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### **EUROPEAN COMMISSION**



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# COMMISSION STAFF WORKING DOCUMENT

# Accompanying document to the

Proposal for a
REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
concerning Type-approval requirements for agricultural vehicles

**Impact Assessment** 

{COM(2010) 395 final} {SEC(2010) 934 final}

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#### **BACKGROUND**

Type-approval requirements for agricultural and forestry tractors, their trailers and towed machinery (vehicles from categories T, C, R and S¹, hereafter referred to as agricultural vehicles) are currently contained within the Framework Directive 2003/37/EC² ( the "Framework Directive"). In addition to this, a series of Directives referenced in the Framework Directive contain detailed technical requirements relating to agricultural vehicles. The Framework Directive became mandatory on the 1 July 2005 for new types of tractors from categories T1, T2, and T3, and is mandatory for all new T1, T2 and T3 tractors as of 1 July 2009. For all the remaining vehicle types (categories T4, T5, C, R and S) approval requirements are currently optional or not yet available (Annex 3 includes detailed definitions of all tractor categories and in part C gives some information on how the type-approval system functions). To be noted that during creation and development of the complete type-approval system, for some time directives usually are of an 'optional' nature in order to facilitate those manufacturers that want to (and are able to) use the advantages of harmonisation while not creating undue burden to others. For authorities it allowed at the same time to adapt.

Type approval is legislation that has been addressed in the political initiative named "CARS 21"<sup>3</sup>. This initiative was set up in 2005 to carry out an automotive-related regulatory and policy review to advise the Commission on future policy options. One of the reasons for setting up CARS 21 was the concern expressed by automotive stakeholders that the cumulative cost of regulation had a negative effect on competitiveness, and made vehicles unnecessarily expensive. The CARS 21 Final Report<sup>4</sup> concluded that while most of the legislation in force should be maintained for the protection of consumers and the environment, a simplification exercise should be undertaken so as to rationalise the regulatory framework and move towards international harmonisation of requirements.

Concerning the **braking** requirements currently provided for in Directive 76/432/EEC for tractors it has been made evident that the directive needs to be updated and extended to the other categories covered by the Framework Directive. Draft amendments have been extensively discussed and should be concluded in the near future. These amendments will thus be integrated into the implementing legislation following the split-level approach which is explained in more detail below. As it may have serious implications the Commission will prepare a separate impact assessment report on this project

Information on the **market** of agricultural vehicles (more details are presented in Annex 4):

- a. For the tractor categories of T1-T2-T3, the EU type-approval (TA) is mandatory on the basis of Directive 2003/37/EC. Based on available figures 137,000 products were sold in 2005.
- b. The other categories defined in Directive 2003/37 can obtain on an optional basis as an alternative to national type-approval EC type-approval for specific aspects, based on separate directives. Sales p.a. in 2005: T4: 15,000; T5: 13,000; C: 5,000 R: 125,000 and S: 500,000.

Categories: T = wheeled tractors; C = crawler tractors; R = trailers; S = towed machinery

<sup>&</sup>lt;sup>2</sup> OJ L 171, 9.7.2003

http://ec.europa.eu/enterprise/automotive/pagesbackground/competitiveness/cars21.htm

http://ec.europa.eu/enterprise/automotive/pagesbackground/competitiveness/cars21finalreport.pdf

- c. Tractors are to a large extent produced by large manufacturers with multinational operations, while only a few are SMEs (with the exception of e.g. T4.1 (high-clearance tractors), which are produced virtually all by SMEs). In the category of trailers (R) and to some extent also towed equipment (S) there are many SMEs. No figures on SMEs are available (see annex 2). Some categories are mostly used in specific regions/areas: crawlers (C) especially in ES, IT, EL, FR; low-clearance tractors (T4.3) in mountains (AT, CH, IT).
- d. Users: 1. farmers, with or without personnel most or all are SMEs. 2. a large sector of contractors: companies working for farmers to provide for specific services, on each farm usually a limited number of days p.a. They are mostly using specialized (larger) equipment, like harvesters and fast tractors (T5). Contractors generally are SMEs (typically about 10 staff on average).

