b>7,869.4</b>	<b>40,148</b>	<b>1,323</b>	<b>65,798.8</b>	<b>244,990</b>
EE	4	:	:	24	:	:	21	99.8	2,316
IE	4	28	154	26	43.6	304	18	480.5	2,108
EL	40	63	1,130	150	119.1	1,236	158	97.4	1,804
<b>ES</b>	<b>168</b>	<b>34,476</b>	<b>63,377</b>	<b>851</b>	<b>1,416.5</b>	<b>10,796</b>	<b>1,017</b>	<b>15,217.6</b>	<b>66,736</b>
<b>FR</b>	<b>189</b>	<b>78,969</b>	<b>137,554</b>	<b>1,161</b>	<b>4,056.7</b>	<b>25,157</b>	<b>639</b>	<b>16,056.1</b>	<b>61,906</b>
<b>IT</b>	<b>105</b>	<b>31,680</b>	<b>68,424</b>	<b>618</b>	<b>2,286.6</b>	<b>15,530</b>	<b>1,531</b>	<b>15,190.1</b>	<b>91,778</b>
CY	0	0	0	25	8.3	97	59	5.9	117
LT	4	:	105	7	:	224	18	54.4	660
LT	5	5	86	13	90.5	506	13	12.0	703
LU	7	126	492	7	81.2	409	4	-	-
HU	51	6,644	11,080	99	228.0	2,371	335	6,859.0	51,702
<b>NL</b>	<b>126</b>	<b>3,568</b>	<b>9,183</b>	<b>474</b>	<b>1,420.1</b>	<b>7,846</b>	147	1,088.8	5,046
AT	26	7,727	13,444	199	587.3	3,570	81	3,512.0	11,972
<b>PL</b>	<b>107</b>	<b>12,137</b>	<b>32,096</b>	<b>299</b>	<b>639.3</b>	<b>9,369</b>	<b>980</b>	<b>11,743.7</b>	<b>107,251</b>
PT	26	2,199	5,410	199	195.3	2,818	304	3,562.3	21,499
RO	24	2,869	17,472	73	57.6	1,632	<b>332</b>	<b>4,840.5</b>	<b>97,487</b>
SL	14	1,300	3,009	35	249.4	1,495	92	1,034.3	8,516
SK	28	8,146	12,318	45	155.4	1,473	131	5,069.5	37,291
FI	26	527	2,081	150	455.4	3,107	94	205.7	1,381
<b>SE</b>	<b>180</b>	<b>17,424</b>	<b>44,926</b>	272	694.1	<b>4,042</b>	<b>615</b>	<b>3,828.8</b>	<b>17,488</b>
<b>UK</b>	<b>649</b>	<b>40,826</b>	<b>77,075</b>	<b>790</b>	<b>2,926.1</b>	<b>19,134</b>	<b>1,357</b>	<b>10,245.4</b>	<b>76,125</b>

Source: Eurostat Structural Business Statistics

## 8. *Trade and trade partners*

The automotive industry had a positive extra-EU trade balance of around €7 billion in 2010. The positive trade balance comes primarily from the passenger cars (€55 billion) and the heavy commercial vehicles segments (€2.9 billion). In the case of light commercial vehicles, the EU has a small trade deficit (€241 million in 2010), with most imports coming from Japan and the USA. The EU is also a net exporter of automotive parts and accessories, with a trade surplus of €17 billion in 2010. Germany is responsible for more than half (60%) of the total EU exports followed by the UK (13%).

The United States and China are the two main export markets representing, respectively, 26.6% and 11.5% of the total value of exports of the EU passenger car market. In terms of imports, in 2009, over three quarters of EU passenger cars came from Japan, Turkey, the USA and South Korea (ACEA).

Intra-EU trade in motor vehicles and parts has significantly increased since the introduction of whole vehicle type approval and the removal of technical requirements in 1992 and represents an important element in the overall level of intra-EU trade. The significant amount of FDI in Central and Eastern Europe – particularly since joining the EU – has also led to increased intra-industry trade in the automotive sector, that also suggests an increasing level of specialisation by the newer Member States and a gradual convergence of the structure of the automotive sector in the newer Member States with that of the older Member States.

## 9. *Developments in the automotive sector and challenges for the EU automotive industry*

The automotive manufacturing industry is facing a period of unprecedented change which has been accentuated by the financial crisis. The CARS 21 final report<sup>58</sup> points to a number of key challenges:

Growth of markets outside of Europe assuming increasing shares in the total global sales of motor vehicles. This has already led to an increasing number of new production facilities belonging to EU manufacturers being located in the emerging economies and this is followed by manufacturers of components. As a result there are significant changes in the structure of the automotive supply and value chain with significant logistical challenges for EU manufacturers.

There is increasing competition for the EU automotive industry on a worldwide scale, particularly from India and China that already have significant shares in their domestic markets and in other Asian markets. In these new markets low-costs cars are considered to have a significant growth potential. So far, there is only a limited presence of these manufacturers in EU markets – particularly in the passenger cars segment. However, EU companies are expected to be challenged more and more, both in the new markets and the home market.

In the commercial vehicles sector, and particularly heavy duty vehicles, emerging markets manufacturers represent more than 65% of total production and are achieving continuously increasing shares of the growing emerging markets<sup>59</sup>.

On the production side, a concerted effort has been made over the last 20 years to reduce the number of parts that manufacturers conceive, design, develop and manufacture. Instead they

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<sup>58</sup> CARS 21 High Level Group on the Competitiveness and Sustainable Growth of the Automotive Industry in the European Union, Final Report 2012

<sup>59</sup> Alix Partners, 2010, High Stakes 2010 Global Commercial Vehicle Outlook



have aimed to re-use the same parts, sub-systems and ultimately entire vehicle platforms. They use the same parts, sub-systems and entire vehicle platforms across different model ranges and a number of them have already moved further to the co-development and sharing of core production platforms<sup>60</sup>. Some manufacturers have also followed a strategy of ensuring that any given model is as close to being identical as possible in all world markets.

The introduction of more demanding long-term greenhouse gas targets as well as air quality objectives in the EU require further improvements to the internal combustion engine and the introduction of new and cleaner vehicle technologies, such as electric and hybrid propulsion systems. The use of financial incentives in a number of countries supporting the purchase of such vehicles reinforces this trends which also depends on technological developments and the price of fuels. There is however a high level of uncertainty as to how fast the new technologies will become dominant in the market. According to a number of market reports, the combustion engine is still expected to maintain its dominant share for some time to come, particularly in the fast growing emerging markets.

Acceleration of technical developments in a number of areas and an increasing integration of cars with ICT services via mobile systems that shift the market more towards the selling of mobility services than cars as such.

Significant shifts in consumers' preferences and behaviour with a high focus on issues of safety but also web connectivity. There are also new mobility patterns developing – such as the use of shared cars – that can challenge the market structure.

In view of some of the challenges identified, the CARS 21 Final Report concludes that reinforcing the competitiveness of the sector constitutes the only way to preserve and develop employment in the EU in the long term. The report refers to the need for adaptation of production capacities – including possibly the closure of a number of production plants, the development of new business models and production methods and the identifications of new sources of raw materials. It also refers to the need to develop new skill profiles and tackle the resulting changes in employment. Innovation is also identified as a key factor for maintaining the competitiveness of the automotive sector based on industry investment as well as public R&D support.

At the same time, better access to markets in third countries is considered to be key in maintaining the competitiveness of EU industry. The industry makes reference to a number of tariff and non-tariff barriers for access to some emerging markets (e.g. Korea, China, India). The acceptance of international regulations under the 1958 UNECE Agreement is considered to be the best way to remove non-tariff barriers to trade and has highlighted the need for bilateral regulatory cooperation with third countries to be strengthened, with a view to eliminating non-tariff barriers.

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<sup>60</sup> Evalueserve (2012), White Paper - Platform Strategy will Shape Future of OEMs - Flexibility to Drive Growth  
[http://sandhill.com/wp-content/files\\_mf/evalueservewhitepaperplatformstrategywillshapefutureofoems.pdf](http://sandhill.com/wp-content/files_mf/evalueservewhitepaperplatformstrategywillshapefutureofoems.pdf)

## **Annex 8:**

### **ATTEMPT TO QUANTIFY THE IMPACT OF THE ENVISAGED POLICY OPTIONS**

#### **1. Approach to quantification of impacts**

Quantifying the impacts of the proposed policy options poses a number of difficulties. There is a lack of quantitative data on the extent of problems with the implementation and enforcement of the legal framework for the free movement of motor vehicles.

There is general agreement amongst stakeholders on the relevance of the problems, but less agreement on their significance.

The analysis involved a number of different steps:

- determining the size of the market for products covered by the EU's technical harmonisation legislation for motor vehicles, their components and systems;
- establishing the proportion of automotive devices on the market that are either unsafe or non-compliant with the type-approval legislation;
- evaluating the likely contribution of each of the problem areas identified to the number of unsafe and non-compliant products on the market;
- assessing the extent to which the policy options to address the problem areas would reduce the number of unsafe and non-compliant products on the market; and
- assessing the proportion of vehicle recalls associated with unsafe and non-compliant products, the costs to different stakeholders associated with these recalls and the extent to which these costs would be reduced by the policy options.

The calculations of costs resulting from these steps are subject to considerable uncertainty, because of the number of assumptions that have had to be made and the limited data upon which they are based. Nevertheless, they provide an indication of the quantitative impacts of the policy options, and are provided here for information only.

#### **2. Determining the size of the market:**

See section 2.4 of the Impact Assessment report and Annex 7.

#### **3. Establishing the proportion of automotive products on the market that are either unsafe or non-compliant:**

The exact proportion of unsafe and non-compliant automotive products on the EU market is not known.

However, from the consultation of stakeholders in the context of the EPE study emerged that the majority of national authorities estimate that unsafe products account for more than 10% of automotive products on the market.

Based on this estimate, two scenarios are considered where unsafe automotive products account for between 5% (lower estimate) and 15% (higher estimate) of automotive products on the market. Applying these percentages to the relevant

turnover of the EU automotive sector (see § 2.4 of the Impact Assessment report) and depending on the assumptions made about the size of the market affected, the market share of unsafe automotive products represents a value of between €5 billion and €30 billion.

It should be noted that these monetised figures only represent the value of the market share taken by non-compliant and unsafe products and do not include the costs of the consequences the presence of these products on the market may generate in terms of loss of life, injuries, harm to the environment, etc. since these costs could not be quantified. As such the monetised figures above and below are only indicative for the degree of distortion of competition that is caused by these products.

Estimated value and market share of unsafe automotive products		
	Lower Estimate	Upper Estimate
Annual turnover affected *	€100 billion	€200 billion
% of annual turnover	5%	15%
Size of market	€5 billion	€30 billion
* The lower estimate of €100 billion assumes only aftermarket parts are affected while the upper estimate of €200 billion assumes all parts and accessories are affected		

The exact proportion of non-compliant automotive products on the EU market is also not known. Depending on the sector of the industry considered, stakeholders consulted in the context of the evaluation study provided estimates ranging between 10 to 15% for multi-brand independent replacement parts, rising up to 50% for specific automotive parts. In the tyre sector it is estimated that around 10 to 12% of the 300 million tyres sold annually are non-compliant with EU legislation. The Fitness Check study found that it is mainly the spare parts and tyre sectors where non-compliant products may arise and, these are usually produced by non-EU manufacturers that tend to use technical services' offices outside the EU. (see the two case studies in Annex 2).

National authorities consulted consider the percentage of non-compliant products to be less than 10%. In view of the above, and for the purpose of this attempt for a quantitative assessment, the same assumption has been made as for unsafe automotive products, by considering two scenarios where non-compliant automotive products are representing between 5% (lower estimate) and 15% (upper estimate) of the market. Depending on the scenarios considered this represents an estimated value of between with a value of between €2.5 billion and €30 billion.

Estimated value and market share of non-compliant automotive products			
	Lower Estimate	Central Estimate	Upper Estimate
Annual turnover affected *	€50 billion	€100 billion	€200 billion
% of annual turnover	5%	5%	15%
Size of market	€2.5 billion	€5 billion	€30 billion
* The lower estimate of €50 billion assumes only replacement parts are affected, the central estimate of €100 billion assumes all aftermarket parts are affected and the upper estimate of €200 billion assumes all parts and accessories are affected			

In view of the above estimates and considering that non-compliant products to some extent are also a subset of unsafe products, this impact assessment has been carried out based on the scenarios as reflected in the table below.

Estimated value and market share of unsafe and non-compliant automotive products		
	lower estimate	upper estimate
Annual turnover affected	€100 billion	€200 billion
% of annual turnover accounted for by non-compliant and unsafe products	5%	15%
Size of market accounted for by non-compliant and unsafe products	€5 billion	€30 billion
Size of market accounted for by non-compliant products		€5 billion

#### 4. Estimating the likely contribution of each of the identified problem areas to the number of unsafe and non-compliant products on the market:

The exact proportion of automotive recalls, non-compliant and unsafe products that could realistically be reduced by addressing the five identified problem drivers is difficult to ascertain.

An estimate of the likely effectiveness of the policy options has been made based on the judgement of stakeholders, by subdividing their verbal ranking into four categories:

- highly effective;
- effective;
- uncertain; and
- highly uncertain.

These verbal rankings have been transformed into a numerical ranking to estimate their likely impact on the percentage reduction in unsafe and non-compliant products that would result from the policy options.

Potential Effectiveness of Policy Option	% Reduction in unsafe and non-compliant products
Highly Effective	75%
Effective	50%
Uncertain	15%
Highly Uncertain	5%

These percentage are used in the estimates for the monetised value of the reduction in market share of unsafe and non-compliant products that could be generated by the respective policy options (see Section 6 of the Impact Assessment report).

**5. Assessing the proportion of vehicle recalls associated with unsafe and non-compliant products, the costs to different stakeholders associated with these recalls and the extent to which these costs would be reduced by the policy options:**

In a further attempt for quantification, an analysis of the underlying reasons for RAPEX recall notifications in the automotive sector and their relationship with the five identified problem drivers was made in the context of the IA study and resulted in the following findings (see table below).

Problem Driver	Likely Cause of Recall*	Ranking of contribution of problem driver based on views of stakeholders	% of RAPEX notifications in 2010 linked to cause of recall*	Estimated % reduction of recalls by addressing problem driver	
				Lower Range	Upper Range
A		Medium/High		7.5% <sup>2</sup>	10% <sup>2</sup>
B	Non-compliant products	High	3.40%	2.5% <sup>1</sup>	20% <sup>3</sup>
C	Defective products	Medium	52.70%	5% <sup>2</sup>	25% <sup>1</sup>
D		Medium			
E	Production/QA	Medium/High	14.40%	10% <sup>1</sup>	15% <sup>3</sup>
Total for Problem drivers A + B + C + D + E			70.50 %	25%	70%
<i>Other</i>	<i>Design Flaws</i>		17.10%		
<i>% of recalls which could not be reduced by addressing the problem drivers</i>					
	<i>Not known</i>		12.30%	75%**	30%**
<p><i>1 Based on a % reduction in notifications linked to cause of recall (Column 4)</i></p> <p><i>2 Based on stakeholder views on the ranking of the problem drivers (Column 3)</i></p> <p><i>3 Some defective products or those with design flaws will also be non-compliant (Problem Area B) and or result from weak links in CoP (Problem Area E)</i></p> <p><i>* Obtained from review of RAPEX entries for motor vehicles in 2010</i></p> <p><i>** Percentages are derived from adding the percentages figuring in the same column above and subtracting this sum from 100%.</i></p>					

Applying these estimated reduction percentages for recalls to the estimated value of the market share of non-compliant and unsafe products on the market, enables to make an indicative quantification of the potential contribution each of the problem drivers have on the share of non-compliant and unsafe products on the market (see table below).

Estimated contribution of the problem drivers on the value of non-compliant and unsafe products on the market			
Problem driver	Estimated % of recalls linked to the problem driver	Estimated corresponding market value of non-compliant and unsafe automotive products (€million)	
		Lower (non-compliant automotive products)	Upper (unsafe and non-compliant automotive products)
A*	7.5% - 10%	€375	€3,000
B	2.5% - 20%	€125	€6,000
C	5% - 25%	€250	€7,500
D	-	€0	€0
E	10% - 15%	€500	€4,500
No link with problem drivers**	75% - 30%		
Total		€1,250	€21,000

\*For instance, for problem driver A, multiplying 7.5% by €5 billion (lower estimate for value of non-compliant products) gives €375 million and multiplying 10% by €30 billion (upper estimate for value of non-compliant and unsafe products) gives €3 billion.

\*\* For a number of recalls it has not been possible to establish a link with one of the identified problem drivers.

These estimated percentages and values are subject to uncertainty, due to the fact that they are partly based on stakeholders' views and on an assessment of the likely causes of the recalls (as RAPEX does not provide such causal information).

This explains also that for a relative high % of the recalls no link with one of the five problem drivers can be established. In the lower estimate, this amounts to 75% of the recalls, whilst for the upper estimate this represents 30% of all recalls. These relatively high percentages can be explained to a very large extent by the fact that the vast majority of recalls in the automotive sector are of a voluntary nature and are undertaken by the manufacturer to address quality issues, which not necessarily have a bearing on safety or environmental performance and therefore on the compliance of the product with the relevant requirements of the type-approval framework. As the problem drivers have been identified to select the policy options that would enable to enhance the type-approval framework, it is to be expected that still a large percentage of the automotive recalls will not be avoided by addressing the problem drivers. It is therefore important to ensure that the procedures for recalls are maintained in the type-approval framework and further clarified and strengthened to ensure that the recall procedures provide a meaningful and complementary tool to protect citizens from the safety risks that automotive products may represent despite the fact that they comply with the type-approval requirements

Notwithstanding the above limitation, the estimates provide a basis for an indicative quantification of some of the potential benefits of intervention when assessing the policy options for each of the problem drivers (See Annex 9).

## Annex 9:

### DETAILED ASSESSMENT OF THE IMPACTS OF THE POLICY OPTIONS

#### 9.1 Problem driver A: insufficient traceability of automotive products and lack of clarity about responsibilities of economic operators in the supply chain

##### 9.1.1. Assessment of economic impacts

##### 9.1.1.1. Functioning of Internal Market:

Options A1 and A2 are not expected to have a significant impact towards improving the functioning of the internal market.

Setting out clear and common, and enforceable criteria for all economic operators involved in the supply chain, including the traceability of their products, as is envisaged under Option A3b, will help to ensure that economic operators will be treated equally and in a proportionate manner by the enforcement authorities in the Member States and will provide them also the legal basis for having their rights duly respected and defended. Option A3b is expected to generate a reduction in the number of non-compliant and unsafe automotive products on the market. Assuming that Option A3b is effective (i.e. 50% reduction)<sup>61</sup> in addressing the problems identified, it is estimated that the value of such products on the markets would be reduced by between €88 million and €1.5 billion. Even assuming an uncertain outcome (i.e. only 15% reduction), Option A3b would still reduce the value of non-compliant and unsafe automotive products on the market by between €56 million and €450 million<sup>62</sup>.

These figures do not relate to profits or a sectoral loss of market share, as it is anticipated that compliant automotive products would be sold to replace this volume. Effectively, manufacturers or importers of non-compliant and unsafe automotive products would either incur costs to comply<sup>63</sup> or would no longer place their products on the EU market.

<sup>61</sup> See Section 2.5 of the IA study

<sup>62</sup> These figures are based on estimates made with regard to the market share of non-compliant and unsafe automotive products, for which mainly the feedback from stakeholders has been used. Therefore the robustness of these estimates is very moderate, also in view of the approach followed to consider different degrees of effectiveness of the envisaged measures in the policy options (See also Annex 8)

<sup>63</sup> The FC Staff working document provides the following indicative costs for the approval of motor vehicles (they do not include the cost for the design and construction of the vehicle to comply with the safety and environmental requirements)

Type of vehicle	Costs(€)/TA of a single model	Main cost drivers		TA costs (€)/annual turnover	TA costs (€)/vehicle
		Human resources for preparation, information collection & monitoring	Testing fees		
Large volume passenger cars	700,000-1,000,000	30-50%	15-20%	<0.05%	5-15
Sport/luxury cars	250,000-350,000	30-50%	15-20%	0.1-0.2%	250-300
Trailers/Tankers	50,000-100,000	50-80%	15-20%	0.3-0.5%	50-250

### 9.1.1.2. Competitiveness:

Options A1 and A2 are unlikely to result in either cross-border investment flows (including relocation of economic activity) or impact on trade.

The baseline scenario under Option A1 may however weaken the competitive situation of the economic operators in the automotive industry who are respecting the rules, as they may lose out to careless or less scrupulous competitors placing non-compliant and unsafe products on the market in particular when their origin is difficult or impossible to trace.

Due to the uncertainty about the effectiveness of the voluntary initiatives envisaged by Option A2, it is unlikely that this option would succeed in remedying the competitive disadvantage for economic operators applying the rules.

By specifying clear and enforceable provisions on the traceability of products and the responsibilities of the economic operators in the supply chain - the problem of non-compliant and unsafe automotive products on the market, the global competitive position of complying companies is likely to be enhanced most under Option A3b.

Suppliers of non-compliant and unsafe automotive products from third countries would be discouraged - by the enforcement of these provisions - from bringing such products to the EU at a price that undercuts the price of safe and compliant products, improving the competitive position of EU-based manufacturers that incur costs in ensuring that their products are safe and compliant.

The specific impacts Option A3b may have on the competitiveness of enterprises in relation to their cost of doing business, capacity to innovate and their international competitiveness have been assessed in greater detail through a competitiveness proofing study. The results of this competitiveness proofing for option A3b are summarised in table CP.1 in Annex 1.

### 9.1.1.3. Operating Costs and Conduct of Business/Small and Medium Enterprises<sup>64</sup>:

Option A1 does not impose additional adjustment, compliance or transaction costs on businesses.

The main cost associated with Option A2 would be incurred by industry associations in a sector wide application of the traceability recommendations through voluntary agreements and awareness campaigns. Depending on the size and the scope of these voluntary initiatives the costs are estimated to vary between €15,000 and €360,000<sup>65</sup>.

The enhanced product traceability requirements and obligations for economic operators in the supply chain as envisaged under Option A3b may increase the operating costs for these enterprises. However, it is to be noted that these requirements should be based on what is considered good practice and which have been agreed in the context of the new legislative framework for the marketing of products. Therefore, these requirements should not create any substantial additional burdens for responsible economic operators, but rather have a deterrent impact on those economic operators who deliberately are trying to ignore or circumvent the rules and to cut corners on compliance costs.

For manufacturers with no representative currently established in the EU, additional costs may be incurred in employing such a representative, leasing of an office and

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<sup>64</sup> This analysis is limited to SMEs and does not include micro enterprises (see § 1.3 above)

<sup>65</sup> For the details of this estimate, see tables 3.10 and 3.11 of the IA study report



other related expenses. These costs have been estimated as ranging from some hundreds of Euros up to €300,000 per non-EU economic operator for appointing an EU representative<sup>66</sup>. It is however not possible to provide an accurate quantification of the total costs of this measure, as the total number of non-EU manufacturers and importers is not known for certain and neither the proportion of these manufacturers without any representative in the EU. Some indicative costs of having a representative based on hypothetical numbers of non-EU firms affected and likely actions taken have been estimated to range between €3 million and €90 million that would have to be borne by non-EU companies.

With regard to the product traceability requirements under Option A3c, the estimated potential costs to economic operators of having to put RFID tags on automotive parts has been discarded because of the excessive costs involved. Assuming that about 30000 different automotive products would be subject to such requirements, the estimated costs for this extreme approach would vary between €25 billion (low estimate) and €1.580 billion (high estimate).

The specific impact Option A3b has on enterprises with regard to their cost of doing business has been assessed in greater detail through a competitiveness proofing study, the results of which are reflected in the summary table CP.3 in Annex I.

From the competitiveness proofing study emerged that the requirements on the traceability of products and responsibilities of economic operators as envisaged under policy option A3b are already met by large manufacturers as part of their current practice. The same appears to apply, in general terms, to smaller manufacturers (e.g. body builders, trailers and semi-trailers, special purpose vehicles, sport vehicles) which also consider that the envisaged requirements can be met by current practice and with limited additional administrative work.

Distributors and importers of vehicles and components – authorised or independent – expect some administrative work to arise from the new obligations under policy option A3b – mainly in the form of IT and record management systems - but they do not consider that the impacts for firms are going to be substantial.

Also for SMEs the competitiveness proofing study concluded that the expected impacts under Option A3b would be relatively minor. Certain record management costs will arise for small firms, some of which do not already have systems in place, but, the overall associated costs are not perceived as disproportionate.

#### 9.1.1.4. Administrative burdens:

Options A1 and A2 do not place additional administrative obligations on economic operators and, as such, no additional administrative burden is incurred.

Option A3b is unlikely to place an administrative burden on businesses, except for some non-EU economic operators, who would have to assume certain responsibilities and incur the associated administrative costs to meet these responsibilities.

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<sup>66</sup> See UK DTI (2011): Impact Assessment - The potential cost and benefits to the United Kingdom of the measures outlined in the proposal for a Regulation of the European Parliament and of the Council on the approval and market surveillance of two or three wheel vehicles and quadricycles <http://assets.dft.gov.uk/consultations/dft-2011-26/dft-2011-26-ia.pdf>

#### 9.1.1.5. Public authorities:

Under options A1 and A2 there are unlikely to be any direct costs to the national authorities and their technical services from maintaining the status quo. Approval authorities may incur increased costs under Option A3b to ensure that economic operators are satisfying the requirements so that only approved and safe automotive products reach the market. The burden of additional work required by the approval authority depends on the increase in notifications from economic operators or other Member States compared with the current situation. Requirements for cooperation with market surveillance and/or approval authorities are also considered likely to result in an increase in cost associated with staff time for this activity. For this impact assessment it is estimated that this would result in costs of €40,000 to €300,000 per Member State, or a total cost of between €1.4 million to €10.1 million across the EU<sup>67</sup>.

Member States would also incur costs associated with amending their national legislation. Specific data on the costs of transposition of EU legislation by Member States are not readily available, as some Member States consider that these costs are difficult to quantify and would occur in the ordinary course of the business. In practice, the exact costs would depend on the specific changes introduced and regulatory model used for the review of the framework Directive. For instance, the envisaged transformation of the Directive into a Regulation directly applicable in the Member States could reduce the transposition costs considerably. For the purposes of this impact assessment, the transposition costs have been estimated around €500,000 and €1 million<sup>68</sup>.

#### 9.1.1.6. Innovation and Research:

There are no impacts on innovation and research under any of the options.

#### 9.1.1.7. Consumers and Households:

Problems associated with non-compliant and unsafe vehicles impact not only on the financial situation of consumers, but also on their health and safety. A key impact on consumers relates to the number of road accidents which result from unsafe automotive products. In practice, however, it is difficult to extrapolate the available data on recalls to develop robust quantitative EU-wide estimates on the impacts of recalls on accidents and safety. Nevertheless, it is clear that under Option A1, the problems associated with non-compliant and unsafe automotive products will continue into the future.

Under Option A2 consideration could be given to information campaigns by consumer organisations, as they may help in drawing the attention of citizens to the possible risks or shortcomings non-compliant automotive products on the market may entail. However the leverage such campaigns may have on economic operators to ensure conformity or improve the quality of their products is expected to be rather limited. Option A3b would improve the current situation, although the extent could not be quantified.

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<sup>67</sup> For the details of this calculation see pages 47 + 48 of the IA study report and the caveat mentioned in § 3.1.4..

<sup>68</sup> Estimates based on figures provided in UK DTI impact assessments in 2006 and 2011. See IA study report p.48

#### 9.1.1.8. Third Countries and International Relations:

All options should have no direct effect on EU trade policy and international relations.

The specific impacts Option A3b may have on the international competitiveness of enterprises have been analysed in greater detail through a competitiveness proofing study, and the results are reflected in the summary table CP.1 in Annex I.

#### 9.1.2. *Assessment of social impacts*

Option A1: The negative social impacts associated with the health risks and road accidents resulting from non-compliant and unsafe motor vehicles are likely to continue or even to increase in the future, in particular when no effective remedial actions can be taken against such products due to difficulties in tracing their origin and the economic operators responsible for their placing on the market.

Option A2 is expected to have beneficial social impacts through reducing the share of non-compliant and unsafe products on the market and as such contributing to reducing the number of road accidents and the harm to the environment caused by them, and the associated societal costs. However, this impact is expected to be small, because of the uncertainty about the effectiveness of implementing recommendations on a voluntary basis. Information campaigns by consumer organisations may have some societal impact by raising the awareness of consumers and preventing them from opting for cheaper, non-compliant products with associated road safety or environmental risks.

Option A3b is expected to result in a reduction of the share of non-compliant and unsafe products on the market and as such contribute to reducing the number of road accidents and the harm to the environment caused by them, and the associated costs for the society. Option A3b may also result in some minor impact on job creation, in particular when non-EU economic operators would be required to have an established authorised representative in the EU for the purpose of market surveillance.

#### 9.1.3. *Assessment of environmental impacts*

Similar to what has been stated above for the social impacts, the options that will result in the reduction of the number of non-compliant and unsafe products, will equally have beneficial environmental impacts to the extent that the risk of environmental harm caused by these products will be reduced accordingly. This is expected to be the case for Option A3b, and to a lesser extent also for Option A2, whilst the baseline scenario under Option A1 is expected to generate a negative environmental impact as the presence of non-compliant products on the market will continue to exist and may even increase in the absence of effective remedial measures against such products..

In addition, the envisaged product traceability requirements under option A3b may provide an indirect positive environmental impact by facilitating the implementation of Directive 2005/64/EC on the type-approval of motor vehicles with regard to their re-usability, recyclability and recoverability.

## 9.2 Problem area B: lack of clarity about the responsibilities & cooperation of enforcement authorities

### 9.2.1. Assessment of economic impacts

#### 9.2.1.1. Functioning of Internal Market:

Maintaining the current situation (Option B1) would lead to a continued existence of incoherent and/or inconsistent enforcement approaches across the Member States, in particular in taking coherent, effective and efficient actions against non-compliant and unsafe products encountered on their market and by imposing obligations on the involved economic operators to remedy the compliance or safety problems caused by their products. Assuming that the absence of clear roles and responsibilities for enforcement authorities and clear mechanisms and procedures in the legislation for information exchange and co-operation between these authorities, accounts for between 2.5% and 20% of the unsafe products on the EU market, Option B1 would result in non-compliant products - representing a value of around €125 million - and unsafe automotive products with a value of around €6 billion remaining present on the EU market annually<sup>69</sup>.

Under Option B2, the clarification of the roles and responsibilities of enforcement authorities is expected to benefit both enforcement authorities and economic operators in identifying the responsible party when non-compliant or unsafe products are identified on the market.

The scale of the benefits that would accrue for both authorities and economic operators from improved co-operation and information exchange would largely depend on the extent of improvement that could be achieved compared to the current situation. Adopting a conservative assumption that Option B2 could result in a 5% reduction of these products, the corresponding reduced value would be around €6.3 million per year for non-compliant products and around €300 million per year for unsafe products<sup>70</sup>.

Providing legal clarity in this field through a regulatory initiative (Option B3), based on the agreed principles and provisions of the new legislative framework on the marketing of products, would contribute to ensuring a better implementation and enforcement of the automotive technical harmonisation legislation and as such contribute to achieving the economic objective of a level playing field and a better functioning of the Internal Market.

The enhanced information exchange and co-operation amongst national authorities provided by regulatory Option B3 is expected to reduce unfair competition from economic operators bringing non-compliant and unsafe products on the EU market. For such economic operators Option B3 would entail that they would no longer be able to take advantage of some Member States not being up-to-date with the latest technical developments (e.g. new technologies posing unverified risks) and approaches in market surveillance (e.g. where they are hindered by a lack of resources). Reducing the market access possibilities for non-compliant and unsafe automotive products through an enhanced co-operation and information exchange between enforcement authorities would contribute to maintaining and enhancing a level playing field for all economic operators. The enhanced information exchange

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<sup>69</sup> See footnote 38

<sup>70</sup> See table in Section 4 of Annex 8: the estimated value resulting from problem area B for non-compliant and unsafe automotive products is €125 million, respectively €6 billion.

and co-operation between Member States' authorities is expected to contribute to a harmonised and correct application and enforcement of the type approval legislation, and, in so doing, enhance the functioning of the internal market.

Assuming that Option B3 would be effective in reducing by 50% the problems of non-compliant and unsafe products on the market due to lack of co-operation and information exchange between enforcement authorities, this would result in the value of non-compliant products on the market reduced around €63 million per year and that of unsafe products by around €3 billion per year. Even in the assumption the effectiveness of Option B4 is simply uncertain (i.e. a 15% reduction), it would still generate a reduction of non-compliant products on the market of around €19 million per year and a reduction in unsafe products of around €900 million per year<sup>71</sup>.

The co-regulatory initiatives under Option B4, consisting of guidance and training for enforcement authorities, when applied in conjunction with Option B3 and increasing the overall reduction effectiveness to 75%, could result in an additional reduction of non-compliant and unsafe products with an estimated value of respectively €4 million and €4.5 billion per year.

As standalone option, Option B4 is expected to be at most simply 'effective' (i.e. a 50% reduction), and to generate a reduction in non-compliant products on the market of around €63 million per year and a reduction in unsafe automotive products of around €3 billion per year.

#### 9.2.1.2. Competitiveness:

Option B1 is unlikely to result in cross-border investment flows (including relocation of economic activity) or impact on trade barriers. However, it is possible that the global competitive position of EU firms may be compromised, if due to a lack of co-operation and information exchange between enforcement authorities the perception is created that there is a possibility of bringing non-compliant and unsafe products on the EU market, without a high risk of being sanctioned for this.

Option B2 is unlikely to result in either cross-border investment flows (including relocation of economic activity) or impact on trade barriers. Economic operators may be discouraged from bringing non-compliant and unsafe automotive products on the EU market as a result of the voluntary co-operation and information exchange by enforcement authorities leading to a more uniform enforcement of the rules. This would have an indirect positive impact on the competitive position of manufacturers complying with the requirements.

Option B3 is unlikely to result in either cross-border investment flows (including relocation of economic activity) or impact on trade barriers. The obligatory co-operation and exchange of information between enforcement authorities is expected to increase the deterrence for economic operators to bring non-compliant and unsafe products on the market. The indirect impact will be that the competitive position of economic operators complying with the legislation is safeguarded or even enhanced as the unfair competition from non-complying operators will be limited.

The impact of Option B3 on the competitiveness of enterprises in the automotive sector has been further analysed by means of a competitiveness proofing study, the results of which are reflected below.

- Impact on Costs and price competitiveness

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<sup>71</sup> See footnote 38

Economic operators – manufacturers, distributors and importers – are not expected to be directly affected by the proposed measures. The provisions are mainly expected to have an impact on enforcement authorities. Any increase in operating costs will only arise for non-compliant manufacturers that will need to undertake measures to ensure compliance or, alternatively, exit the market.

– Impact on innovation and research

It has not been possible to identify any direct impact of the proposed policy options B3 + B4 on research and development activity and innovation in the automotive sector. The impact assessment study suggests that co-operation between national authorities may operate as a knowledge creation mechanism, leading to identification of new potential areas of research which can then be pursued by economic operators and other stakeholders at an individual basis or at an EU level (joint R&D projects). The industry representatives did not dismiss this possibility but did not consider it to be a significant factor in the development of innovation in the sector, at least in the short to medium term.

– Impact on international competitiveness

EU manufacturers expect that a better information exchange and co-operation amongst national authorities should lead to a reduction of unfair competition from non-compliant products entering the market, even though its effectiveness is not possible to assess. The impact assessment study estimated a potential reduction in the market value of non-compliant products spare parts and tyres – of €19-63 million (not more than 0.5% of the market) which would primarily benefit those EU manufacturers of spare parts that produce compliant products. Suppliers of non-compliant products – generally assumed to come from third countries - will be discouraged from bringing such components to the EU.

The industry representatives interviewed did not consider that there would be significant benefits in terms of access to non-EU markets. The Impact Assessment study suggested that, by addressing the presence of non-compliant products on the market and protecting the reputation of the EU for safe, compliant and high quality automotive vehicles, this will enhance the global competitive position of EU firms. EU manufacturers argue that, in general, the automotive sector has a strong reputation in that respect and that quality and safety are key selling points. The proposed measures, while positive, are not expected to make a significant additional contribution.

The results of the competitiveness proofing for Option B3 are summarised in table CP.2 in Annex 1.

#### 9.2.1.3. Operating Costs and Conduct of Business/Small and Medium Enterprises:

Options B1 and B2 are not expected to result in additional costs to economic operators.

Option B3 is not expected to result in any costs for complying economic operators. If effectively implemented, the regulatory provisions for the co-operation and information exchange between enforcement authorities will result in better enforcement and therefore less scrupulous or non-complying economic operators are likely to experience an increase in their operating costs (as they would now incur compliance costs). A greater uniformity in the implementation of the Directive throughout the EU is likely to level operating costs for economic operators regardless of the Member State they are trading in.

Option B4 is not expected to result in costs to economic operators, other than those accruing to less scrupulous manufacturers, as under Option B3

#### 9.2.1.4. Administrative burdens:

None of the four options considered would place additional administrative obligations on economic operators and, as such, no additional administrative burden is incurred.

#### 9.2.1.5. Public authorities:

Option B1: avoiding changes to the regulatory framework will mean that national authorities face no administrative costs associated with any intervention, including those associated with an amendment of the current national legislation.

There will be some costs to national authorities under Option B2. However, it is difficult to predict the change likely to occur from the baseline scenario to allow for a quantification of these costs. It is clear, however, that Member States would only accept to incur any costs under Option 2 (e.g. from participating in investigations initiated in other Member States) when they are sure that the benefits are likely to outweigh the costs incurred. Lower and higher costs estimates for developing a voluntary agreement between national authorities have been estimated to range from €32,000 to €250,000.

Option B3: Member States may incur some costs relating to ensuring that they meet the envisaged requirements for ensuring proper co-operation and information exchange between enforcement authorities. These additional costs are unlikely to be high, as a number of national authorities already use (and the vast majority are aware of) the various means of information exchange available. These costs could further be limited by streamlining these procedures and by limiting them to what is acknowledged as essential for the proper functioning of the internal market.

The main costs associated with Option B4 relate to the preparation of guidance and delivery of training. The exact cost of this option would depend on the number of issues to be clarified in the guidance and the scope of the training exercise, amongst other factors. Lower and higher estimates made for developing the guidance and training material and delivering the training range from €17,000 to €32,000.

In terms of benefits, it is significant that in responding to the Impact Assessment study questionnaire, over 60% of national authorities (11 of 18) believe that enforcement of the current legislation can be improved by providing targeted training for national authorities. Around 70% of responding national authorities (13 of 18) also indicated that enforcement of the current legislation can be improved by developing interpretation guidelines on the legal provisions of Directive 2007/46/EC. The main benefits from Option B4 are likely to accrue to national authorities with comparatively weaker structures and procedures, which would benefit from knowledge transfer leading to the improvement of their performance.

#### 9.2.1.6. Innovation and Research:

None of the four options considered would have a direct impact on innovation and research.

#### 9.2.1.7. Consumers and Households:

Under Option B1 consumers will continue to face costs associated with vehicle recalls. The exact proportion of these vehicle recalls that could realistically be attributed to the lack of clarity around the roles and responsibilities of enforcement authorities and weaknesses in information exchange and co-operation amongst them is uncertain. Assuming that the percentage of non-compliant and unsafe automotive products (2.5% - 20%) which may be attributable to Problem Area B<sup>72</sup> also applies to vehicle recalls, the total cost relating to the inconvenience of vehicle recalls for the consumers can be estimated to range between €10,000 and €10 million.

Under Option B2, it is assumed that there would be a reduction in the number of automotive parts resulting in recalls and thereon the number of accidents on the road. Consumers are also likely to benefit from a reduced risk of purchasing unsafe, non-compliant or low quality vehicles and/or automotive products on the internal market. Due to the voluntary nature of this option, the exact outcome (e.g. in terms of reductions in recalls) cannot be quantified.

Non-compliant automotive products account for less than 5% of RAPEX notifications<sup>73</sup> and it can be assumed that at least some of these would have been identified under Option B3. The exact proportion of these recalls which would be avoided under Option B3 is not known for certain, particularly for the recalls where the cause is 'not known'. However, assuming a 20 – 50% reduction in recalls due to defective products and design flaws, the time costs avoided can be estimated at around €40,000 to €7.2 million per year.

Option B4: It is possible that some consumers would face higher costs for replacement parts, as low-cost non-compliant and unsafe products would no longer be readily available on the EU market, although these costs will be counterbalanced by the health and safety benefits associated with ensuring that only compliant automotive products are available on the market. A higher proportion of consumers are expected to benefit from a reduced risk of purchasing unsafe, non-compliant or low quality vehicles and/or automotive products on the internal market. The costs associated with vehicle recalls are also likely to reduce.

#### 9.2.1.8. Third Countries and International Relations:

The proposed measures under Options B2, B3 and B4, while positive, are not expected to make a significant additional contribution to trade with third countries and enhancing international relations. From the competitiveness proofing study emerged that EU manufacturers expect that a better information exchange and co-operation amongst national authorities should lead to a reduction of unfair competition from non-compliant products entering the market, even though its effectiveness is not possible to assess. The Impact Assessment study estimated a potential reduction in the market value of non-compliant products spare parts and tyres – of €9-63 million (not more than 0.5% of the market) which would primarily benefit those EU manufacturers of spare parts that produce compliant products. Suppliers of non-compliant products – generally assumed to come from third countries - would be discouraged from bringing such components to the EU.

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<sup>72</sup> See table in Section 4 of Annex 8

<sup>73</sup> See table in § 3.1.8



The industry representatives consulted did not consider that there would be significant benefits in terms of access to non-EU markets, contrary to some conclusions in the impact assessment study.

### 9.2.2. *Assessment of social impacts*

Under Option B1, there would be no changes to the current enforcement situation and, as such, there is unlikely to be a reduction in the current frequency of health risks or road accidents as a result of non-compliant and unsafe automotive products. This would imply that the current risks to the health and safety of individuals from road accidents would continue to exist and even increase in the future. The inconvenience and worry for consumers associated with having a recalled vehicle and a reduction in customer satisfaction from such vehicles would also continue into the future.

Under Option B2, it is assumed that there would be a reduction in the number of automotive products representing a safety or environmental risk, and subsequently less recall actions would be needed. An associated reduction in the number of accidents on the road can be expected. Due to the voluntary nature of this option, the exact outcome (e.g. in terms of reduction of road accidents and associated social impacts) cannot be quantified.

Under Option B3, it is assumed that a regulatory initiative aimed at clarifying the roles and responsibilities of enforcement authorities and enhancing information exchange and co-operation amongst national authorities is likely to result in a decrease in the number of automotive parts representing a safety or environmental risk, and subsequently in less recalls needed. The societal impact resulting from an associated decrease of the number of accidents on the road is expected to be positive. While the exact impact of this reduction in road accidents cannot be known for certain, the reduction in current recall rates under Option B 3 is expected to result in between 30,000 and 450,000 car owners no longer being affected by the risks, worry and inconvenience of owning a recalled vehicle. At the same time, the remaining recalls should continue to eliminate the safety or environmental risks, and contribute to reduce the potential negative societal impacts associated with the presence on the roads of vehicles representing a safety or environmental risk.