This simplification exercise has been planned in the "Commission second progress report on the strategy for simplifying the regulatory environment".

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<sup>&</sup>lt;sup>5</sup> COM(2008) 33 final, 30.1.2008, proposal n°47, p. 31.

#### SECTION 1: PROCEDURAL ISSUES AND CONSULTATION OF INTERESTED PARTIES

#### 1.1. Organisation and timing

Apart from its planning in the simplification strategy, this proposal forms part of the 2009 Commission Legislative and Work Program<sup>6</sup> and is scheduled in the Commission's Agenda Planning under the reference 2009/ENTR/001.

A Roadmap has been established for this proposal, including an impact assessment, and has been inserted in the Agenda Planning. An Impact Assessment Steering Group, consisting of interested Directorate-Generals was set up and met on 26 March 2009.

The impact assessment was presented to the Commission's Impact Assessment Board (IAB) on 13 May 2009. This version of the impact assessment has been amended to respond to the comments of the IAB. In particular, implications of the preferred options have been further detailed, as well as the positions of stakeholders; information on the markets for agricultural vehicles has been added; criteria for comparison have been amended; consequences for health, safety and environment have been spelled out; some editorial errors were corrected.

TRL Ltd. was contracted as external consultant in order to deliver an extended Impact Assessment study, while a public consultation took place to gather stakeholders' opinions.

#### 1.2. Public consultation

An open public consultation was run from 3 July 2008 to 12 September 2008 with the specific purpose of seeking stakeholder opinions on key aspects of the simplification of the provisions relating to type-approval of agricultural vehicles. In particular, stakeholder views were sought regarding the choice and format of the coming legislation, on the completion and the mandatory nature of the type-approval system, and on its scope and coverage.

The public consultation was: targeted at those groups that would be most affected by the proposals, including type-approval authorities in Member States, manufacturers, suppliers and consumers; published on a specific website created for the purposes of the consultation<sup>7</sup>; and published in English, French and German. The consultation document was also announced on "Your Voice in Europe" and sent directly to parties known to be interested in the policy.

The Commission has acknowledged the receipt of all stakeholder responses to the consultation, and these have been made publically available. 8

The Commission has analysed the comments made during the consultation and a full summary of these can be found on the DG Enterprise and Industry website. Further details regarding the consultation can also be found in Annex 1.

The written consultation was discussed in 2008 in a meeting of the Commission's Working Group on Agricultural Tractors (WGAT) to which all relevant stakeholders were invited, and supplemented by an impact assessment study (see section 1.3). The general attitude was positive, but with differing opinions on specific issues (i.a. on whether type-approval should be mandatory for all categories).

The public consultation met with the Commission's minimum standards for consultation.

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<sup>&</sup>lt;sup>6</sup> COM(2008) 712 final, Commission Legislative and Work Programme 2009. Acting now for a better Europe, 5.11.2008, p. 17.

http://ec.europa.eu/enterprise/automotive/consultation/agricultural vehicles/call.htm

http://ec.europa.eu/enterprise/automotive/consultation/agricultural\_vehicles/contributions.htm

http://ec.europa.eu/enterprise/automotive/consultation/agricultural\_vehicles/summary.pdf

### 1.3. External expertise

An impact assessment study ran from September 2008 to March 2009 with the aim of evaluating the economic, social and environmental impacts of the proposals relating to agricultural vehicles. In particular, the study focused on the simplification of the existing type-approval system and the development of type-approval legislation where it does not exist for certain vehicle categories.

The following statement by the contractor is to be noted: "The confidence in the estimates could be improved if additional responses and data were available from stakeholders. The lack of data has meant that some of the estimates made in this impact assessment have relied heavily on assumptions made by TRL or on anecdotal evidence from stakeholders."

Annex 2 gives a description of the tasks (to be) performed and the methodology used by the contractor.