The social impact of Option B4 would depend on the level of uptake and implementation of the interpretation guidance and the extent of the targeted training. Due to the nature of this option, the exact outcome (e.g. in terms of reductions in road accidents and environmental harm and their associated social impacts) cannot be quantified. However, targeted training of officials would contribute to ensuring better implementation and enforcement of the automotive type-approval legislation and thus contribute to achieving the social objective for a safer and healthier traffic environment for the citizens.

### 9.2.3. *Assessment of environmental impacts*

Similar to what has been stated above for the social impacts, the options that will result in the reduction of the number of non-compliant and unsafe products will equally have beneficial environmental impacts to the extent that the risk of environmental harm caused by these products will be reduced accordingly. This is expected to be the case for Options B3 and B4, and to a lesser extent also for Option B2.

### 9.3 Problem area C: varying degrees of stringency and quality applied by technical services

#### 9.3.1. Assessment of economic impacts

##### 9.3.1.1. Functioning of Internal Market:

Option C1: Assuming that shortcomings in the quality and performance of technical services would account for between 5% and 25% of unsafe automotive products on the EU market, Option C1 would result in non-compliant products representing a value of around €250 million and unsafe automotive products with a value of around €7.5 billion remaining placed on the EU market annually<sup>74</sup>.

Option C3: Reinforcing the legal requirements for the assessment and designation of technical services by Member States' authorities should contribute to limiting the negative impacts arising from an unfair competitive advantage gained by economic operators who utilise technical services applying less consistent quality criteria and more lenient approval procedures. It is also expected to contribute in reducing current distortions of competition between technical services from type-approval hopping and selection of technical services perceived as less stringent by less scrupulous economic operators.

Assuming that Option C3 is effective (i.e. 50% reduction) in addressing the problems relating to non-compliant and unsafe automotive products, it is estimated that this would generate a reduction in non-compliant products on the market by a value of around €125 million per year and a reduction in unsafe products of €3.8 billion per year.<sup>75</sup>

##### 9.3.1.2. Competitiveness:

Option C1 is unlikely to result in cross-border investment flows (including relocation of economic activity) or impact on trade barriers.

The impact of Option C3 on the competitiveness of enterprises has been assessed in detail in the competitiveness proofing study, the results of which are summarised in table CP.3 of Annex 1.

##### 9.3.1.3. Operating Costs and Conduct of Business/Small and Medium Enterprises:

Option C1 does not impose additional adjustment, compliance or transaction costs on businesses. An unfair competitive advantage would, however, continue to be gained by economic operators who utilise technical services applying less consistent criteria and more lenient approval procedures.

Manufacturers would also continue to incur costs relating to recalls, as there will be no change from the current situation. The exact proportion of recalls accounted for by inadequate performance of technical services is not known. However, for the purpose of this impact assessment an estimate has been made based on some judgement of the likely causes of automotive recall notifications in RAPEX. Although there are inherent uncertainties, if it is assumed (as set out in Section 2) that some 'defective products' are the result of weaknesses in the quality of the type-approval and conformity assessment tasks carried out by technical services, this would suggest that between 5 and 30 vehicle model recalls (i.e. between 5% and 20% of all vehicle recalls) would continue to arise under Option C1.

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<sup>74</sup> See table in Section 4 of Annex 8.

<sup>75</sup> See footnote 38

Option C3: Reinforcing the legal requirements for in-house technical services may result in costs for some manufacturers, for instance where technical services incur significant additional costs to meet the technical independence criteria.

Enhancing the legal clarity and strengthening the criteria for the designation and monitoring the performance of technical services aimed at ensuring a greater uniform level of stringency in type-approval testing is likely to result in a reduction in the number of non-compliant and unsafe automotive products present on the EU market. Defective products account for around 50% of RAPEX notifications on vehicle recalls and it can be assumed that at least some of these products may have been approved by less quality or less stringent technical services. Under Option C3, it is assumed that strengthening the requirements which technical services have to comply with is likely to result in more robust approval testing and inspections being applied by TS and, therefore, a reduction in non-compliant and unsafe products leading to recalls. Assuming a 20 - 50% reduction under Option C3 compared to Option C1 would mean that, across the EU, between 30,000 and 450,000 fewer vehicles per year would have to be recalled. Assuming an average cost of recall of €100 - €250, this would mean cost savings of between €3 million and €13 million.

Scrupulous economic operators would also benefit from a better level playing field, resulting from a regulatory approach which limits the unfair competitive advantage gained by economic operators who select technical services applying less consistent criteria and more lenient approval testing procedures.

#### 9.3.1.4. Administrative burdens:

Options C1 and C3 do not place additional administrative obligations on economic operators and, as such, no additional administrative burden is incurred.

#### 9.3.1.5. Public authorities:

Option C1: Avoiding changes to the regulatory framework will mean that national authorities face no administrative costs associated with any intervention, including those associated with an amendment of their current national legislation. The current level of costs associated with post-market controls and remedial actions against non-compliant and unsafe automotive products will continue into the future and may even increase.

There are no direct costs or benefits to technical services from maintaining the status quo. They could, however, lose the benefits accrued from a more harmonised application of the quality and performance criteria. The scale of these benefits cannot be quantified, but around 40% of the technical services responding to the Impact Assessment study questionnaire indicated that alignment of Directive 2007/46/EC with other related legislation in the automotive area which already include such quality and performance criteria is likely to result in benefits or cost savings for their organisation.

Option C3: There may be costs associated with improved monitoring of compliance with the quality and performance criteria. The extent of these costs is uncertain, as Member States have already to undertake this task under the current legislation. However, assuming a small increase in inspection frequency of one or two additional inspections per year per technical service, would give costs of around €4,800 per Member State.

Strengthening the technical and economic independence criteria for technical services is likely to result in costs for them. The extent of these costs would depend

on whether the technical independence would entail a physical, legal or personnel separation of the type-approval department from other departments within the same technical service.

Legal separation would entail solicitors' costs, accountant fees and other associated costs for registering a new company name – which can be estimated at around €20,000 per technical service as an average (though this will differ by size of company). The total one-off cost of legal separation is estimated to be around €2 million, assuming that around 100 technical services would be undertaking this action (this assumes that 40% of technical services would need to undertake this action). Physical separation would result in potentially significant additional costs for a separate building (purchase or rent), equipment, testing equipment, etc. At a conservative estimate, this could cost at least €300,000 per technical service. The total one-off cost of physical separation would be around €3 million, again assuming that around 100 technical services would be undertaking this action.

Personnel separation is to be considered the best practice under the current situation, as it focuses on the “personnel responsible for carrying out the conformity assessment” and involves a clear separation of staff. Personnel separation could imply some costs associated with an additional “checking step” to ensure there is no conflict of interest and the technical and economic independence of the technical service is maintained. Total one-off costs are estimated in the range of €150,000 - €1.5 million, associated with around 200 technical services undertaking this action (this assumes that 80% of technical services would need to undertake this action). Effectively, it is assumed that larger technical services already have robust systems in place and, as such, these costs are more valid for the smaller ones.

The benefits for technical services would accrue mainly to organisations that are operating effectively, by reducing the competition from, and loss of business to, less stringent ones. Responsible technical services would benefit, as it will become more difficult for those operating less stringently to maintain or gain market share by offering low quality services and applying the compliance requirements too leniently. More reliable performance in the type-approval testing procedures applied by technical services is also likely to lead to a subsequent reduction in non-compliant and unsafe automotive products encountered on the market.

Although these benefits have not been quantified, the findings from the impact assessment study questionnaire indicate that the majority of technical services believe that the quality would be improved by strengthening the criteria for their technical and financial independence (61% respectively 64% of respondents). Some technical services would also benefit from a consistent regulatory approach and set of requirements which apply to all the automotive products within their portfolio (at least, for motorcycles and motor vehicles). Around 80% of technical services responding to the Impact Assessment study questionnaire indicated that they are involved in the type-approval testing and verification of conformity of production for other products apart from motor vehicles and/or motor vehicle parts and, as such, the benefits of such regulatory consistency are likely to apply to the majority of technical services.

#### 9.3.1.6. Innovation and Research:

There are no additional impacts on innovation and research under Options C1 and C3. The competitiveness proofing study suggests that in certain cases the requirements for personnel separation could have a negative impact on the transfer of

knowledge among the departments working on type approval related testing and those providing product design and other consultancy services. Nonetheless, their clients, the manufacturers of vehicles and components, can still make use of the knowledge developed in one activity – type approval testing – for product development. In general, this loss of knowledge was not seen as a particular concern for any of the providers of technical services or the manufacturers.

#### 9.3.1.7. Consumers and Households:

Problems with non-compliant and unsafe automotive products impact not only on the financial situation of consumers, but may have also repercussions on their health and safety. A key impact on consumers relates to the number of road accidents which could result from non-compliant and unsafe automotive products. These costs will continue to be incurred under Option C1, and can be estimated by using the assumption that between 50% and 75% of the vehicles which are subject to a recall are relevant to Option C1, resulting in a time loss for consumers representing a value of between €1.4 million and €21 million.

Option C3: If the cost increases incurred by technical services due to enhanced legal requirements on their quality and performance are passed down to manufacturers and then consumers, it is possible that some consumers purchasing new vehicles may experience a minimal price increase. It is also possible that consumers would face higher costs for replacement parts, as low-cost, low-compliant products would no longer be readily available on the EU market. However, this will be counterbalanced by the health and safety benefits (as well as better quality) associated with fully compliant automotive products.

Under Option C3, consumers are likely to benefit from a reduced risk of purchasing unsafe, non-compliant or low quality vehicles and/or automotive products on the internal market. The costs associated with recalls of automotive products are also likely to reduce. While some of the costs to consumers can be quantified, others are more difficult to quantify. It is, however, possible to develop some indicative cost estimates for the time lost by consumers as a result of their vehicle being recalled. The exact proportion of these vehicle recalls which could be avoided under Option C3 is not known for certain. However, assuming a 20 – 50% reduction in vehicle recalls under Option C3, the time costs avoided can be estimated at between €540K and €3.5 million per year.

#### 9.3.1.8. Third Countries and International Relations:

The competitiveness proofing of Option C3 indicated that to the extent that this option will contribute to a more consistent implementation of the type approval legal framework and reduce the possibility of flexible interpretation and application of the requirements by technical services, manufacturers that are in compliance with the requirements will benefit from a greater level playing field. The impact assessment study estimated that, if effective, the proposed regulatory initiative would contribute to a reduction of non-compliant products of a value of around €125 million per year. A lower level of effectiveness could still generate a reduction of around €38 million per year. Consequently, such a reduction may contribute towards a more level playing field for EU manufacturers of components and parts against manufacturers that can benefit from the less strict approach followed by some of these technical services operating in non-EU countries.

The strengthening of the criteria for technical services may operate as a deterrent to the entry of new providers with offices operating outside the EU. However, there has been no evidence found of such an interest and, so far, the specific market remains dominated by EU firms, although these may also operate outside the EU.

### 9.3.2. *Assessment of social impacts*

Option C1 is unlikely to reduce the current frequency and seriousness of health risks or accidents due to defective automotive parts and the social impact of recalls. This would mean that the social well-being of consumers, workers and professionals would continue to be affected.

Under Option C3, it is assumed that strengthening the criteria which technical services have to comply with to be entitled to perform type-approval testing and verification of conformity of production is likely to result in a decrease in the number of non-compliant and unsafe automotive products, which on its turn would result in less recalls and accidents on the road. While the exact impact of Option C3 cannot be known for certain, it is estimated that a reduction in current recall rates under Option C3 would result in between 30,000 and 450,000 car owners no longer being affected by the risks, worry and inconvenience of having a vehicle subjected to a recall.

### 9.3.3. *Assessment of environmental impacts*

According to statistics, 21% of automotive recalls in the UK between 2005 and 2010 related to engine, exhaust or emission-related faults. This percentage is assumed to be valid for the EU, based on comparisons of 2010 data for UK recalls and RAPEX notifications. It is further assumed for quantification purposes that around half of these faults are likely to lead to undesirable environmental consequences, particularly emissions of hazardous substances above set emission limits. Faults such as those relating to engine cut-out, stalling and failure restart are unlikely to impact on the environment.

The exact proportion of vehicle recalls for engine, exhaust or emission-related faults accounted for by Option C1 is not known. However, assuming that 50% of the recalls which impact on the environment can be attributed to weaknesses in the quality of the type-approval and conformity assessment tasks carried out by technical services, this would suggest that between three and six vehicle model recalls affecting the environment would continue to arise under Option C1. This would represent around 180,000 to 270,000 vehicles per year having undesirable environmental impacts under Option C1.

Under Option C3 it is assumed that strengthening the requirements technical services will have to comply with is likely to result in more robust type approval testing and inspections being applied by technical services and, therefore, a reduction in products leading to recalls. Assuming a 50% reduction under Option C3 compared to Option C1 would mean that, across the EU, between 90,000 and 120,000 fewer vehicles per year would have undesirable environmental impacts under Option C3.

## 9.4 Problem area D: lack of clarity in safeguard measures & recall procedures

### 9.4.1. Assessment of economic impacts

#### 9.4.1.1. Functioning of Internal Market:

Option D3 is unlikely to result in a significant change from the current situation, particularly for Scenario 1, as Member States would continue to take measures to address risks identified on their national markets. However, streamlining the safeguard recall and procedures applied in the Member States will provide more legal certainty for the economic operators who may be affected by a safeguard measure or a recall action applied to the products for which they bear the responsibility for their compliance.

However, if there were a significant number of challenges to safeguard taken at national level under Scenario 2 (because as one national authority noted, “it is seldom the case that non-conformity is restricted to national territory”), it is possible that the national safeguard measures are disruptive for economic operators, in turn affecting the functioning of the internal market. During the determination of whether a national safeguard measure is justified, it is likely that the product in question will continue to be sold and/used in other Member States, increasing the costs to economic operators if a final decision is made that the measure is justified or in the opposite case limiting these costs and the possibility for economic operators to start lawsuits against national authorities where a national measure is found to be unjustified and having incurred unnecessary costs as a result.

Option D3 also contributes to the aim of improving information exchange and co-operation amongst national authorities. It could help other Member States, particularly those with fewer resources, in applying and enforcing the Directive and, in so doing, enhance the functioning of the internal market.

#### 9.4.1.2. Competitiveness:

Option D1 is unlikely to result in cross-border investment flows (including relocation of economic activity) or impact on trade barriers.

The competitiveness proofing of Option D3 has shown that the proposed two-step approach for safeguard measures will result in costs to manufacturers and other economic operators unless measures taken by a specific Member State at the national level are considered unjustified and end up being challenged by the Commission or other Member States. In that case, there are possible avoidable recall costs for economic operators if a national measure is eventually considered unjustified. It has been estimated that the avoidable costs for manufacturers as a result of a recall in one Member State that may be eventually reversed may be in the range of €400,000-1,000,000 in the case of large Member States and €40,000-€100,000 for smaller Member States. Such costs represent no more than 0.1% of the annual turnover for large OEMs. In the case of smaller firms – such as producers of sports cars or trailers - who sell a few thousand units per year, a recall of the equivalent of 10% of the annual production from a single Member State will still not represent more than 0.01% of annual turnover. In contrast, where national measures are not challenged there will be no additional costs arising.

The impact of Option D3 on the competitiveness of enterprises in terms of their cost of doing business, capacity to innovate and international competitiveness has been assessed in detail in the competitiveness proofing study, the results of which are summarised in table CP.4 of Annex 1.

#### 9.4.1.3. Operating Costs and Conduct of Business/Small and Medium Enterprises:

Option D1 does not impose additional adjustment, compliance or transaction costs on businesses.

Option D3: Under Scenario 1, no costs are anticipated for economic operators. However, under Scenario 2, if a national measure is considered unjustified and, as a result, the Member State concerned is required to withdraw the measure, this is likely to result in avoidable costs to economic operators. Even where a national measure is considered justified, the period of time during which the Commission is assessing this decision could give rise to opportunity costs, as companies delay taking action in the hope that the national measure will be withdrawn. See also section 6.4.4.2 above.

#### 9.4.1.4. Administrative burdens:

Options D1 and D3 do not place additional administrative obligations on economic operators and, as such, no additional administrative burden is incurred.

#### 9.4.1.5. Public authorities:

Option D1: Avoiding changes to the regulatory framework will mean that national authorities face no administrative costs associated with amending their current national legislation. The current level of costs associated with post-market safeguards and recalls will continue into the future, or even increase due to the absence of a more harmonised approach amongst Member States.

Option D3: the two-step approach for safeguard measures could result in a reduction in the administrative requirements for national authorities ‘to advise, notify and/or communicate to other Member States and the Commission of measures taken’. This view is confirmed by responses to the Impact Assessment study questionnaire, which show that over half of the national authorities support the simplified two-step approach for safeguard measures.

However national authorities have raised some concerns with regard to the 2-step approach. Firstly, taking into account the free movement of goods across the EU, it is not straight-forward to consider how a non-conformity could be restricted to a national territory. Consumers are likely and able to purchase automotive products from anywhere in the EU online and are also able to use vehicles purchased in one country in another country. Secondly, there may be the possibility for abuse of the national safeguard system by national authorities or economic operators, in an attempt to minimise the impact of a safeguard measure by not having it extended to other Member States.

#### 9.4.1.6. Innovation and Research:

No direct impacts on innovation and R&D activity arising from the assessed options D1 and D3 could be identified. Industry representatives did not consider that there is any evident linkage. What could be assumed is that any possible uncertainty arising from a situation where national safeguard measures are challenged could lead to an environment that is not conducive to innovation. It is not possible to make any assessment of the possible impact but it is difficult to envisage that the specific measure can have a significant impact on the innovation activity of manufacturers.



#### 9.4.1.7. Consumers and Households:

There are no additional costs or benefits to the consumer of retaining the status quo under Option D1.

Option D3: There is a risk that, while national safeguard procedures may benefit consumers in the Member State applying them, e.g. due to quicker processing times, any additional benefit is likely to be marginal; i.e. it assumes the current process is inefficient, which is not supported by the views from stakeholders. In addition, consumers in other Member States may be exposed to risks from vehicles and/or devices which have been addressed in one Member State, but not others.

#### 9.4.1.8. Third Countries and International Relations:

Option D1: No impacts identified

Option D3: See summary table IA.4 in Annex I.

#### 9.4.2. *Assessment of social impacts*

Under Option D1 there would be no changes to the current enforcement situation and, as such, no additional social impacts.

It is considered that no social impacts - other than those identified for consumers and households - can be directly attributable to Option D3, as there would be no change in the number of automotive parts resulting in recalls and/or the number of accidents on the road, as a result of the two-step approach for the safeguard measures.

#### 9.4.3. *Assessment of environmental impacts*

It is considered that environmental impacts cannot be directly attributable to Options D1 and D3. However, from the IA study emerged that 21% of recalls in the UK relate to engine, exhaust and emission faults, which – when extrapolated to the EU would result in up to 270.000 vehicles per year have an undesirable environmental impact. The enhanced provisions for the safeguard procedures as envisaged under option D3 are expected to have an indirect impact on recalls, resulting in a non-quantifiable reduction in the number of vehicles with an undesirable environmental impact.

### **9.5 Problem area E: weaknesses in the procedures for ensuring conformity of production**

#### 9.5.1. *Assessment of economic impacts*

##### 9.5.1.1. Functioning of Internal Market:

Option E1: Maintaining the current situation could lead to an uneven playing field for reputable economic operators competing with others that gain an unfair advantage from weaker CoP procedures and the varying degrees of stringency applied by enforcement authorities to verify the application of the CoP procedures. These less scrupulous economic operators are also likely to use less stringent TS, thereby creating unfair competition amongst TS. In this regard, the impacts of options A1 and C1 also apply to this option.

Assuming that weaknesses in CoP account for between 7.5% and 10% of unsafe automotive products on the EU market, Option E1 would result in non-compliant products with a value of around €500 million and unsafe automotive products with a value of around €4.5 billion remaining placed on the EU market annually.

Option E3: Optimising the ex-ante control efforts by authorities and economic operators in ensuring a proper and continued application of CoP during the entire manufacturing process is likely to result in fewer non-compliant and unsafe automotive products being placed on the market. Economic operators would benefit from reduced requirements to remedy ex-post problems associated with their vehicles and/or automotive products already been placed on the market. This Option would also improve the coherence and consistency with the type-approval legislation for motor cycles and tractors. It would eliminate the current distortions of competition due to the inconsistent criteria and procedures and thereby strengthen the harmonisation of the internal market. Consumers would also increasingly recognise that automotive products which are subject to a common and high level of type-approval and verification of conformity of production, will result in less recalls and therefore less nuisance and uncertainty for the consumer.

Assuming<sup>76</sup> that Option E3 is effective (i.e. 50% reduction) in addressing the problems relating to the presence of non-compliant and unsafe automotive products on the market, it is estimated that there would be a reduction in non-compliant products on the market representing a value of around €250 million per year and a reduction in unsafe automotive products with a value of €2.2 billion per year. Even assuming that the effectiveness of Option E3 is simply uncertain (i.e. a 15% reduction), it will still generate a reduction in non-compliant products of around €75 million per year and a reduction in unsafe automotive products of €675 billion per year.

#### 9.5.1.2. Competitiveness:

Options E1 and E3 are unlikely to result in cross-border investment flows (including relocation of economic activity) or impact on trade barriers.

#### 9.5.1.3. Operating Costs and Conduct of Business/Small and Medium Enterprises:

As the do nothing option, Option E1 does not impose additional adjustment, compliance or transaction costs on businesses, but does not generate benefits either.

Option E3 may result in some costs for economic operators. However, as this option aims at achieving consistency and coherence with the agreed principles and provisions of the NLF, it is expected that it will not result into any substantially different economic impacts than those already identified for the introduction of the NLF.

SMEs could be affected, if they do not have robust CoP systems in place. While the vast majority of vehicle manufacturers are likely to have robust QA structures in place already, this may not be the case for manufacturers of other vehicle parts. In such case, costs would be incurred to improve QA structures; however, the scale of these costs cannot be estimated because of the lack of information on the current QA systems in place.

The strengthening of ex-ante verification procedures should also result in a reduction in costs and administrative burdens linked to safeguard measures and recall procedures. However, there is currently no basis for determining the scale of such benefits.

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<sup>76</sup> See footnote 38

Having a more robust QA system in place could also benefit economic operators by increasing the efficiency of production and reducing waste by helping to ensure that fewer poor-quality products are produced.

The impact of Option E3 on the competitiveness of enterprises has been assessed in further detail in the CP study, the results of which are summarised in table CP.5 of Annex 1.

#### 9.5.1.4. Administrative burdens:

Option E1 does not place additional administrative obligations on economic operators and, as such, no additional administrative burden is incurred.

Option E3: There may be a possible additional administrative burden arising from strengthening the verification and approval procedure for quality management systems. For most companies with QMS, the requirements under Option E3 are unlikely to exceed current requirements for most companies. However, for those enterprises currently without QMS, the additional administrative requirements could be significant. No information is available on the number of companies without QMS at present to allow for a reasonable quantification of the impacts.

#### 9.5.1.5. Public authorities:

Option E1 does not generate any direct costs or benefits for public authorities.

Option E3: The strengthening of ex-ante verification procedures for CoP should also result in an overall benefit for authorities, as these will be more formalised and harmonised, compared to the current situation.

#### 9.5.1.6. Innovation and Research:

Options E1 and E3 do not generate any direct impacts on research and innovation.

#### 9.5.1.7. Consumers and Households:

Problems with vehicles due to weaknesses in the CoP procedures may impact not only on the financial situation of consumers, but also on their health and safety. A key impact on consumers relates to the number of road accidents which result from defective automotive devices due to poor CoP. These costs cannot be quantified but will continue to be incurred under Option E1.

However an indicative estimate can be made for the time lost by consumers in driving to dealerships to get their vehicles re-fitted as a result of a vehicle recall that can be attributed as a result of less robust production processes/QA. Assuming that between 50% and 80% of the vehicles which are subject to a recall and relevant to Option E1, the total cost relating to the consumer's inconvenience alone of driving to the dealership can be estimated at between €1.7 million and €21.6 million. This does not include other costs associated with the trip, e.g. fuel costs, risk of accident, environmental costs, etc.

There are no benefits to the consumer of retaining the status quo.

Option E3: If cost increases incurred by manufacturers for improving their CoP arrangements are passed down to consumers, this may result in a minimal price increase.

Under Option E3, consumers are likely to benefit from a reduced risk of purchasing unsafe, non-compliant or low quality vehicles and/or automotive devices on the internal market. The costs associated with vehicle recalls are also likely to reduce.

An indicative estimate of the time lost by consumers due to reduced recall actions is expected to represent a value of between €900,000 and €13 million per year<sup>77</sup>.

#### 9.5.1.8. Third Countries and International Relations:

None of both options have a direct impact on EU trade policy and international relations.

#### 9.5.2. *Assessment of social impacts*

Under Option E1, there would be no changes to the current enforcement situation and, as such, no additional social impacts.

Under Option E3, it is assumed that strengthening the CoP procedures is likely to result in a decrease in the number of automotive parts resulting in recalls. While the exact impact of Option E3 cannot be known for certain, even a 2% reduction in current recall rates is likely to result in 30,000 fewer individuals and/or families affected by the risks, worry and inconvenience of a owning a recalled vehicle.

#### 9.5.3. *Assessment of environmental impacts*

Option E1: 21% of recalls in the UK over the last five years relate to engine, exhaust or emission-related faults. This statistic is assumed to be the same for the EU, based on comparisons of 2010 data for UK recalls and RAPEX recall notifications. It is assumed for quantification purposes that some of these faults (around half ( $\pm 10\%$ )) are likely to lead to undesirable environmental consequences, particularly emissions of hazardous substances above emission limits. Faults such as those relating to engine cut-out, stalling and failure restart are unlikely to impact on the environment.

The exact proportion of these vehicle recalls accounted for by inadequate verification of CoP is not known. However, the review of the RAPEX notifications (see section 3.1.3 above) indicates that around 15% of vehicle recalls are caused by 'production/QA' faults. Assuming that 'production/QA faults' are the result of weaknesses in the CoP, this would suggest that between three and six vehicle model recalls affecting the environment would continue to arise under Option E1. This would represent around 60,000 to 90,000 vehicles per year having undesirable environmental impacts under Option E1.

For Option E3, it is assumed that strengthening the CoP requirements is likely to result in more robust checks being applied by TS and, therefore, a reduction in 'production/QA faults' leading to recalls. Assuming a 50% reduction (or effectiveness) under Option E3 compared to Option E1 would mean that, across the EU, around 30,000 fewer vehicles per year would have undesirable environmental impacts under Option E3.

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<sup>77</sup> For the details of the cost calculations, see IA study report, pages 129 + 130



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PART 2/2

**COMMISSION STAFF WORKING DOCUMENT**

**Additional analysis to complement the impact assessment supporting the**

*Review of the type-approval framework for motor vehicles*

**Proposal for a Regulation of the European Parliament and the Council on the approval  
and market surveillance of motor vehicles and their trailers**

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## **1. INTRODUCTION**

### **1.1. Context of the original impact assessment**

When the news about the VW non-compliance case came out in September 2015, the Commission was already in the process of reviewing Directive 2007/46/EC which governs the current system for the type-approval of motor vehicles. A legislative initiative to this end was first announced in the 2011 Commission Work Programme and had been the subject of a Fitness Check, including background studies and extensive stakeholder consultations.

The main objective of the Fitness Check was to assess the effectiveness of the changes that Directive 2007/46/EC introduced in the type-approval framework. Back then, the overall conclusion was that the framework, in principle, is fit for purpose. However, a number of changes should be implemented in order to address certain systemic weaknesses which would help reduce more effectively the presence of non-compliant and unsafe automotive products on the internal market. However, the evidence available back then pointed to a relatively limited problem that was most severe in the automotive aftermarket.

The recommendations of the Fitness Check were the following:

- (1) Market surveillance is an important missing element.
- (2) The recall system needs to be clarified, in particular to ensure that vehicles recalled in one Member State are also recalled elsewhere. At the same time, the current safeguard procedures should be strengthened.
- (3) The practical implementation of the type-approval requirements should be improved by harmonising and enhancing the approaches adopted by Member States' authorities and their technical services, and by clarifying their roles and responsibilities as well as their cooperation.

These recommendations and the feedback from the public and stakeholder consultations were used as an input for the original Impact Assessment and for formulating policy options to address the specific systemic weaknesses that were known at the time.

### **1.2. How did the context of the original impact assessment change?**

The content of the original Impact Assessment was then further influenced by the problems with the implementation of the Mobile Air Conditioning (MAC) Directive 2006/40/EC in 2013. Especially the conditions under which the type-approval of existing vehicle types can be extended and how conformity of production can be assured moved to the centre of attention. As a result, the original Impact Assessment also addressed the need to improve the existing framework regarding these two issues.

The news about VW's non-compliance problems in September 2015 then raised the urgent question whether the policy options for addressing the specific systemic weaknesses in the original Impact Assessment could still be considered sufficient in the light of the new situation. Especially the scale of the problem (8.5 million affected vehicles), the expected gravity of the negative impact on public health, consumers and also on the company itself, resulted in a fundamental reassessment of

the potential risks that the EU's type-approval and market surveillance framework needs to manage. Another factor that contributed to the reassessment of the policy options following the VW case was the uncoordinated response of the 28 national type-approval authorities who independently authorise vehicles for sale in the entire EU at present, and who are also in charge of initiating recalls. The current system clearly proved deficient in dealing with a large situation of non-compliance such as the one encountered with VW. It also became clear that the need for a swift and closely coordinated response at the EU level clashed with the absence of effective means for the European Commission to get directly involved under the current rules. Even for obtaining the relevant information, the European Commission depended on the willingness of national authorities and vehicle manufacturers to cooperate.

This reassessment reconfirmed the importance of the policy options identified and selected in the original Impact Assessment, but also showed the need to adjust them substantially to achieve a significantly higher efficiency in remedying the identified systemic weaknesses. In addition, the reassessment identified an additional systemic weakness that results from the decentralised system of enforcement and develops and assesses policy options to make it more robust and harmonised by means of introducing a supervisory and coordination system at EU level. The envisaged adjustments to the preferred combination of policy options in the original Impact Assessment and introduction of the EU supervisory system aim at improving the type-approval system to the extent necessary that the risk of major non-compliance problems reoccurring in the future is significantly reduced. A schematic overview of the policy measures envisaged under the original Impact Assessment and under the additional analysis is provided in the table below.

Table 1: **Envisaged measures in the original impact assessment**

<b>Envisaged measures</b>	
<b>Original impact assessment</b>	<ul style="list-style-type: none"> <li>• Better information exchange between type-approval authorities about type-approvals granted, amended, refused and withdrawn + to the Commission upon request.</li> <li>• Stricter performance and independence criteria for technical services (MS to restrict, suspend or withdraw the designation of their technical services if necessary)</li> <li>• Clarification of conformity of production requirements</li> <li>• Introduction of general market surveillance provisions to complement type-approval</li> <li>• Clarification of obligations of economic operators in the supply chain (for type-approval and market surveillance)</li> <li>• only one EU type approval may be issued for a type of vehicle</li> <li>• limitation of duration of validity of type-approvals + stricter criteria for granting extensions</li> <li>• EU level dispute settlement for non-compliance: if Member States do not agree on the compliance of a product, COM may shall be notified and take a EU wide decision</li> </ul>

Table 2: **Envisaged measures in the additional analysis**

<b>Envisaged measures</b>

<b>Additional analysis</b>	<ul style="list-style-type: none"> <li>• Need for greater EU oversight by means of: <ul style="list-style-type: none"> <li>○ Joint audits of technical services + limited duration of their designation + rights of MS and COM to object to designation</li> <li>○ Investigation power for the Commission to challenge competence of technical services.</li> <li>○ Peer-reviews of type-approval authorities</li> <li>○ Obligation for MS to review their market surveillance activities and to make them public</li> <li>○ Creation of an Enforcement Forum</li> </ul> </li> <li>• Greater financial independence of technical services (no longer directly paid by manufacturers)</li> </ul> <p><u>Most directly linked to the VW case:</u></p> <ul style="list-style-type: none"> <li>• Right for the Commission to carry out compliance verification testing and to take safeguard measures.</li> <li>• Clearer recall procedures, with greater involvement of Member States other than the one that that issued the type-approval</li> <li>• Stronger deterrents (including the right for the Commission to levy penalties)</li> </ul>
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### 1.3. What new evidence has become available regarding weaknesses in the EU type-approval system?

As explained above, the VW case highlighted and confirmed the systemic weaknesses of the type-approval framework that were already identified in the original Impact Assessment report. It also highlighted that the measures developed there to remedy these weaknesses would not be sufficiently effective in preventing similar major non-compliance problems from happening again in the future.

The purpose of this reassessment is therefore to establish whether there is a need for further adjustments to the already selected policy options in the original Impact Assessment report and to assess their impacts. It also aims at assessing the impact of the new policy option to introduce an EU supervisory mechanism. The objective is to identify adjustments to the selected policy options that have the potential to substantially improve their efficiency with regard to the potential contribution to:

- reducing the market share of non-compliant automotive products on the market, and
- avoiding the re-occurrence of major non-compliance problems in the future.

### 1.4. Scrutiny by the Commission Regulatory Scrutiny Board

The Regulatory Scrutiny Board of the European Commission assessed a draft version of the present additional analysis paper and issued its recommendations on 21 January 2016. In response to the recommendations, the new Sections 1.1 to 1.3 were added and additional elements were incorporated into the document.

## 2. CONTEXT

On 18 September 2015, the United States' Environmental Protection Agency (EPA) issued a notice of violation (NOV) of the Clean Air Act to Volkswagen. The NOV alleges that four-cylinder Volkswagen (VW) and Audi diesel cars from model years 2009-2015 include software that circumvents EPA emissions standards for certain air

pollutants, most notably for nitrogen oxides (NOx). According to EPA, the software used by Volkswagen is a “defeat device”.

In the light of the above, on 25 September 2015<sup>1</sup>, the Commission announced swift action on the EU internal market in three key areas:

- (1) Clarification of the situation caused by the VW case through investigations by Member States, clampdown on fraud and rigorous enforcement of the rules. The Commission invited all Member States to carry out the necessary investigations at national level and report back;<sup>2</sup>
- (2) Speeding-up the implementation of new test procedures that measure vehicle emissions in real driving conditions and provides better protection against deceitful applications;<sup>3</sup>
- (3) Revision of the approval and surveillance system so that major non-compliance issues can no longer pass unnoticed and unpunished. It should be noted that this revision is fully complementary to the proposal on real driving emissions testing.

The issue was discussed in the Competitiveness Council of 1 October 2015<sup>4</sup>, the Transport Council on 8 October 2015<sup>5</sup>, and the Environment Council on 26 October 2015. Commissioner Bieńkowska invited the Member States' authorities to share information and report on their national measures in relation to the VW case to the Commission.

It was also debated in the European Parliament Plenary in Strasbourg on 6 October 2015. The EP on 27 October 2015 adopted a Resolution on emission measurements in the automotive sector<sup>6</sup>, calling on the Commission to significantly strengthen the current EU type approval regime including more EU oversight, in particular with regard to the market surveillance, coordination and follow up regime for vehicles sold in the EU.

On 15 October 2015, in the framework of the meeting of the national type approval authorities and the Commission, the German type-approval authority (KBA *Kraftfahrtbundesamt*) informed that vehicles with diesel engines EA189 (Euro 3, 4 and 5) of the VW, Audi, Skoda and Seat brands were affected by non-conformities regarding "engine characters in conjunction with the particular emission stages". The KBA also informed that, from its "point of view the non-conformity is with regard to

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<sup>1</sup> [http://europa.eu/rapid/press-release\\_STATEMENT-15-5713\\_en.htm](http://europa.eu/rapid/press-release_STATEMENT-15-5713_en.htm)

<sup>2</sup> [http://europa.eu/rapid/press-release\\_MEX-15-5722\\_de.htm](http://europa.eu/rapid/press-release_MEX-15-5722_de.htm)

<sup>3</sup> Further details about these investigations are provided in Annex 1

<sup>4</sup> In response to the revelations that the established non-conformity was related to the use of a prohibited defeat device, the Commission took immediate action by accelerating the adoption of the legislation necessary to introduce real driving emissions (RDE) testing as part of the EU type-approval requirements. This RDE testing will substantially limit the risk of fraudulent manipulation of the emissions treatment system as it was done by Volkswagen, i.e. by only switching on the after treatment system to pass the laboratory emissions tests and switching it off when the vehicle is in normal operational driving conditions on the road.

<sup>5</sup> <http://www.consilium.europa.eu/en/meetings/compet/2015/10/01-02/>

<sup>6</sup> <http://www.consilium.europa.eu/en/meetings/tte/2015/10/08/>

<sup>6</sup> <http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//NONSGML+TA+P8-TA-2015-0375+0+DOC+PDF+V0//EN>

the use of a prohibited defeat device according to Article 5 of Regulation (EC No715/2007)" (Euro 5/6).<sup>7</sup>

Based on its findings, the KBA ordered a recall of the VW affected vehicles that it type-approved. The recall should start in 2016. The KBA also invited all other national type-approval authorities do the same for vehicles registered in its territories. Moreover, the KBA invited in particular those authorities that approved Audi, Skoda and Seat vehicles to "initiate the necessary measures" according to the safeguard clauses of the Framework Directive on type-approval (Art. 30 of Directive 2007/46). According to public information, recalls in all EU Member States would affect 8.5 million vehicles. Thus far, Volkswagen has set aside € 6.7 billion for the global recall of the affected diesel cars<sup>8</sup>.

On 17 December 2015, the European Parliament decided to appoint an inquiry committee<sup>9</sup> that will investigate whether EU rules for emissions and the type approval were appropriately transposed and enforced at the Member States' level and whether the Commission has taken proper and effective action to oversee enforcement.

Strong calls were also made by a broad range of stakeholders, including national parliaments, consumer and environmental protection organisations, for the Commission to reinforce the type-approval system, in particular by ensuring adequate supervisory mechanisms for a correct and harmonised application of the type-approval procedures.

The European consumer association BEUC (Bureau Européen des Unions de Consommateurs) called upon the European Commission to put in place a robust market surveillance programme to restore trust amongst consumers<sup>10</sup>.

The French Parliament (Assemblée Nationale) addressed to the Commission its opinion on the need for greater transparency and an equal level in the type-approval tests carried out by the Member States. It also calls upon the Commission and the Member States to study the possibility of setting up a European type-approval agency with a view to verify the respect of the type-approval requirements, in particular with regard to the emission limits.<sup>11</sup>

Transport & Environment, an environmental NGO campaigning for smarter, greener transport in Europe, also called upon the Commission to strengthen the European type-approval system to increase the consistency of its implementation and to strengthen the conformity checking at EU level.<sup>12</sup>

Four Members of European Parliament jointly wrote on 11 January 2016 to Commissioner Bieńkowska asking her to include in the proposals for the review of the type-approval framework a number of far reaching changes, including the

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<sup>7</sup> [http://www.kba.de/SharedDocs/Pressemitteilungen/DE/2015/pm\\_29\\_15\\_nachpruefungen\\_kba\\_pdf.pdf](http://www.kba.de/SharedDocs/Pressemitteilungen/DE/2015/pm_29_15_nachpruefungen_kba_pdf.pdf)

<sup>8</sup> [http://www.volkswagenag.com/content/vwcorp/info\\_center/en/news/2015/10/PM\\_Q3.html](http://www.volkswagenag.com/content/vwcorp/info_center/en/news/2015/10/PM_Q3.html)

<sup>9</sup> <http://www.europarl.europa.eu/sides/getDoc.do?type=TA&language=EN&reference=P8-TA-2015-0462>

<sup>10</sup> [http://www.beuc.eu/publications/beuc-x-2015-086\\_vw\\_emissions\\_test\\_scandal\\_demands\\_thorough\\_eu\\_response.pdf](http://www.beuc.eu/publications/beuc-x-2015-086_vw_emissions_test_scandal_demands_thorough_eu_response.pdf)

<sup>11</sup> <http://www.assemblee-nationale.fr/14/pdf/europe/c-rendus/c0235.pdf>

<sup>12</sup> <http://www.transportenvironment.org/press/eu-oversight-car-testing-will-stop-cheaters-and-deliver-emissions-reductions-road>

establishment of an effective EU oversight of the work of national type-approval authorities to ensure they all work to one consistent quality standard. (Annex 1)

These calls have prompted the Commission to reassess the policy options it had already identified, assessed and selected in preparation of a review of the type-approval framework in the context of a legislative initiative that has been on the Commission work programme since 2011. The purpose of this re-assessment is to consider whether and to what extent further adjustments to the selected policy options could further improve the implementation and enforcement of the type-approval requirements, and to identify and to assess further additional policy options in response to the calls made upon the Commission to ensure adequate supervisory mechanisms for a correct and harmonised application of the type-approval procedures.

### **3. SCOPE AND PURPOSE OF THIS DOCUMENT:**

This additional analysis paper responds to point (3) of the abovementioned Commission announcement of 25 September 2015. It should be noted, that the reinforcement of the type-approval system is a measure that would be taken in addition to the specific regulatory response the Commission has given to effectively prevent the future use of defeat devices (i.e. real driving emissions testing).

The focus of this paper is, therefore, on improving the implementation and enforcement of the framework for the type-approval of motor vehicles. This framework seeks to ensure that motor vehicles, their trailers, components, systems and separate technical units comply with all applicable safety and environmental performance requirements.

The efficiency of this framework depends on two aspects: the nature and timing of compliance verifications (ex-ante and ex-post), and the organisation and coordination of type-approval actions. Only the optimal combination of both aspects ensures compliance and guarantees that the safety and environmental performance requirements are respected. Therefore, all relevant elements of this framework are reassessed in this document.

The analysis paper looks into all elements, processes and procedures of the type-approval system that may be vulnerable to possible circumvention or insufficiently rigorous implementation and enforcement. It also tries to identify shortcomings in the post-market control provisions of the type-approval legislation which may lead to non-compliant products not being detected and remedied after they have been placed on the market.

The revelation of the VW non-compliance problems has been a trigger for the Commission to reassess whether the draft measures it was developing to improve the type-approval framework would be: 1. sufficient to ensure that the risk of major non-compliance problems occurring would be timely detected and prevented during the ex-ante controls of the type-approval procedure; 2. if for some reasons non-compliant products passed the type-approval controls unnoticed, would the selected options in the original Impact Assessment be sufficiently robust and effective in identifying non-compliant automotive products on the market; 3. and whether sufficiently strong remedial tools would be available to ensure that only compliant, safe and environmentally performing vehicles can circulate on the market.

The reassessment is also taking into account the calls that have been made upon the Commission by stakeholders (as referred to in section 2), in particular with regard to the request for introducing a greater EU oversight over the implementation and enforcement of the type-approval requirements.

The Commission was already in the process of reviewing the current system well before the news about the EPA Notice of Violation was released in September 2015. A legislative initiative to improve the system was first announced in the Commission Work Programme in 2011 and has been the subject of a fully-fledged fitness check, including background studies and extensive stakeholder consultation.

During this review process, problems emerged in 2013 in relation to the implementation of the Mobile Air Conditioning (MAC) Directive<sup>13</sup>, which underlined the need and urgency to strengthen the type-approval framework for motor vehicles and in particular to enhance the procedures for extending type-approvals, safeguard clauses and vehicle recalls. The Commission recently referred the case to the ECJ.

The policy options identified and assessed at that time and the selected combination of these options focused, among others, on the following aspects:

- Introduction of market surveillance provisions (ex-post compliance verification controls) to complement the type-approval requirements (ex-ante compliance verification);
- Clarification of the recall and safeguard procedures, as well as the conditions for granting extensions to approvals for existing types of vehicle;
- Improving the enforcement of the type-approval framework by harmonising and enhancing the type-approval and conformity of production procedures applied by Member State authorities and technical services;
- Clarification of the roles and responsibilities of economic operators in the supply chain, and of the information exchange and co-operation between authorities and parties involved in the enforcement of the rules; and
- Enhancing the independence and performance of technical services.

These issues were addressed in the policy options identified, assessed and selected in the Impact Assessment report (IA report), which this document accompanies. The Impact Assessment Board scrutinised the IA report and provided a positive opinion on 28 March 2014. The benefits of the measures identified in the report were estimated to be in the order of € 656 million per year. This figure corresponds to the expected reduction of the market share of non-compliant automotive products in terms of their sales value (reduction by 15% per year). Taking into account the associated costs of € 130 million per year, the selected combination of policy options was considered as a good and cost-efficient response to the problems.

The purpose of this document is to complement the above mentioned IA report to consider, in the light of the established VW non-compliance problem, the further improvement of the type-approval system. It also attempts to quantify the possible additional costs and benefits of such adjustments.

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<sup>13</sup> [http://europa.eu/rapid/press-release\\_IP-15-6290\\_en.htm](http://europa.eu/rapid/press-release_IP-15-6290_en.htm)

All relevant information available at the time of writing is taken into account in the analysis. However, this information is predominantly of qualitative nature and only allows for a limited quantitative assessment, based on an extrapolation of the assumptions that have been made for the original IA report. The additional benefits of the adjusted policy options are, therefore, mostly assessed by applying a certain percentage increase to the effectiveness values used in the IA report. These values have been chosen in the IA report on the basis of outcome of the stakeholder consultation undertaken for that purpose.

The assumption applied in the original IA report was that the effectiveness of the initial policy options would be 50% in terms of reducing the market share of unsafe and non-compliant automotive products. For the purpose of the attempt to quantify the benefits of the envisaged adjustments to these initial policy options, the assumption applied is that the adjustment would increase this effectiveness from 50 to 75%, however limited only to the reduction of the market share of **non-compliant** automotive products. As the aim of the adjustments is to reduce the risk of non-compliance not being timely detected, prevented or remedied, the impact of possibly reducing also the market share of unsafe automotive products has not been assessed, as there is no evidence nor even indications that these adjustments would have that effect. Although this is relatively simplistic approach, it is the best available method under the given circumstances and deemed to be in line with the principle of proportionate analysis.

#### 4. PROBLEM DESCRIPTION

While it is too early to assess the full impact of the VW case, due to the large scale of the breach of the EU type-approval legislation, the consequences of the substantial exceedance of exhaust emissions limits for the environment are obvious. Although it is difficult at this stage to precisely quantify the environmental damage caused by the exceedance of the exhaust emission limits, a conservative attempt for a preliminary estimate has been made. For the purpose of roughly estimating the order of magnitude of the environmental costs, the calculation methods used by the United States Environmental Protection Agency (US EPA) to establish their vehicle engine penalty policy<sup>14</sup> has been used as a yardstick. For violations of the defeat device prohibition, the EPA applies a maximum penalty of \$3,750 per device. Applying this figure to the 8.5 million vehicles affected in the EU would represent at least<sup>15</sup> a monetised environmental harm of about €30 billion.

A detailed quantification of the impact on public health and the associated social costs in the EU is not yet possible. However, a recent study by the Massachusetts Institute of Technology<sup>16</sup> assessed the impact of the Volkswagen emissions control defeat devices on US public health. This study concludes that integrated over the sales period (2008–2015) the excess emissions are estimated to cause 59 premature

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<sup>14</sup> [http://www.epa.gov/sites/production/files/documents/vehicleengine-penalty-policy\\_0.pdf](http://www.epa.gov/sites/production/files/documents/vehicleengine-penalty-policy_0.pdf)

<sup>15</sup> It should be noted that the EPA penalties start from the lower value of \$3,750 per defeat device used, but that the overall fine can go as high as \$37,500 per vehicle not complying with the exhaust emission requirements. In view of the uncertainties about the magnitude of the emissions exceedance (depending on the sources, they are estimated to be between 4 to 20 times higher than the permissible limits) no attempt can be made to apply the EPA calculation methods to estimate the possible environmental cost per car for exceedance of the emission limits.

<sup>16</sup> <http://dspace.mit.edu/handle/1721.1/99727>



deaths in the US. When monetising premature mortality using EPA recommended data, this would represent a social cost of \$450million over the sales period. It would not be scientifically sound to extrapolate findings from the US study to the EU. However, when taking into account that the affected fleet in the US represents about half a million vehicles and the one in the EU<sup>17</sup> around 8.5 million, the US findings certainly point to potentially very severe public health impacts in the EU.

Even in the absence of more precise estimates, the likely magnitude of the environmental and health impact makes it imperative to address the situation as a matter of urgency to avoid reoccurrence of such large scale non-compliance problems and their negative impacts. In addition, the public and political trust in the credibility and robustness of the regulatory type-approval system has been damaged by the fact that it failed to prevent and detect major non-compliance problems. Together with its limitations in ensuring effective, timely and EU wide remedial action, this has also seriously damaged consumer confidence.

It is therefore important to restore this trust and confidence of EU citizens and enterprises by means of actions geared towards establishing a stringent and well-functioning type-approval system. That is why the additional measures assessed in this document aim at addressing the overall robustness of the type-approval system in view of prevention and early detection of major cases of non-compliance. On this basis, adjustments to the policy options assessed in the IA report, but also going beyond these options are being considered to mitigate the identified weaknesses in enforcing and implementing the type-approval requirements.

Already at this stage, it is possible to identify the main elements of the type-approval system that may be particularly vulnerable and constitute the weakest link in the chain for ensuring a harmonised implementation and enforcement of the type-approval requirements.

The core element of the type-approval system is the **mutual trust between Member States with regard to the stringency applied in enforcing the type-approval requirements**, in particular for the tests and inspections that need to be carried out before issuing type-approvals. This decentralised system entails the risk that the weakest links in the chain (i.e. the Member States with the least stringent approach towards enforcing type-approval) could be targeted by applicants who want to cut corners. The policy options identified, assessed and selected in the IA report already included a number of ideas to limit this risk.

The potential scale of this problem cannot be quantified, but the fact that some Member States issue a high number of type-approvals without having a substantial automotive industry might point to a certain imbalance in the current system. Table 3 provides an overview of the number and share of type-approvals granted per Member State and the production output of their automotive industry. While some of the top listed Member States in terms of type-approvals also account for an important share of the production, others account for little or none.

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<sup>17</sup> Using a multiplication factor of 17

Table 3: Overview of type-approvals issued by Member States compared to production

Country	Total number of type-approvals issued (2004 to 2009)	Percentage of type-approvals issued (2004 to 2009)	Percentage of total EU motor vehicle output <sup>18</sup>
Germany	1209	23	33
Luxembourg	1002	19	0
UK	891	17	8
France	729	14	13
Netherlands	393	7.5	0
Malta	344	6.5	0
Spain	243	4.6	14
Italy	193	3.7	6
Belgium	76	1.5	4
Ireland	69	1.3	0
Czech Rep.	24	0.4	6
Latvia	18	0.3	0
Hungary	11	0.2	1
Sweden	9	0.2	0
Romania	5	0.1	2
Lithuania	5	0.1	0
Poland	-	0	5
Slovak Rep.	-	0	3
others	-	0	5
<b>Total</b>	<b>5229</b>	<b>100</b>	<b>100</b>

This distribution may simply indicate that the technical and administrative capacity to carry out verification testing and to issue type-approvals is unevenly distributed in the EU and not always focussed in the main producer countries. However, it could also be related to differences in the stringency that type-approval authorities and their technical services apply, which could induce applicants to selectively apply for type-approval with those approval authorities who are likely to be the most lenient. Therefore, it is important, to ensure that the observed pattern it is not the result of unfair competition between national type-approval authorities and their technical services. In order to be able to better verify this in the future, more data from an improved monitoring of these bodies would be highly useful.

Another critical aspect of the current system is that **only the Member States that have granted a type-approval for the concerned products are entitled to decide on the corrective actions** to be taken by the economic operator, and to approve the corrective measures necessary to restore compliance. When these decisions are not taken, or when they are not taken timely enough or when they are not satisfactory, other Member States have under the current systems no means of redress as they cannot take safeguard measures against the non-compliant vehicles on their market, without involvement of the Member State that issued the type-approval. In the aftermath of the VW case, and despite the co-ordination efforts undertaken by the Commission, it appeared very difficult to obtain a harmonised and uniform response by all Member States, in terms of the actions judged necessary to address the non-compliance problem (see Annex 2). This demonstrates that the current type-approval system is not well equipped to address major non-compliance problems in a consistent and coherent manner across the EU. Therefore, additional changes need to

<sup>18</sup>

Source: Impact assessment study report, RPA, Annex 9, p. A9-3

be considered, in particular with regard to the introduction of centralised supervisory and control mechanisms. Different options for doing so will be explored in this document.

**Technical services are paid directly by manufacturers** for carrying out type-approval inspections and tests on the manufacturers' vehicles. This entails a potential risk that commercial and financial pressure may be exercised and could negatively affect the independence and performance of the technical services. The policy options identified, assessed and selected in the IA report, aimed at strengthening the independence criteria for technical services, but did not address possible ways and means to increase their financial independence. Consideration should be given to changing the remuneration system for technical services to ensure a greater financial independence.

Finally, it appears that the **dissuasive nature of the penalties in the enforcement system has not been sufficiently strong** to deter fraudulent behaviour. This relates to sanctions/penalties in particular, together with weaknesses in the areas of market surveillance and safeguard clauses. In combination, these weaknesses appear to result in a situation where the risk of being detected and penalised may not be sufficiently dissuasive to prevent fraudulent behaviour.

## 5. PROBLEM DRIVERS

The overarching problem is the lack of detection and prevention of non-compliant automotive products (i.e. motor vehicles and their parts) in the market, indicating that there may be regulatory failures in the type-approval system that make it possible that non-compliance is not prevented and detected, and that as a result, non-compliant products can be placed on the internal market.

There are a number of underlying factors (so-called “problem drivers”) that cause and exacerbate this overall problem. The IA report identified already five main problem drivers which have been reassessed with a view to identify to what extent their nature and scale may have changed since the original IA report. This re-assessment confirms that four of the problem drivers are particularly relevant for the established regulatory failure. (Drivers B, C, D and E). Problem driver A, by contrast, is considered not to be directly contributing to the existence of non-compliant products on the market (it rather is considered as a helpful tool to identify and hold economic operators accountable for the non-compliance). In addition, the view taken in the original IA report that automotive products originating from outside the EU would be one of the main problems, needs to be adjusted in view of the fact that a case of major non-compliance stems from a EU manufacturer. Furthermore, a new problem driver F has been identified, i.e. the lack of harmonised enforcement and implementation of the type-approval requirements. The table below provides an overview of all six problem drivers.

Table 4: Overview of problem drivers and objectives

Problem driver	Objective
A) Insufficient traceability of automotive products and lack of clarity about responsibilities of importers and distributors	Enhance the traceability of automotive products to enable action against non-compliant products and clarify the responsibilities of importers and distributors

B) Lack of clarity about the responsibilities and cooperation of enforcement authorities	Specify and clarify responsibilities of enforcement authorities to ensure effective and uniform action against non-compliant products
C) Varying degrees of stringency and quality applied by technical services	Ensure the quality of type-approval and conformity of production checks across the EU
D) Lack of clarity on rights and obligations of Member States' authorities in taking safeguard measures and in launching recall procedures	Ensure the effective and timely implementation of safeguard and recall procedures across the EU including clear rules on involvement of different authorities and cooperation between them
E) Weaknesses in the control procedures for ensuring conformity of production	Ensure that production models comply with the approved type
F) (New) Lack of EU co-ordination and supervision to ensure harmonised enforcement	Provide a level playing field and enable an effective response to a situation of non-compliance

The problem drivers B, C, D and E need particular attention, to ensure that the policy options designed to address them are sufficiently effective and efficient to prevent the reoccurrence of major non-compliance problems. For each of them, the preferred combination of policy options as determined in the IA report needs to be reassessed with the aim of identifying any adjustments that could be necessary to provide a more adequate response to the problem drivers and to increase the effectiveness of these policy options in reducing the market share of non-compliant automotive products. In addition, policy options in response to the new problem driver F need to be developed and assessed.

### Problem driver A

*Difficulties to trace the origin of non-compliant and unsafe products encountered on the market and lack of clarity about the respective responsibilities of economic operators involved in the supply chain for such products.*

The reassessment of the policy option selected to address this problem driver resulted in the conclusion that this policy option does not need to be strengthened in the light of the objective to better detect and prevent non-compliance problems. It will, therefore, not be reconsidered in this document.

### Problem driver B

*Lack of clarity about the respective responsibilities of and the co-operation between the different authorities that may be involved in the enforcement of the technical harmonisation legislation for the free movement of motor vehicles (in particular type-approval-, market surveillance- and border control authorities) and the role of the Commission.*

The IA report, which will be accompanied by this document, highlights under this problem driver that the current type-approval legislation focuses mainly on pre-market control procedures for type-approval and the conformity of production. As a result, it only defines and refers to type-approval authorities and the competent authorities for the assessment and designation of technical services. The lessons learned from the VW-case demonstrate that this may not be sufficient to prevent and detect non-compliance problems by means of the ex-ante controls of the type-approval procedure. Consideration should therefore be given to strengthening the already envisaged market surveillance provisions to ensure that additional, targeted compliance verification tests on vehicles already placed on the market are carried out.<sup>19</sup>

In addition, the VW case revealed that large scale non-compliance problems that seriously affect the entire EU market cannot be adequately addressed by Member States individually. After the VW case became public, there were slow and uncoordinated responses in different Member States creating confusion among the affected citizens. In fact, the responses the Commission received in reply to the questionnaire sent to the Member States did not provide a fully informative and coherent picture on their actions, and demonstrated the need for coordination of these actions and responses with a view to ensuring a harmonised and EU wide response to the situation of non-compliance (see Annex 2). Coordinated and harmonised action by all enforcement authorities in all Member States is crucial to maintain the confidence in the internal market for motor vehicles and to avoid distortion of competition. It is therefore essential that appropriate remedial action is taken across the EU against motor vehicles that do not comply with the type-approval requirement or represent a serious safety risk or harm to the environment.

The competence of the national enforcement authorities is limited to the territory of their Member State. Weaknesses in the organisation of enforcement in one single Member State can seriously undermine the efforts by others to keep non-compliant products from entering the market. Also when other Member States detect non-

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<sup>19</sup> It should be noted that the United States' Environmental Protection Agency has come to a similar conclusion in response the detection of the use of defeat devices in cars on the US market. <https://blog.epa.gov/blog/2015/10/epas-rigorous-auto-oversight-will-get-even-stronger>

compliant automotive products on their market, they are under the current system entirely dependent on the remedial actions that are decided on by the Member State that issued the type-approval.

Where remedial action is required beyond the national border, enforcement authorities must be able to rely on cooperation and exchange of information with their colleagues in the other Member States. This needs to be properly coordinated to be effective. Such situation calls for considering ways and means for more oversight at EU level, and the role by the Commission in this, to ensure that EU wide remedial actions are taken to adequately address situations of non-conformity.

The absence or the poor functioning of such an exchange of information and cooperation hampers an effective and uniform enforcement of the automotive internal market legislation across the EU. The existing fora for exchange of information between type-approval authorities of the Member States<sup>20</sup> are mainly addressing issues related to the interpretation of the type-approval requirements and procedures specified in the legislation. They are not tailored and equipped to support and to ensure an effective exchange of information and cooperation between enforcement authorities on non-compliance issues, neither to ensure an adequate and harmonised implementation and enforcement of the type-approval requirements, in particular when it comes to preventing, detecting and/or remedying non-compliance problems.

#### Problem driver C

*Divergence in quality of the type-approval and conformity assessment tasks carried out by technical services.*

Technical services are key players in the type-approval process as they have to carry out the tests and inspections necessary for type-approval and to verify that manufacturers are producing their vehicles in conformity with the approved type by ensuring an adequate level of conformity of production. Varying degrees of stringency and quality standards applied by technical services in these fields are issues that have emerged from the public consultation and the ex-post evaluation study, and are considered to contribute substantially to hampering the harmonised implementation of the type-approval legislation.

Therefore, the policy options identified and selected in the IA report aim at strengthening the independence of technical services, but the reassessment of these policy options revealed the need for additional precautionary efforts to ensure that the independence and performance of technical services cannot be impeded by financial and economic pressures.

As already indicated in Section 4 (Problem description), there may be a need to assess whether adjustments to the designation procedure and remuneration system for technical services could contribute to further strengthen their independence and the quality of their performance.

#### Problem driver D

*Lack of clarity and harmonisation in the post-market safeguard procedures and the provisions for the recall of vehicles.*

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TAAEG (Type Approval Authorities Experts Group) & TAAM (Type Approval Authorities Meetings)

The limitations of the current safeguard clauses and recall provisions of the type-approval framework have become clear in the context of the Member States' response to the VW case. They have appeared to be not sufficiently robust and flexible to offer effective remedial tools to the enforcement authorities in the Member States and to the Commission to take swift, effective, harmonised, EU-wide remedial action against non-compliant vehicles.

The current safeguard procedures are designed on the assumption that the type-approval authority that issued the approval for a type of vehicle would take timely and appropriate remedial action whenever the type of vehicle would be found not to comply with the requirements. Reassessment of this assumption is necessary, as well as the need to address also those cases where no such appropriate and timely remedial action would have been taken by the issuing type-approval authority. In particular, the rights and obligations of the other Member States and the role of the Commission in such cases may need to be clarified.

In this context, the current system of sanctions and penalties also plays an important role. It needs to be critically assessed whether the system, where the decisions on the application of sanctions and the level of penalties are taken at the level of individual Member States is sufficiently effective in discouraging fraudulent behaviour and circumvention of the rules. In particular the question if the current division of responsibilities results in effective, proportionate and dissuasive penalties for infringing type-approval rules needs to be asked.

#### Problem driver E

##### *Shortcomings in the legal provisions for ensuring conformity of production.*

The procedures for ensuring conformity of production (CoP) are an indispensable part of the overall type-approval process since they aim at ensuring that all vehicles are produced in accordance with the approved type. Therefore, they constitute a very important link between the ex-ante type approval procedure and the ex-post market surveillance activities, and – if properly specified and implemented – a powerful tool to minimise the risk of non-compliant products being placed on the market. This, in turn, would limit the need for restrictive post-market actions to remedy the problems associated with such products.

The current CoP provisions, however, give too much room for diverging interpretation and application. In particular, the weaknesses in the criteria for the assessment of the quality assurance system to be set up by the manufacturer, for the frequency of periodical audits and the possibility of unexpected visits to the manufacturers' premises to verify the conformity of production arrangements result in varying degrees of rigour applied by type-approval authorities and their technical services.

The current CoP provisions have also not succeeded in detecting and preventing the use of defeat devices in production vehicles. It is, therefore, necessary to assess to what extent further adjustments to the selected policy option would be necessary so as to contribute better to achieving the goal of early detection and prevention of non-compliances before vehicles are placed on the market. In this assessment, the role of the technical services and the responsibility of approval authorities should be taken into account. In view of the clear link to the problem drivers B and C, the need for better monitoring and supervision should also be assessed with a view to ensuring a correct and harmonised implementation of the CoP requirements.

### Problem driver F (New)

#### *Lack of EU co-ordination and supervision to ensure harmonised enforcement.*

The discovery of major non-compliance problems on the EU market has demonstrated that the current decentralised system for implementation and enforcement of the type-approval requirements by the Member States may not be sufficiently effective. The lack of clear rules and procedures to ensure effective, coordinated and harmonised remedial action by the Member States is resulting in a patchwork of different reactions by the Member States. Some Member States have been very slow in reacting or did not take action at all (for an overview see the Appendix to Annex 2). This is also due to the fact that their rights and obligations to take remedial action against non-compliant products are not precisely defined in the current framework (see also problem driver D).

Furthermore, the role of the European Commission in the current safeguard procedures is limited which hampers effective and timely coordination and harmonised remedial action by all Member States. Addressing this failure appears vital for improving the system's capability of dealing with major non-compliance issues across the EU in a harmonised manner and to avoid distortion of competition.

Further adjustments to the policy options selected to address the problem drivers described above may help in contributing to remedy this failure. However, there is a need to consider whether this failure can be addressed completely, by clearly defining and, where necessary, strengthening the rights and obligations of the enforcement authorities in the Member States. Also the role of the Commission with regard to coordinating, supervising and complementing the national enforcement activities needs to be considered in this context.

## **6. OBJECTIVES:**

### **6.1. General policy objectives**

The overall objective for reassessing the policy options selected for the review of the type-approval system is to safeguard and strengthen the functioning of the internal market for motor vehicles, and to restore consumer's confidence in the system. This should be achieved by ensuring that all necessary mechanisms are in place for an effective and uniform application and enforcement of the requirements that any risk of non-compliance is prevented, detected and/or remedied as early as possible.

By means of strengthening the system of ex-ante controls (type-approval) and complementing these by post-market controls (market surveillance) it should aim at ensuring that all motor vehicles as well as systems, components and separate technical units intended for such vehicles which are placed on the EU market fulfil all the applicable requirements. This is necessary to guarantee a high level of safety and environmental protection to the EU citizen and to the society as a whole.

The market surveillance system needs to be designed to provide adequate procedures for remedying the situations where non-compliant automotive products, due to failures in the ex-ante controls, are nevertheless placed on the market. As such, the type-approval and market surveillance provisions are contributing to the general policy objectives of enhancing road safety and reducing pollutant and CO<sub>2</sub> emissions. Finally they should also aim at regaining consumer confidence in the EU regulatory framework and enhancing the competitiveness of the EU automotive



industry, by guaranteeing that a level playing field is maintained for all economic operators involved.

## **6.2. Specific policy objectives**

Two specific objectives are envisaged with the re-assessment of the selected policy options and the assessment of further adjustments to these policy options:

- Ensure a better implementation and enforcement of the safety and environmental requirements governing the design and construction of motor vehicles and their parts and systems, in order to reduce the risk that non-compliance may not be prevented, detected and remedied.
- Reduce the number of non-compliant automotive products on the market (by means of the above specific objective).

## **6.3. Operational policy objectives**

Avoid reoccurrence of major non-compliance problems and prevent non-compliant motor vehicles, systems, components and separate technical units intended for such vehicles being placed on the EU market, and to withdraw them from the market, by:

- Specifying the respective responsibilities of the different authorities involved in this process, and coordinating their activities with a view to ensure effective and uniform action against non-compliant products across the EU market and the equal treatment of economic operators in the enforcement of the requirements;
- Increasing the credibility of the type-approval tests and inspections by enhancing the financial independence of technical services, and the criteria for their designation and for effectively monitoring their performance;
- Ensuring reliable and high-quality type-approvals procedures, including the conformity of production arrangements;
- Organising effective market surveillance with targeted compliance verification testing of vehicles already placed on the market, with a view to improve the knowledge and insight on the nature and extent of the problem of non-compliant products on the market, in order to better target strategies and remedial action;
- Ensure proper monitoring and supervision of the above implementation and enforcement activities, including enhanced penalty provisions as a deterrent against infringing the type-approval requirements.

## **7. REASSESSMENT OF THE SELECTED POLICY OPTIONS**

Building on the policy options already selected for addressing the problem drivers identified in the IA report, this reassessment addresses the possibilities and needs to further adjust these policy options with a view to increase their effectiveness and efficiency, in particular with regard to remedying the implementation and enforcement weaknesses in the current type-approval system and with the aim to ensure that possible non-compliance risks can be prevented, detected and/or remedied in a timely manner. An overview of how the identified policy options and their possible adjustments relate to the relevant problem drivers is given in Table 5.

Table 5: Overview of policy options and their possible adjustments

Problem driver	Selected policy option in the impact assessment report	Possible adjustments to the selected policy option
B) Lack of clarity about the responsibilities and cooperation of enforcement authorities	Option B.3: Specify the role of the different authorities involved in the enforcement of the type-approval legislation + establish clear procedures for information exchange and co-operation between them	<p>Establishment of an Enforcement Forum to ensure proper information exchange and to coordinate the co-operation between enforcement authorities</p> <p>Development of harmonised market surveillance strategy consisting of sufficient and targeted compliance verification tests on vehicles already placed on the market</p>
C) Varying degrees of stringency and quality applied by technical services	Option C.3: Clarify and strengthen the requirements technical services have to comply with to be entitled to perform type-approval testing and verification of conformity of production.	<p>Introduction of a supervisory mechanism on the assessment and designation of technical services by means of joint audits, including also a regular monitoring of their performance before their designation can be renewed.</p> <p>Increase the financial independence of technical services by changing the remuneration system for their type-approval activities (national type-approval fee structure)</p>
D) Lack of clarity in safeguard measures and recall procedures	Option D.3: Include legal provisions to specify the role of and interaction between the different authorities involved in post-market safeguard measures and recall actions.	<p>Extension of the right to take safeguard measures and to order recalls in case of serious non-compliance to all Member States and the Commission</p> <p>Extension of penalties to economic operators for infringing the type-approval requirements to include also technical services</p>
E) Weaknesses in the procedures for ensuring conformity of production	Option E.3: strengthen the assessment of quality management systems for production, and product related controls through inspection and testing, under surveillance by the competent authorities.	Monitoring of the respect of the CoP verification requirements by technical services (included in the envisaged system of joint audits of technical services)
F) (New) Lack of EU co-ordination and supervision to ensure harmonised enforcement		<p>2 new policy options:</p> <p>1) maintaining the decentralised enforcement system but with more rights for the other Member States to take precautionary measures and including better EU oversight (supervisory system, managed by the Commission, to monitor and steer the national type-approval and market surveillance activities).</p> <p>2) replacing the decentralised</p>

		enforcement system with a centralised system that would take over the responsibilities of Member States and be in charge for EU wide type-approval and market surveillance activities (EU Type Approval and Market Surveillance Agency)
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**7.1. Problem driver B: lack of clarity about the responsibilities & cooperation of enforcement authorities**

Option B3: The selected regulatory option in the report envisages to better specify the role of the different authorities involved in the application of the type-approval legislation and to establish clear procedures for information exchange and co-operation between them to effectively mitigate the presence of non-compliant products on the market.

The re-assessment of this policy option has resulted in identifying a possible adjustment to reinforce this policy option by setting up an appropriate mechanism to ensure proper information exchange and to improve the co-operation between national authorities. This supervisory system should result in an EU-wide and harmonised strategy in the fight against non-compliance.

To coordinate the supplementary activities stemming from the above adjustments to policy option B3, it should be envisaged to set up an Enforcement Forum, chaired by the Commission, in which the authorities of the Member States would participate to exchange information, develop enforcement strategies, and coordinate harmonised enforcement projects. This Enforcement Forum would also be used to co-ordinate and evaluate the joint audits of technical services and the peer-reviews of type-approval authorities (see Section 8.2).

In addition, to address the other driver identified in section 4 for problem B, there is a need to consider the development of a harmonised market surveillance strategy, which by means of sufficient and targeted compliance verification tests on vehicles already placed on the market, to be carried out by Member States and by the Commission, would provide the appropriate tools for verifying whether or not the ex-ante controls of the type-approval procedure have failed to prevent and detect the risk of non-compliance.

The selection of these adjustments to the selected policy option for addressing problem driver B has been based on the identification of best practices established in other EU product harmonisation legislation to ensure adequate safety and environmental protection (notably medical devices).

**7.2. Problem driver C: varying degrees of stringency and quality applied by technical services**

The regulatory Option C3 selected in the impact assessment report would consist of developing legal provisions to clarify and strengthen the requirements technical services have to comply with to be entitled to perform type-approval testing and verification of conformity of production. These provisions would in particular aim at

clarifying the criteria governing the technical independence (e.g. technical services are not allowed to be the designer, manufacturer, supplier, installer, purchaser, owner, user or maintainer of the vehicles or devices tested) and their financial independence (e.g. the remuneration of the top level management and assessment personnel is not to depend on the number of assessments carried out or on the results of those assessments).

The reassessment of the effectiveness of this policy option has demonstrated the need to further increase the financial independence and performance criteria for technical services, and the need to introduce supervisory mechanisms on the assessment and designation of technical services, including also a regular monitoring of their performance before their designation can be renewed. This supervisory mechanism would be based on joint audits, involving the participation of at least three Member States' authorities and the Commission.

To strengthen their financial independence, the system of remunerating technical services for their type-approval activities would be changed: their fees would be administered by the type-approval authority that designated them, instead of technical services being directly paid by the manufacturers as is currently the case. This would require Member States to set up a national type-approval fee structure, to which the manufacturers applying for type-approval would have to pay for all related type-approval services rendered (i.e. those rendered by the type-approval authority and the technical service designated by it for carrying out the type-approval tests and inspections). By changing the remuneration of technical services, their financial independence from manufactures would be increased substantially.

The national fee structure to be set up by the Member States would also take into account the costs for the post-market compliance verification testing that the Member States will have to carry out as provided for in the adjustment measures to strengthen policy option B3.

### **7.3. Problem area D: lack of clarity in safeguard measures and recall procedures**

The impact assessment report concludes that the best way to address this problem driver is the selection of the regulatory option D3. This selected option envisages amendments to the existing type-approval legislation by including provisions to specify the role of and interaction between the different authorities involved in post-market safeguard measures and recall actions. It also envisages measures to improve the cross border information exchange and cooperation between national enforcement authorities (i.e. type-approval authorities, market surveillance authorities, border control authorities).

In addition, changes to the current provisions on safeguard measures would be introduced, in line with the two step approach of Decision 768/2008/EC establishing a common framework for the marketing of products<sup>21</sup> and as already incorporated in the type-approval legislation for motor cycles<sup>22</sup>. Under this approach, Member States (or their approval authorities) would be required to inform the Commission and other Member States of safeguard measures taken where they consider that the established non-compliance is not restricted to their national territory.

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<sup>21</sup> <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:218:0082:0128:EN:PDF>

<sup>22</sup> See in particular Chapter XII of Regulation (EU) No 168/2013 (Articles 46 to 53)

The reassessment of the selected policy option resulted in the conclusion that these measures should be pursued and further strengthened to become a more effective tool for enforcement. The right to take safeguard measures and to order recalls in case of serious non-compliance should be extended to all Member States and the Commission, rather than continue to be limited to the Member State that issued the type-approval.

In addition, the penalties that Member States have to apply to economic operators for infringing the type-approval requirements should be extended to address also cases where it would appear that the technical services have a shared responsibility for the non-compliance. The Commission would also have the right to levy penalties when either its independent compliance verification tests or the Union safeguard clause demonstrates that economic operators and/or technical services have failed to comply with their obligations under the type-approval legislation.

These adjustments to strengthen option D3 are considered essential to ensure that sufficiently strong deterrents are in place to make sure that economic operators refrain from trying to circumvent the rules and can be held accountable for placing non-compliant automotive products on the market. They also aim at ensuring that technical services rigorously verify the respect of the type-approval requirements by the economic operators.

#### **7.4. Problem driver E: weaknesses in the procedures for ensuring conformity of production (CoP)**

The impact assessment report selected regulatory option E3 to address this problem driver. This option envisages developing binding provisions to clarify and strengthen the CoP requirements. These binding provisions should enhance the assessment of quality management systems for production, and product related controls through inspection and testing, under surveillance by the type-approval authorities and their technical services. The current provisions for ensuring CoP should be improved by incorporating the concept that the quality assurance system of the manufacturer has to be assessed by the type-approval authority (or an accreditation authority acting on its behalf) based on the detailed quality assurance system documentation to be approved by that authority.

The re-assessment of the selected option has confirmed the importance the CoP procedures have in contributing to the detection of non-compliance and in preventing that production vehicles do not conform to the approved type and therefore risk being non-compliant. To ensure a proper implementation and enforcement of these CoP provisions, the peer-review system to audit technical services should also cover their responsibility to verify regularly and thoroughly whether the manufacturer is respecting all the conformity of production requirements.

#### **7.5. New problem driver F: lack of EU co-ordination and supervision to ensure harmonised enforcement**

The recent occurrence of major non-compliance problems has demonstrated that the current decentralised system for implementing and enforcing the type-approval requirements has not been effective in preventing, detecting and remedying such problems. While the need for swift and coordinated remedial action across the EU in such major non-compliance cases has become obvious, the current system does not provide the appropriate tools for organising and co-ordinating these actions. The current provisions fail to address the need for clear procedures and defining the

respective responsibilities of the national enforcement authorities and their interaction at EU level. The Commission has no formal role in this process. As a result, the powers for coordination and intervention by the Commission are limited and completely dependent on the goodwill of the Member States to cooperate in the investigations. The central role in this process under the current system is for the Member State that has issued the type-approval for the product, with very little possibilities for the other Member States to intervene and to take the necessary precautionary measures in their territory against these non-compliant products. This regulatory failure has to be addressed urgently. The envisaged adjustments to the selected policy options as described above may to some extent help in contributing to address this regulatory failure. However, there is a need to assess whether additional policy options could contribute to address this failure more completely.

Basically there are two options considered (apart from the status quo, i.e. continue with the current type-approval system without any changes).

The first option would consist of maintaining the decentralised enforcement system (whereby Member States remain responsible for the implementation and enforcement of the type-approval and market surveillance requirements), but with extended rights for the other Member States to take precautionary measures and better EU oversight to ensure a proper coordination and harmonisation of these measures. This may require setting up a robust verification and supervisory system to monitor and steer the national type-approval and market surveillance activities. This supervisory system would be managed by the Commission, with extensive powers to intervene quickly and effectively to remedy any weaknesses or problems in the implementation and enforcement of the type-approval and market surveillance requirements at the Member State level.

The second option would consist of replacing the decentralised system with a centralised system that would take over the responsibilities of Member States and be in charge for EU wide type-approval and market surveillance activities (EU Type Approval and Market Surveillance Agency – ETAMSA).

Both options will be assessed further on in Section 8.5.

## **7.6. Instruments for the policy options**

Each of the identified adjustments to increase the effectiveness of the selected policy options are considered to be fully in line with the proportionality principle as they envisage addressing the regulatory weaknesses of the current type-approval system. They are also consistent with the overall policy objectives set out for the re-launch of the single market strategy, in particular with regard to ensuring stronger market surveillance, and by taking due account of the principles and boundaries of the horizontal framework for the marketing of products, in particular Regulation (EC) No 765/2008.

To enhance the harmonised implementation of the type-approval requirements by the Member States, and in line with the principles of smart regulation, it is envisaged to replace the current Framework Directive 2007/46/EC by a Regulation, directly applicable in the Member States.

## 8. ANALYSIS OF IMPACTS OF THE ENVISAGED ADJUSTMENTS TO THE SELECTED POLICY OPTIONS

It should be noted that this analysis of impacts for the envisaged adjustments to the selected policy options is mainly based on a qualitative rather than a quantitative approach. The main reason being that no data could be collected to build a quantitative assessment and to draw reasoned conclusions. The second reason is that the main objective of this initiative is to improve the effectiveness of the current legal framework by streamlining and enhancing procedures and processes, rather than by introducing new safety and environmental requirements. Also for the original Impact Assessment it has proven difficult to quantify in a reliable manner the impact of such procedural changes. Nevertheless, an attempt for a basic quantitative assessment has been made to indicate the rough order of magnitude of the benefits resulting from the envisaged adjustments to the selected policy. However, as already mentioned at the end of section 3, these estimates are building on assumptions about the likely improvement the envisaged adjustments could generate in the effectiveness of the selected policy options in terms of the possible reduction of the presence on the market of non-compliant products. Therefore, the benefit estimates are not sufficiently precise and robust to be used as a basis for comparison with the cost estimates for the selected policy options and their adjustments.

### 8.1. Problem driver B: lack of clarity about the responsibilities & cooperation of enforcement authorities

The envisaged adjustments to the regulatory option as described in Section 7.1 would provide increased legal clarity for enforcement bodies regarding their responsibilities and a better coordination of enforcement activities through the Enforcement Forum. Clear rules on information exchange and cooperation are absolutely necessary to ensure effective and harmonised EU wide enforcement. The need to establish a supervisory system will be discussed separately in the assessment of the new problem driver F (Section 8.5).

#### 8.1.1. Affected stakeholders

- (1) National authorities: Stronger cooperation with other Member States and the Commission. This may require national authorities to adapt their organisation and working procedures accordingly, possibly with the need to increase their resources, in particular for carrying out ex-post compliance verification testing, as well as for their participation in the Enforcement Forum and the peer-reviews (see assessment for problem driver C). Better coordination between Member States could however also mean cost reduction, if the Member State granting the type approval is no longer the only entity that is charged with following-up.

The costs associated with the better information exchange could be minimised by using the existing European Type Approval Exchange System database (ETAES)<sup>23</sup>.

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<sup>23</sup> The cost associated to setting up an electronic database for the exchange of type-approval information was already assessed in a feasibility study commissioned by the UNECE in June 2006 based upon the already existing European Type-Approval Exchange System (ETAES) database.

- (2) European Commission: Need to establish and manage the Enforcement Forum, to steer the peer-review system and carry out independent compliance verification testing.
- (3) Manufacturers: will be affected by the post-market compliance verification testing carried out by the Member States and the Commission.

### 8.1.2. *Benefits*

The envisaged complementary measures to better address this problem driver will result in substantially more effective enforcement results and a reduction in the market share of non-compliant products.

The Impact Assessment report on the selected policy options used as a basis for this criterion the assumption that the measures would be effective (50% reduction of the market value of non-compliant products). For the purpose of assessing the benefits of the envisaged adjustments, in combination with the initially selected policy option, it is assumed that the overall effectiveness will increase from high to very high (75% reduction of non-compliant products). The resulting benefit will be that the yearly rate of reduction of non-compliant products will increase from 15% per year to 22.5% per year. For problem driver B this would increase the **estimated monetised benefit** from € 94 million per year (for the initially selected policy option) to at least **€ 141 million per year** in terms of reduction of the market share of non-compliant products. It should be noted that the approach taken in this document for the estimation of benefits from reducing non-compliance is very conservative, as it is based on the lowest estimates used in the impact assessment of the selected policy options. This is a very prudent approach, which may underestimate the real benefits, especially as avoidance of possible environmental harm due to non-compliance and avoidance of consumer hassle (other than avoided opportunity costs of the time related to recalls) cannot be quantified.

The benefits from the selected policy option in terms of reducing the number of vehicles to be recalled and the associated cost savings have been estimated to represent a monetised value of € 7.2 million per year<sup>24</sup>. The envisaged adjustments to this policy option are expected to increase the effectiveness by 50% with a resulting additional cost saving of € 3.6 million per year. In combination, the selected policy option and its envisaged adjustment would generate a **total estimated benefit of € 10.8 million per year by reducing the number of vehicles to be recalled and the associated recall costs.**

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The impact assessment study estimated that on average the administrative and logistic cost for a manufacturer to recall a vehicle would be around € 250 (which does not include the costs for the new parts or components that may be needed)



### 8.1.3. Costs

The cost for the affected stakeholders is estimated as follows:

- (1) National authorities: The need for increasing their resources to cope with the selected policy option for addressing problem driver B is estimated to generate an increase equal to the need that was identified in the IA report for transposition of the EU legislation nationally. This estimated cost of **€ 28 million per year** has been based on an **increase of human resources** representing on average a cost of € 1 million per year per Member State (representing on average the cost of 8 employees full-time equivalent). In view of the fact that the revision of the type-approval legislation is envisaged to take the legal form of a Regulation and not a Directive as anticipated in the Impact Assessment study, the estimated amount of € 28 million per year foreseen for transposition could be redeployed to cover the estimated need of increasing national authorities' human resources to comply with the envisaged adjustments to the selected option for addressing this problem driver. In addition, the costs for carrying out compliance verification testing is estimated to be in the same range as the cost estimate for the compliance verification testing carried out by the Commission (see Section 8.5), i.e. on average € 6.5 million per year per Member State, representing a total of **€ 182 million per year**. The overall cost for national authorities as a result of the envisaged adjustments to the selected policy option is, therefore, estimated to be in the order of € 210 million/year, with the understanding that the increase in human resources needs will be covered by the € 28 million/year that were foreseen for transposition.
- (2) European Commission: The estimated costs for the European Commission to establish and manage the Enforcement Forum, to steer the peer-review system and carry out independent compliance verification testing are covered in Section 8.5, where the options for greater EU supervision and control are assessed.
- (3) Manufacturers will be mainly affected by the post-market compliance verification testing carried out by the Member States and the Commission. Compared to the initially estimated costs for manufacturers to comply with the selected policy option (€ 90 million per year), the envisaged adjustments to this policy option would create an estimated cost increase of about €10 million per year<sup>25</sup>, resulting in an **overall estimated cost of €100 million per year for the combination of the selected policy option in combination with its envisaged adjustment**. Overall, a more effective enforcement of the type approval rules will induce manufacturers to comply with them, as the chances of non-compliance being detected will increase.

<sup>25</sup>

The costs for manufacturers resulting from their involvement in the post-market compliance verification testing and inspections is estimated to be in the order of € 10 million per year, covering the making available of vehicles for these test and inspections (based on an upper estimate assuming up to 400 vehicles to be made available per year representing an average value of € 25,000 per vehicle). See § 7.5.1.3.

## 8.2. Problem driver C: varying degrees of stringency and quality applied by technical services

### 8.2.1. Affected stakeholders

- (1) Technical services: will be subject to additional administrative burden and financial costs in relation to the envisaged audits carried out jointly by a number of Member State authorities with involvement of the Commission and renewal of their designation. The information obligations for technical services are to a large extent based on standard reference provisions of the NLF decision 768/2008 (Annex I, Art. R28), and should therefore not result in significant administrative impact on technical services.
- (2) National authorities: the stricter criteria for assessing, designating, monitoring and auditing technical services and for setting up the fee structure for collecting from the manufacturers the fees related to type-approval activities performed by the technical services and by the national authorities may result in national authorities having to adapt their organisation and working procedures accordingly. This could possibly entail the need to increase their resources, in particular for carrying out the audits through the peer-review system.
- (3) Manufacturers: may be confronted with higher type-approval fees resulting from the additional costs incurred by national authorities for collecting the fees and for auditing the technical services.
- (4) European Commission: will need to steer and participate in the peer-review system with the Member States for auditing the technical services.

### 8.2.2. Benefits

The strengthening of the criteria for technical services to ensure a high performance level in the execution of the type-approval testing and inspections will result in more reliable and harmonised verification and respect of the type-approval requirements. Ensuring greater independence from the manufacturer will also reduce the potential risk of a conflict of interest. The envisaged peer review mechanism for the auditing of technical services will be an incentive for those services to continuously provide state of the art services in delivering a robust verification of compliance with the type-approval and conformity of production requirements by the manufacturers. It is also expected to offer some scope for learning from good practice examples. Experience with a similar peer review mechanism of conformity assessment bodies in the field of medical devices legislation has been positive and has even resulted in underperforming conformity assessment bodies no longer providing services.

The impact assessment report used, as a basis for estimating and monetising the associated benefits of the selected policy option, the assumption that the measures would be effective (50% reduction of the market value of non-compliant products). For the purpose of assessing the benefits of the envisaged adjustments, in combination with the to the selected policy option, it is assumed that the overall effectiveness will increase from high to very high (75% reduction of non-compliant products). The resulting benefit will be that the yearly rate of reduction of non-compliant products will increase from 15% per year to 22.5% per year. For problem driver B this would increase the **estimated monetised benefit** from € 125 million per year (for the selected policy option) to **€187.5 million per year** (for the combination of selected policy option and their envisaged adjustments) in terms of reduction of the market share of non-compliant products.

Additional benefits can be expected from the effectiveness of the envisaged measures and the resulting decrease in the number of vehicles to be recalled and the associated cost savings. These have been estimated in the Impact Assessment report to represent a monetised value of € 13.6 million per year for the selected policy option. The envisaged adjustments to this policy option are estimated to increase the overall effectiveness by 50% with a resulting additional cost saving of € 6.8 million per year. In combination, the selected policy option in combination with the envisaged adjustments aimed to increase the performance of technical services in detecting and preventing non-compliance with the type-approval requirements are estimated to generate **benefits of €20.4 million per year by reducing the number of vehicles to be recalled and the associated recall costs.**

### 8.2.3. *Costs*

The cost for the affected stakeholders is estimated as follows:

(1) Technical services:

The envisaged adjustments to the selected policy option aim at improving the performance and independence of technical services will result in additional administrative burden and financial costs, in particular in relation to the envisaged audits that will be carried out jointly by a number of Member State authorities with involvement of the Commission and for the renewal of their designation. These additional costs for the envisaged adjustments are assumed to quadruple the estimated costs for the pre-VW measures. **The overall cost for technical services as a result of the envisaged combination of the selected policy option and the envisaged adjustments is therefore estimated to be in the order of €12 million per year (+/- € 50,000 per year per technical service).**

(2) National authorities: the estimated costs for national authorities to implement the stricter criteria for assessing, designating, monitoring and auditing technical services and for setting up the necessary structure for collecting from the manufacturers the fees related to type-approval activities performed by the technical services and by the national authorities are included in the estimated costs for increasing the human resources as described in Section 8.1.3. (1). The costs for national authorities associated with their participation in the joint audits of technical services (travel costs) are covered in Section 8.5.1.3. (3) below.

(3) Manufacturers: it is estimated that the potential increase in type-approval fees that may result from the additional costs incurred by national authorities for collecting the fees and for auditing the technical services will not be significant. The impact assessment study carried out to assess the impact of the selected policy option has demonstrated that the type-approval costs to manufacturers only represent 0.05% of their turnover, or putting this against profit margins (assuming a very conservative average profit margin of around 3% of the retail price) the increased type-approval cost would reduce profits only marginally if they cannot be passed on to consumers. Therefore, the increase in type-approval fees due to the stricter criteria for technical services and their regular auditing would not have a significant impact on the costs of operation for automotive companies.

- (4) Consumers are not expected to be significantly impacted by the increased type-approval cost incurred by the manufacturers. The impact assessment study carried out on the selected policy option has demonstrated that the type-approval costs per vehicle sold in large series represent only € 5 to € 15 per car. It is, therefore, not a substantial cost and even if the cost increase would be passed on to the consumer, this would not be significant compared to the total price of the car.
- (5) European Commission: the estimated cost for the Commission to steer and participate in the peer-review system with the Member States for auditing the technical services is addressed in Section 8.5.

### **8.3. Problem driver D: lack of clarity in safeguard measures & recall procedures**

#### *8.3.1. Affected stakeholders:*

- (1) National authorities: the envisaged improvements in the safeguard and recall procedures would extend rights and obligations to all Member States instead of limiting them to the Member State that issued the type-approval as is currently the case. Member States should already have the necessary resources in place, because the current system already requires these resources to order recalls or impose safeguard measures if serious safety risks and/or the risk of serious environmental harm are detected. The envisaged extension of the safeguard procedures to also cover cases of non-compliance is not expected to have a significant impact on the already existing resources of the national authorities.
- (2) Manufacturers who are complying with the rules should not be impacted by the envisaged improvements of the safeguard measures and recall procedures. Only those who may attempt to cut corners and save money by ignoring or circumventing the safety and environmental requirements will incur costs from the safeguard measures, recalls ordered and sanctions applied for rectifying and compensating the non-compliance problems caused by them.
- (3) European Commission: the impact on the Commission stemming from having more rights and obligations as a result of the improved safeguard and recall procedures is expected to be limited and non-significant, certainly in comparison with the impact of the newly envisaged supervisory role for the Commission as described in Section 8.5.

#### *8.3.2. Benefits*

The expected benefits from the improved safeguard and recall procedures are difficult to quantify. They should result in reduced harm from serious safety and environmental risks and from non-compliance problems if they are sufficiently effective and harmonised EU-wide. In this context, it is important to keep in mind that these remedial measures should be rather the exception than the rule. The measures envisaged to address the other problem drivers are expected to be sufficiently effective so as to avoid that the safeguard and recall measures would need to be used frequently. However, in the case where major non-compliance problems, safety risks and/or environmental harm would arise, it is of utmost importance that these procedures are clear and efficient to guarantee swift and effective remedial action across the EU. Therefore, these important procedures will have also to be considered when assessing the level of EU coordination and supervision as described in Section 8.5.

### 8.3.3. *Costs*

The improved safeguard and recall procedures are not expected to generate any significant costs for the affected stakeholders.

## 8.4. **Problem driver E: weaknesses in the procedures for ensuring conformity of production**

### 8.4.1. *Affected stakeholders:*

- (1) **Manufacturers:** manufacturers already respecting the conformity of production requirements that are currently in place should not be significantly affected by the strengthening of the procedures for verifying the compliance with the requirements. Sample inspections and testing are already foreseen in the current type-approval system, and the regular verification audits carried out by the type-approval authorities or their designated technical services should not create significant additional burden as such audits already have to be covered by the manufacturer's quality assurance management system.
- (2) **National authorities and technical services:** have already under the current type-approval system the obligation to monitor and verify regularly whether the manufacturer correctly implements the conformity of production arrangements that have been approved as part of the type-approval process. They may be affected if they have minimised their efforts under the current obligations, which they will no longer be able to do under the strengthened criteria for ensuring compliance. The auditing of technical services (see Section 8.2) will also cover their performance in verifying and ensuring the respect of the CoP provisions by the manufacturers. The additional cost incurred by these audits is addressed in Section 8.2.3.

### 8.4.2. *Benefits*

The benefits of the selected policy option for addressing this problem driver, as quantified in the IA report, were ranked to be the most significant in terms of reducing the market share of non-compliant products (see table in Section 9.2.1). It reflects the importance of proper implementation and enforcement of the CoP in detecting and preventing non-compliance problems. Therefore, further strengthening the criteria for the verification of the compliance with the CoP requirements is envisaged to contribute even more effectively to the detection of non-conformity problems during the production process. This would reduce the risk that production vehicles differ from the approved type (which was one of the problems encountered with the implementation of the MAC Directive<sup>26</sup>). Better implementation and stricter surveillance of the CoP requirements is expected to increase significantly the effectiveness of the actions by enforcement authorities to detect and prevent non-compliance problems.

The impact assessment of the selected policy option for addressing this problem driver used as a basis for estimating and monetising the associated benefits the assumption that the measures would be effective (50% reduction of the market value of non-compliant products). For estimating the benefits of the envisaged adjustments to this policy option, in combination with the selected policy option, the same assumption is used as for problem drivers B and C, namely that the overall

<sup>26</sup>

[http://europa.eu/rapid/press-release\\_IP-15-6290\\_en.htm](http://europa.eu/rapid/press-release_IP-15-6290_en.htm)

effectiveness will increase from high to very high (75% reduction of the market value of non-compliant products), resulting in an increase of the yearly rate of reduction of non-compliant products from 15% per year to 22.5% per year. This would increase the **estimated monetised benefit** from € 250 million per year (for the selected policy option) to **€375 million per year** (for the combination of the selected policy option and its envisaged adjustments) in terms of reduction of the market share of non-compliant products.

Additional benefits can be expected from the increased effectiveness of the envisaged measures in terms of the likely decrease in the number of vehicles to be recalled and the associated cost savings. These have been estimated in the IA report to represent a monetised value of € 13.2 million per year for the selected policy option addressing problem driver E. The envisaged adjustments to this policy option are estimated to increase the overall effectiveness by 50% with a resulting additional cost saving of € 6.6 million per year. In combination, the selected policy option and its adjustments aiming to increase the performance of technical services in detecting and preventing non-compliance with the type-approval requirements are anticipated to generate a total **estimated benefit of € 19.8 million per year by reducing the number of vehicles to be recalled and the associated recall costs.**

The increased efficiency of the CoP requirements in detecting and preventing non-compliant vehicles from entering the market will also avoid the associated environmental harm caused by non-compliant vehicles on the market. While it is not possible to assess this quantitatively, it should be clear that when the strengthening of the CoP measures would prove to be successful in avoiding non-compliance with the exhaust emission requirements, the environmental benefits would be considerable.

#### 8.4.3. *Costs:*

As indicated in Section 8.4.1 the costs associated with the better implementation and enforcement of the CoP requirements are estimated to be non-significant. The additional costs stemming from auditing the performance of technical services in ensuring a proper verification of the CoP requirements are addressed in Section 8.5 where the options for the greater EU supervision and control are assessed.

### **8.5. Problem driver F: lack of EU co-ordination and supervision to ensure harmonised enforcement**

#### 8.5.1. *Option 1: Maintaining the decentralised system for the implementation and enforcement of the type-approval legislation by the Member States but complemented with an EU supervisory system.*

This option envisages maintaining the decentralised system (whereby Member States remain responsible for the implementation and enforcement of the type-approval and market surveillance requirements), but ensuring a greater EU oversight by setting up a robust supervisory system to monitor and steer the national type-approval and market surveillance activities. This supervisory system would be managed by the Commission, with the power to intervene quickly and effectively to remedy any weaknesses or problems at national level with the implementation and enforcement of the type-approval requirements.

##### 8.5.1.1. Affected stakeholders:

- (1) **Manufacturers:** manufacturers may be affected to the extent that they may be requested to make vehicles available for compliance verification testing and inspections.

- (2) National authorities and technical services: the way they might be affected by the obligation to carry out compliance verification tests has already been covered in Section 8.1.1. The impact of the participation of Member States authorities in the Enforcement Forum and the peer-review mechanism with joint audits of technical services is described respectively in Section 8.1.1. and Section 8.2.1.
- (3) European Commission: the European Commission will be affected by new tasks related to establishing and managing the Enforcement Forum, to steer and coordinate the peer-review system and to carry out independent compliance verification testing.

#### 8.5.1.2. Benefits:

The impact assessment of the selected policy options did not address this new problem driver. In an attempt to quantify the benefits of the envisaged supervisory system with its three main pillars, it is assumed that the supervisory system will increase the effectiveness of the selected policy options for addressing problem drivers B, C and D by 50%. This would result in an **estimated monetised benefit of €117 million per year** in terms of the contribution of the EU supervisory system to the reduction of the market share of non-compliant products.

Increased effectiveness the EU supervisory system would lead to less vehicles being recalled. In an attempt to quantify these benefits, it is assumed that the supervisory system will increase the effectiveness of the adjustments to the selected policy options for addressing problem drivers B, C and D in reducing the number of vehicles to be recalled by 50%. This would result in an **additional estimated benefit of €8.5 million per year** resulting from further reducing the number of vehicles to be recalled and the associated recall costs.

The estimated increased effectiveness of the EU supervisory system in detecting and preventing non-compliant vehicles from entering the market will also avoid the associated environmental harm caused by non-compliant vehicles being placed on the market. Avoided recalls would also reduce consumer hassle (beyond time spent) associated with recalls, which cannot be quantified.

#### 8.5.1.3. Costs:

The **costs for manufacturers** resulting from their involvement in the post-market compliance verification testing and inspections is estimated to be **in the order of € 10 million per year**, covering the making available of vehicles for these test and inspections (based on an upper estimate assuming up to 400 vehicles to be made available per year representing an average value of € 25,000 per vehicle). Although the vehicles will maintain a certain market value after being tested and inspected (i.e. on the second hand market), this is not taken into account in this estimate, with a view to ensure that there is a sufficiently large margin left to cover other associated costs manufacturers may incur (logistic arrangements for the testing and inspections and the administrative follow-up of the compliance verification process).

The costs for the Commission in relation to the establishment and co-ordination of the EU oversight system are estimated as follows:

- 1) Enforcement Forum:
  - a) Staff for the establishment and management of the Enforcement Forum for the co-ordination of enforcement activities with the Member States; on the

assumption of +/- 20 meetings of the Forum per year: 2 FTE (+/- € 0.2 million per year);

b) Reimbursement of Member States representatives to participate in the meetings of the Enforcement Forum (+/- 20 meetings per year): +/- € 0.5 million per year.

2) Compliance verification testing:

Costs for running the Commission's independent compliance verification testing by independent laboratories (JRC): based on an estimated 130 vehicles tested per year on average, including necessary investments, equipment, running costs for the tests and staffing needs (9 FTEs) total: € 8.7 million/year.

3) Peer review system with joint audits of technical services:

a) Staff to organise and participate in 'joint assessments' of technical services; 250 in total, to be audited every 5 years; thus 50 audits per year (1 per week) = 2 FTE. These are the same 2 posts as under 1) a);

b) Reimbursement of Member States representatives to participate in the 'joint assessments' of technical services; 50 audits per year, on average minimum participation of 3 Member States /audit = +/- € 1.3 million per year.

**Total costs for the Commission to set up and operate the supervisory system would be around €10.7 million per year** and would be covered through re-deployment.

#### 8.5.2. *Option 2: Centralise the type-approval system through the creation of a EU Agency*

As mentioned in section 2, several calls have been made on the Commission to consider abandoning the current decentralised system for the implementation and enforcement of the type-approval legislation by the Member States and to replace it with a centralised system through the creation of an EU Type-Approval and Market Surveillance Agency (ETAMSA). As this option has only recently gathered momentum and was previously not considered a proportionate response to address the shortcomings of the EU's motor vehicle type-approval system, only very limited data and evidence is available against which the effects of this option could be examined. The following assessment is, therefore, of mostly qualitative nature.

##### 8.5.2.1. Affected stakeholders:

- (1) Manufacturers are affected to the extent that they would now be subject to centralised type-approval testing and would no longer enjoy the freedom to choose a technical service. As to the cost of individual type-approvals, it is likely that they would be roughly comparable to the current level.
- (2) National authorities and technical services would be severely affected by this option. National type-approval authorities would lose an important part of their current competences to the new agency and the business model of technical services would change.
- (3) The European Commission would be affected by new tasks related to establishing, funding and managing the new EU agency.

##### 8.5.2.2. Benefits

The centralised type-approval system **would drastically reduce the risks that are associated with the decentralised system** in its current form. It would eliminate the possibility for type-approval shopping and ensure the harmonised application and



enforcement of type-approval requirements across the EU. By doing so, it would guarantee a level playing field for all manufacturers of automotive products and reduce the safety and environmental risks that are often associated with non-compliant products.

The creation of a centralised agency would also **facilitate a timely and effective response to a situation of non-compliance** and would eliminate the need for a complex system of information exchange and coordination by reducing the number of relevant entities.

#### 8.5.2.3. Costs and non-pecuniary disadvantages

The **costs for setting up an agency will be at least 4 to 5 times higher** than the supervisory system described under Option 1. Compared to the estimated costs of € 9 million per year for the supervisory system envisaged under Option 1, the estimated costs for setting up and operating an agency would be in the order of magnitude of at least around € 40 to 50 million per year. These figures are derived from the 2014/2015 estimates for the contribution from the EU budget to agencies that have similar roles and responsibilities as the ETAMSA would have, in particular the European Maritime Safety Agency (EMSA) and the European Aviation Safety Agency (EASA). These 2014/2015 estimates are summarised in graph 1.1.6 below. It is understood that the responsibilities of these two agencies go beyond the equivalent of type-approval in the maritime/aviation sectors. However, while for instance EASA also carries out other activities than certification of aircraft, it should be taken into account that there is a limited number of aircraft manufacturers and of new aircraft models every year. In the car sector, a larger number of manufacturers develop a higher number of new car models every year, due to shorter development cycles. In light of this, the comparison of costs seems reasonable overall.

The **MFF 2014-2020 constrains the evolution of agency resources**. The evolution of decentralised agency staffing and appropriations over the years 2014-2020 is guided by two overall constraints: on the one hand, the indicative envelopes for agency expenditure by heading embedded in the MFF 2014-2020; on the other hand, the objective of reducing staffing levels in agencies by 5 % over 5 years<sup>27</sup>. The setting up of a new agency would not be compatible with the above constraints.

Compared to the supervisory system described under Option 1, the setting up of an Agency would have a number of non-pecuniary disadvantages:

It would take considerably longer to establish an agency. This would result in the undesirable situation that during several years the current decentralised system without enhanced EU supervision would continue to exist, unless transitory measures are introduced. Timing will also be negatively impacted by the budgetary constraints of the MFF 2014-2020 (see point 3).

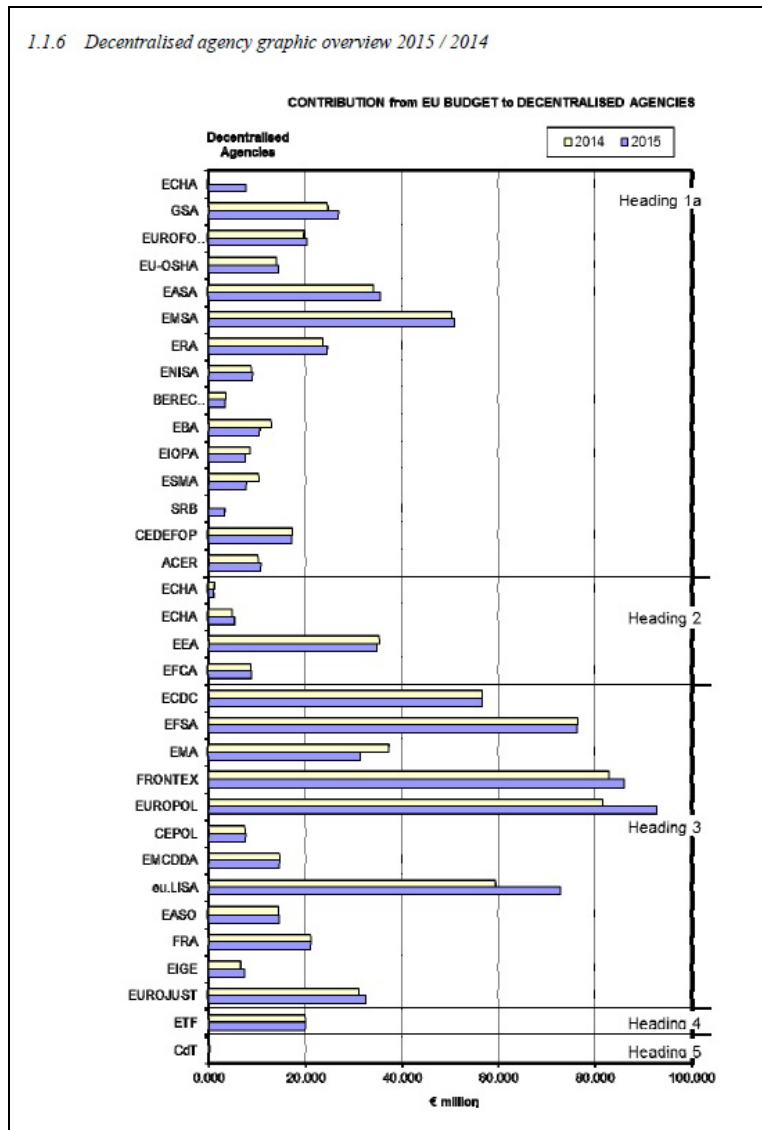
Replacing the existing infrastructure in the Member States (type-approval authorities, technical services and testing laboratories) with a centralised agency would also go beyond what is strictly necessary to tackle the problem and could be seen as disproportionate. While the VW case exposed weaknesses of the decentralised system in its current form, there is no evidence that a decentralised system as such cannot deliver the desired improvement. The supervisory system proposed under

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<sup>27</sup> COM(2013) 519 final - Programming of human and financial resources for decentralised agencies 2014-2020

Option 1 would respect the principle of subsidiarity and would likely result in a comparable level of harmonisation in the implementation and enforcement of the type-approval legislation.

Chart 1: Contribution from EU budget to decentralised agencies



Source: COM(2014) 300 - Draft General Budget of the European Commission for the financial year 2015, Working Document Part III - Bodies set up by the European Union and having legal personality and Public-Private Partnership

Automotive type-approval also requires a highly specific set of skills and people with sufficient expertise in this domain are usually not readily available in the labour market. To quickly staff an EU agency, this expertise would need to come from the existing pool of experts in the national type-approval authorities and technical services. It is difficult to predict to what extent the necessary staff could be hired from this pool and to what extent this would compromise the timeline for the new agency to become operational. Abandoning the decentralised type-approval system could result in considerable job losses in the technical services and their laboratories. These losses would probably be partly offset by hiring staff for the agency, but it is highly unlikely that the same number of jobs could be maintained.

In view of the above constraints and disadvantages which clearly seem to outweigh the advantages, Option 2 is discarded.

## 9. COMPARING THE SELECTED POLICY OPTIONS AND THEIR ENVISAGED ADJUSTMENTS

### 9.1. Summary of the qualitative assessment of the impacts of the selected policy options and their envisaged adjustments

Complementing the selected policy options with the envisaged adjustments is expected to increase the overall effectiveness of the type-approval framework. As such it will generate substantial benefits for society, but with a higher cost to regulators than the selected policy options on their own<sup>28</sup>.

Table 6: Summary of the qualitative assessment of the selected policy options with and without their possible adjustments

<i>Envisaged measures</i>	<i>Selected policy options in the impact assessment report</i>	<i>Selected policy options in the impact assessment report with further adjustments</i>
<b>Effectiveness</b>	moderate	very high
<b>Timeliness</b>	low	high
<b>Responsiveness to political &amp; public expectations</b>	low	high
<b>Estimated benefits for society</b>	moderate	high
<b>Estimated costs for:</b>		
<b>Member States</b>	moderate	high
<b>Commission</b>	moderate	high
<b>Technical services</b>	moderate	high
<b>Manufacturers</b>	moderate	moderate

### 9.2. Comparison of impacts of the selected policy options and their adjustments in terms of estimated reduction of the market share of non-compliant automotive products and reduction in environmental harm and avoidance of recall costs

#### 9.2.1. Estimated reduction of the market share of non-compliant automotive products and decrease in the probability of a large magnitude fraud event with large social costs

The reduction of the market share of non-compliant products is the yardstick used to estimate the effectiveness of the envisaged measures in terms of achieving better implementation and enforcement. The selected policy options could, based on the estimates, reduce the value of the market taken up by non-compliant products by €656 million per year. The combination of these policy options with their envisaged adjustments could increase this benefit to approximately € 1 billion/year. The estimated benefits for the selected policy options and their adjustments to address the identified problem drivers in terms of reducing the share of non-compliant products on the market, the number of reduced recalls and associated cost avoided is summarised in the table below.

The additional measures assessed in this document will significantly increase the chance of non-compliant products being detected and therefore act as a strong

<sup>28</sup>

The differences between this qualitative assessment and the one in the original Impact Assessment Report are due to the effect of the envisaged adjustments to the selected policy options. They do not stem from a re-appraisal of the originally selected options.

deterrent to manufacturers to try to avoid compliance with the rules. Therefore the environmental harm stemming from non-compliant products will also be avoided. While it is not possible to assess this quantitatively, it should be clear that the environmental benefits of avoiding a major non-compliance with the exhaust emission requirements case are considerable. Especially, the additional pollutant emissions that resulted from the VW case and their negative impact on air quality can be assumed to be significant due to a very high number of affected vehicles. However, this effect cannot be quantified yet precisely.

The additional costs incurred by manufacturers are unlikely to increase the prices to final consumers. Even if full pass-on is assumed, the costs of type approval per vehicle should stay roughly in the same range as indicated in the impact assessment of the selected policy options (€ 5-15 for large volume passenger cars). At the same time, the measures would reduce the costs to consumers associated with recalls (opportunity cost of time as presented in the table below, fuel costs of driving to the garage etc.) by promoting compliance.

Table 7: **Estimation of the monetised benefits of selected options and their envisaged adjustments for the problem drivers identified**

<i>Estimation of the monetised benefits of selected options and their envisaged adjustments for the problem drivers identified</i>							
	<b>Problem driver A</b>	<b>Problem driver B</b>	<b>Problem driver C</b>	<b>Problem driver D</b>	<b>Problem driver E</b>	<b>Problem driver F</b>	<b>TOTAL*</b>
Market value reduction of non-compliant products							
Selected policy options <sup>29</sup>	188	94	124	-	250	-	<b>656</b>
Envisaged adjustments to the selected policy options	-	47	62	-	125	117	<b>351</b>
<b>Total</b>	<b>188</b>	<b>141</b>	<b>186</b>	<b>-</b>	<b>375</b>	<b>117</b>	<b>1,007</b>
Avoided costs to consumers by reduced number of vehicle recalls							
Selected policy options	-	7.2	13.6	-	13.2	-	<b>34.0</b>
Envisaged adjustments to the selected policy options	-	3.6	6.8	-	6.6	8.5	<b>25.5</b>
<b>Total</b>	<b>-</b>	<b>10.8</b>	<b>20.4</b>	<b>-</b>	<b>19.8</b>	<b>8.5</b>	<b>59.5</b>
<b>Estimated total benefits</b>							<b>1,066.5</b>
* in € million/year							

<sup>29</sup>

See Impact Assessment report which this document is accompanying

9.2.2. *Estimated costs for implementing the selected options and their envisaged adjustments*

The estimated value of the main costs for implementing the selected policy options and their envisaged adjustments, as well as their combination is summarised in the table below.

**Table 8: Summary of costs estimates for implementing the selected options and their envisaged adjustments**

<i>Summary of costs estimates for implementing the selected options and their envisaged adjustments (€ million/year)</i>							
	Problem driver A	Problem driver B	Problem driver C	Problem driver D	Problem driver E	Problem driver F	Total*
Indicative costs to manufacturers							
Selected policy options <sup>30</sup>	90	-	-	-	-	-	90
Envisaged adjustments to the selected policy options	-	10	-	-	-	-	10
<b>Total</b>	<b>90</b>	<b>10</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>100</b>
Indicative costs of market surveillance by Member States							
Selected policy options	-	10	-	-	-	-	10
Envisaged adjustments to the selected policy options	-	182	-	-	-	-	182
<b>Total</b>	<b>-</b>	<b>192</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>192</b>
Indicative costs of implementation & enforcement by Member States							
Selected policy options	-	-	-	-	-	-	-
Envisaged adjustments to the selected policy options	-	-	-	-	-	28	28
<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>28</b>	<b>28</b>
Indicative costs for technical services							
Selected policy options	-	-	3	-	-	-	3
Envisaged adjustments to the selected policy options	-	-	9	-	-	-	9
<b>Total</b>	<b>-</b>	<b>-</b>	<b>12</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>12</b>
Indicative costs for EU to monitor and supervise							
Selected policy options	-	-	-	-	-	-	-
Envisaged adjustments to the selected policy options	-	-	-	-	-	11	11
<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>11</b>	<b>11</b>
Indicative overall cost estimates of implementing the selected policy options in combination with their adjustments							343
* in € million/year							

## **10. CONCLUSIONS**

Despite the high degree of uncertainty about the robustness of the estimates made for the benefits the selected policy options could generate, and the need to make some extrapolation assumptions on the effectiveness and costs for their envisaged adjustments, one can nevertheless conclude that overall, the estimated costs of implementing the selected policy options with their adjustments are at least an order of magnitude lower than the estimated benefits. The preferred overall policy option is, therefore, to complement the selected policy options that have been identified as the most cost-efficient ones in the IA report by the adjustments identified in this complementary analysis document.

## **11. MONITORING AND EVALUATION**

The same key indicators as identified in the original Impact Assessment Report would be used for the envisaged adjustments to the selected policy options.

These would be complemented by the following specific key indicators to measure the success of the additional measures envisaged by these adjustments:

- Number of technical services audited, and the impact of e audits on the designation of these technical services (ration of extensions, suspensions and withdrawals)
- Number of vehicles subject to ex-post compliance verification testing and the resulting actions from these actions (ration of number of vehicles confirmed to be in conformity, number of vehicles showing non-compliances, number of vehicles recalled as a result of the outcome of the compliance verification testing)
- Changes in the patterns for the manufacturers' selection of the type-approval authorities and the associated designated technical services for obtaining type-approvals as a result of the changes in the remuneration system.

The type-approval framework has been substantially updated in 2007 with Directive 2007/46/EC, followed by a simplification exercise in 2009 with the General Safety Regulation No 661/2009. The fitness check on this framework, carried out in 2013, has demonstrated that a reasoned review of all the framework provisions was not possible due to a number of transitional provisions not yet having entered fully into force and the lack of experience with regard to the implementation of the newly introduced provisions. The lesson to be drawn from this is that a next review would only make sense if sufficient time is allowed for building the necessary experience to collect relevant evidence of the effects the selected policy options and their envisaged adjustments will generate (i.e. at least 5 years after its entry into force).

## **12. TRANSPOSITION AND ASSISTANCE ISSUES**

A central role for assisting Member States in implementing the selected policy options and their envisaged adjustments will be given to the Enforcement Forum, in which the Commission and Member States will develop strategies for implementing the new measures, with view to ensure the highest degree of coherence and consistence in their implementation.

Budgetary allocations will be made in the EU budget to cover the costs of participation of Member States in the meetings of the Enforcement Forum, as well as for their

participation in the joint audits of technical services and the peer-reviews of national type-approval authorities. In addition, technical assistance to Member States will be provided by JRC to harmonise the procedures for carrying out ex-post compliance verification test on vehicles already placed on the market.



**ANNEX 1      JOINT LETTER OF 11 JANUARY 2016 BY MEPS PETER LIESE, MATTHIAS GROOTE, GERBEN-JAN GERBRANDY AND CATHERINE-BEARDER**



Brussels, 11 January 2016

Dear Commissioner,

We are writing to outline our demands for the future reform of Europe's testing system in light of your current work on the review of Directive 2007/46/EC establishing the type-approval framework for motor vehicles.

The recent emissions scandal lay bare the inadequate and weak testing system in place in many Member States and the urgent need to make that framework more transparent, accountable and effective. It is deplorable that there is no consistent data exchange mechanism today – not even for the Commission – on what vehicles are type-approved where and to what standards, nor any clear obligation on national type-approval authorities (TAA's) to test production cars or launch investigations. The current system of leaving all implementation of Directive 2007/46/EC to Member States has thus clearly failed.

While we recognize that there are many improvements that you are already considering in your current discussions, we would like to call on you in particular to include the following changes:

- There should be effective EU oversight of the work of national TAA's to ensure they all work to one consistent quality standard. This must include audits of the work of authorities; and conformity checks on new and low mileage vehicles in normal driving to verify emissions are consistent with certified values
- Commercial relationships must end between vehicle manufacturers and Testing Services and TAA's. Organisations involved in approving vehicles must be genuinely independent
- The Commission must have the power to disqualify, for a specified period, national TAA's and testing services from providing services as part of vehicle approvals where serious or consistent failure is found
- In the interest of the EU Single Market, the European Commission should in the future levy penalties for non-compliance with EU vehicle legislation
- The European Commission must be informed of all approvals being issued. Any requests for exemptions or extensions to approvals must be agreed jointly by the European Commission and TAA
- The new law should spell out clear, binding and quantitative obligations on national TAA's such as the exact amount of conformity of production and in-use compliance tests they need to carry out annually
- To provide transparent publicly available information about the approvals being issued and the outcomes of all testing both for initial type-approval and performed as part of conformity checks. This shall include the results of audits and checks performed by the Commission.

In the aftermath of the emissions scandal, we have a unique opportunity to put in place an effective and robust testing system that would avoid the current weaknesses. This is needed to restore the loss of confidence in Europe's car regulations and maintain the dominant status of EU automotive regulations globally that provides a significant competitive advantage to the European car industry.

We call upon you to take the above points into account and looking forward to working with you when the proposals come for our consideration early next year.

Yours Sincerely



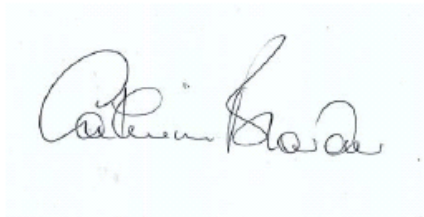
Peter Liese MEP



Matthias Groote MEP



Gerben-Jan Gerbrandy MEP



Catherine Bearder MEP

CC: Vice-President Jyrki Katainen  
Gwenole Cozigou, Director-General, DG Growth  
Joanna Szychowska, Head of Unit C4, DG Growth

**ANNEX 2      LETTERS AND REQUESTS FOR INFORMATION SENT BY THE COMMISSION TO  
MEMBER STATES**

<b>Requests and letters sent by the Commission</b>	<b>Sent on</b>	<b>Deadline for replies</b>	<b>Replies by MS by 04.01.2016</b>
Request by the Head of Unit of Automotive and Mobility Industries, to the members of the Type-Approval Authorities Expert Group (TAAEG) for information available regarding the enforcement of the existing type-approval requirements	8 October 2015	End of October 2015	17 Member States have sent replies (AT, BE, BG, CZ, DE, ES, FR, IRE, IT, LUX, LV, MT, NL, PT, RO, SE, SI);
Letter by Commissioner E. Bieńkowska to Ministers of the Competitiveness Council, Transport Ministers and Environment Ministers requesting information on national investigation measures regarding VW.	14 October 2015	End of November 2015	22 Member States have sent replies (AT, BE, BG, HR, CZ, DE, DK, ES, FR, FIN, HU, IRE, IT, LT, MT, NL, NO, PT, RO, SE, SI, SK); (for summary of the replies, see Appendix)
Letter by Commissioners E. Bieńkowska and M. Arias Cañete regarding irregularities in determination of CO <sub>2</sub> levels	5 November 2015	End on November 2015	12 Member States have sent replies (BE, LT, SI, ES, SE, UK)
Letter by Director of Industrial Policy and Economic Analysis Department to the members of TAAEG and TCMV about measures Member States plan to undertake based on Article 30.3 of Directive 2007/46 regarding vehicles not in conformity with the approved type	22 October 2015	3 November 2015	10 Member States have sent replies (BE, CZ, FR, HU, IT, LUX, NL, RO, SK, UK);

**APPENDIX: INFORMATION ON NATIONAL INVESTIGATIONS ON POSSIBLE NON-COMPLIANCE WITH THE EXHAUST EMISSION REQUIREMENTS**

On 15 October 2015, in the framework of the meeting of the national type approval authorities and the Commission, the German type-approval authority (KBA *Kraftfahrtbundesamt*) informed that vehicles with diesel engines EA189 (Euro 3, 4 and 5) of the VW, Audi, Skoda and Seat brands were affected by non-conformities regarding "engine characters in conjunction with the particular emission stages". The KBA also informed that, from its "point of view the non-conformity is with regard to the use of a prohibited defeat device according to Article 5 of Regulation (EC No715/2007)" (Euro 5/6).<sup>31</sup>

Based on its findings, the KBA ordered a recall of the VW affected vehicles that it type-approved. The recall should start in 2016. The KBA also invited all other national type-approval authorities do the same for vehicles registered in its territories. Moreover, the KBA invited in particular those authorities that approved Audi, Skoda and Seat vehicles to "initiate the necessary measures" according to the safeguard clauses of the Framework Directive on type-approval (Art. 30 of Directive 2007/46). According to public information, recalls in all EU Member States would affect 8.5 million vehicles.

On 3 November 2015, Volkswagen announced it had also discovered irregularities in the CO<sub>2</sub> emission levels of a number of engines (1.4, 1.6 and 2.0-liter diesel engines) produced starting in 2012. Up to 800,000 cars could be affected.

In reply to these new revelations, the Commission invited Volkswagen to speed up its internal investigation to clarify without delay what kind of CO<sub>2</sub> emissions irregularities were found, what had caused them, which cars were affected, where they were registered, and what measures the group would undertake to remedy the situation. In addition, Commissioners E. Bieńkowska and M. Arias Cañete jointly asked Member States in a letter of 5 November 2015 to widen their investigations to establish potential breaches of EU law in the context of the certification of official fuel consumption and CO<sub>2</sub> emission values.

The above investigations are still ongoing.

The table below summarises the replies the Commission received from Member States on the actions undertaken.

The Commission is currently verifying whether all Member States put in place effective, proportionate and dissuasive penalties to sanction infringement of the type-approval rules. The purpose of that verification is to assess the need for further adjustments to the penalty provisions.

MS	What measures have the relevant authorities taken to launch the necessary investigations at national level regarding, among others, type-approvals that were granted to the concerned vehicles as identified by Volkswagen?	Have type approvals been granted?	How many vehicles were fitted with defeat devices?	Have the Member States launched any specific action regarding the manufacturers concerned, according to Article 30 of the Framework Directive 2007/46/EC and what were those actions?	Are Member States aware of vehicles, including from other manufacturers, other than the ones already identified by Volkswagen, which would not be in compliance with Regulation (EU) No 715/2007?	What type-approval tools are appropriate for investigating the kind of situations that we are now confronting and correctly enforce the European law?	What market surveillance tools are appropriate for investigating the kind of situations that we are now confronting and correctly enforce the European law?	Should the current legal framework, notably Regulation 715/2007/EC on Euro5/6 and the Framework Directive 2007/46/EC, be improved in this respect?	Regulation (EU) No 715/2007 on Euro5/6 in its Article 13 requires Member States to establish penalties for the breach of the Regulation. Commission would like to ask Member States to provide information about their national measures implementing this obligation, in particular about the level of penalties as well as information about the application of this provision.	Several studies have shown significant and growing divergence between current test cycle CO <sub>2</sub> measurements - New European Drive Cycle (NEDC) - and those being observed in real world driving. Are the Member States aware of such divergences?	What measures are the Member States taking to ensure that such divergence does not result from unlawful practices?	In case unlawful practices from manufacturers are uncovered, what are the measures envisaged to ensure compliance with the legislation?
<b>Austria</b>	None since AT has not granted any Euro 5/6 type approvals	No		Supervise KBA actions for registered vehicles in AUT via the AUT system for recall	Not yet		Harmonised provisions are missing how the market surveillance shall be conducted	Action in case of non-conformity.	5000 Euro	Yes	None	
<b>Belgium</b>	Explanation from VW requested	No	414889	No	No	RDE	Mandatory Market Surveillance	WG on improvements	Art 3-5 Law of 21 June 1985	Yes	None	RAPEX, Art 3-5 Law of 21 June 1985

<b>Bulgaria</b>	Questions to company representatives							No penalties to economic operators	incorporating market surveillance principles in the framework Directive would be beneficial but with taking full account of the basic principles of type-approval system			
<b>Croatia</b>	Questions to VW importer; created a commission consisting of different stakeholders to decide on how to proceed	No	30000	Received information about KBA actions	No	Still analysing						
<b>Czech Republic</b>	Ordered testing of SKODA vehicles (EURO 5 and 6) according to KBA rules	No	230000	Only testing	No	RDE	To review			1,85 mil. Euro max.	Yes	Common approach needed
<b>Cyprus</b>												
<b>Denmark</b>	None; following the situation	No		No	No					withdraw TA, fines, up to 4 months prison	Yes	Expects improvements with WLTP
<b>Estonia</b>												
<b>France</b>	Launched an investigation of 100 cars from different manufacturers. With assistance from JRC	No	967585	No action except of the investigation	No	Endow COM and JRC with more initiative power to control, investigate and penalize; protocol for revealing DD			Need for appropriate and harmonized penalties		Yes	About to introduce WLTP, representative driving conditions
<b>Finland</b>	None; following the situation	None		Not at this stage	Not at this stage	Independent spot checks	Closer coordination			Against importers: obligation to recall and repair vehicles; withdrawal of vehicles	Yes	Market surveillance, CoP
<b>Germany</b>	Yes, extensive measurement programme	Yes		Asked for detailed action plan and schedule. ( recall)	Not for the moment, but investigating	Review effectiveness	Review effectiveness	Review Defeat devices and re-testing (ISC) provisions		Partial revocation to annulment of TA, criminal charges possible		
<b>Greece</b>												
<b>Hungary</b>	Questions to company representatives.	None		No, pending more info	Not yet, asking other reps	RDE/ ISC will improve				According to 715/2007		

	No answer yet.											
<b>Italy</b>	Testing campaign for M1 5b Diesel vehicles, compare results with RDE tests	Yes	650000	Awaits info from KBA	not at this stage	RDE		Incorporate market surveillance	Info previously provided to COM	Yes	WLTP, verification of emissions during homologation and COP testing	Withdraw TA, in single cases criminal penalties for business fraud
<b>Ireland</b>	None since Ireland was not involved in the approval of any of the vehicles identified by VW	No		No	Not yet, asking other reps		Include PEMS testing	OBD improvements, no self-certification	Implemented in national laws	Yes	Welcomes new measurement in regulation	
<b>Latvia</b>												
<b>Lithuania</b>	Yes- damage to environment	No	7000	No, observing	No		Recalls/withdrawals as in L-cat. Market supervision strengthened	Improvements are needed	Note and limit of time to remove, invalidate CoC, Cancel TA, Up to 6 months no this type of vehicles,	Complaints from users		
<b>Luxembourg</b>												
<b>Malta</b>	Contacted KBA and local importers of VW			Not yet; awaiting info from KBA	No	RDE	Coordinated enforcement - like PROSAFE	RDE	Product Safety Act part IV (fine and possible imprisonment)			
<b>Netherlands</b>	Letters to manufacturers.	Yes - to 22 manufacturers but none to VW group		Awaiting info from KBA	No info. but JRC, TNO AECC studies have shown divergences in NOx emissions	Manufacturer should declare that vehicles comply with RDE under all valid conditions; Currently TAAs can only withdraw TA.	Need to apply MS also for LDV	Market surveillance in FWD	2 yeas prison, max 19500 Euro under economic offence violation	Yes, also noticed by consumers. In major part this is attributable to the use of 'flexibilities' by manuf. Especially PHEV SUVs show large divergence	TNO does independent road load measurements and discusses with manuf.	
<b>Norway</b>	In touch with the importer in Norway and KBA		175000	Withdraw end-of-series vehicles	No	Spot checks; search for DD			Re-evaluation of taxation for registration of new vehicles to make sure they comply with national environmental law	Yes	Affected vehicles to be modified; criminal prosecution in case of unlawful practices	Expects improvements with WLTP
<b>Poland</b>												

<b>Portugal</b>	High-level WG to evaluate impact; questions to representative of manufacturers; may promote additional tests	No		No	No	Need more info from ongoing investigation		Improvements are needed	1) If natural person- 600-3000 euro; 2) If legal person- 1200-6000 euro			
<b>Romania</b>	Inter-ministerial Commission created; TAA asked VW for information	No	105000	Art 30 not appropriate; asked DE for official info	No	RDE		Improvements are needed	6 750 euro/vehicle, penal law for false declaration	Yes	None	
<b>Spain</b>	Questions to Technical Services about TAs to SEAT, requested information from other manufacturers	SEAT TA	680000	Stop end-of-series vehicles for all VW group	No	Current framework is sufficient, RDE is necessary		Incorporate market surveillance in Directive 2007/46/EC	600 000 Euro max.	Yes	Enforce Conformity Production, RDE and WLTP should improve the situation	Withdraw TA, fines, recall vehicles
<b>Sweden</b>	None	No	225000	No	No			Clarify definition of Defeat Devices (DD)	National legislation probably does not apply to manufacturers abroad	Yes	RDE	
<b>Slovak Republic</b>	No; waiting for further information	No		No	No			Review test to ensure detection of DD	2000-16 597 EUR		Only info from publications	
<b>Slovenia</b>	No, but in contact with KBA		Awaiting KBA info on recall	No	No	Satisfied with the recall procedure		RDE	In the Motor Vehicle Act			
<b>UK</b>												