#### SECTION 2: POLICY CONTEXT, PROBLEM DEFINITION AND RIGHT TO ACT

### 2.1. Policy context

Type-approval of agricultural vehicles has substantially evolved over the past thirty-five years: its nature has moved from being a system designed to allow free trade between Member States to a system based on compulsory whole-vehicle type-approval (WVTA) for most categories of vehicle. This system now aims to provide a high level of health, safety and environmental protection. Initially, after the adoption of Council Directive 74/150/EEC, the type-approval of agricultural vehicles was applied only to agricultural tractors fitted with pneumatic tyres having a design speed of less than 25 km/h. Since that time agricultural tractors, trailers and towed equipment have typically increased in size, weight, and technical complexity. In addition, many are now capable of much greater speeds, the distance they travel on public roads has increased, and differing agricultural traditions in different countries has led to greater diversity in designs.

Directive 74/150/EEC has been replaced in 2003 by the new Framework Directive 2003/37/EC, inter alia extending the scope to include trailers and towed equipment. In parallel a set of requirements has been developed for Non-Road Mobile Machinery, with Directive 2006/42/EC covering safety aspects. This directive will enter into force on 29 December 2009. In principle the two directives deal with different products (agricultural vehicles respectively non-road mobile machinery) but in practice some could be classified in both. When the machinery directive was adopted it was agreed that, for the time being, agricultural and forestry tractors would fall under this directive too for those risks not covered at that moment by the type-approval system. The Commission then committed to prepare the necessary proposals to eliminate the overlap between the systems thus created, to be adopted in Comitology in 2009.

Some of the separate technical Directives foreseen by the Framework Directive have not yet been fully adapted to this important technical progress: in those directives, requirements for some vehicles remain optional and therefore, no EC whole vehicle type approval can be issued for these vehicles and the internal market for these vehicles is therefore still incomplete. In the absence of uniform European standards being, Member States have imposed their own mandatory requirements and these often differ widely from one Member State to another.

Moreover, where no common standards exist at EU-level, cultural and traditional differences between farmers in different Member States may lead to different user preferences. Any of these factors can result in a fragmentation of the internal market for industry, i.e. manufacturers having to adapt particular types of vehicles to provide different specifications for the sale in different Member States, thus potentially increasing complexity and cost. For example, some Member States require ABS (anti-lock braking) on fast tractors (T5 – maximum speed over 40 and up to 80 or more km/h); one requires the front axle of a tractor to be connected for the purpose of braking in certain conditions, others do not; requirements on marking plates differ; another has no type-approval system at all for agricultural vehicles other than T1-T3; maximum axle loads are different between countries; a Member State notified various requirements for T4.1, T4.2, T4.3, C1, C2 and C3 tractors (requirements on stability, roll-over protection, driver seat, noise etc.); in some Member States braking systems are hydraulic, in others pneumatic.

#### 2.2. Problem definition

The Commission has identified three key problems associated with the current provisions for the type-approval of agricultural vehicles:

# 2.2.1. A Lack of Legal and Regulatory clarity and burdensome management

It has been pointed out to the Commission that the existing system for agricultural vehicles is too complex and that there is therefore scope for simplification and international harmonisation. At the same time, the completion of the internal market for agricultural vehicles could be done, by proposing to define the requirements which are currently lacking for some categories, despite that the Framework Directive in principle provides for EC whole vehicle type-approval for these categories. It is understood that this proposal does not suggest to increase the stringency of any existing technical requirements; where requirements are introduced for non-regulated categories / aspects, these should be at a level comparable to existing ones, suitably adapted to the category. The specific case of new requirements for braking of all vehicle categories will be dealt with in a separate IA study.

Agricultural vehicles currently have to comply with a series of requirements found in a number of separate Directives. The Framework Directive is linked to 23 technically detailed Directives, which have themselves been amended by 36 amending Directives, so as to ensure that they accurately reflect technical progress (for example, by applying stringent noise and exhaust gas requirements, higher maximum speeds and improved roll-over protection systems). For formal reasons all these separate publications stand on their own and must be applied individually.

In addition to this, many directives contain references to international regulations and standards, such as those from the UNECE, which are subject to amendments. Ultimately, the disparate nature of regulations relating to type-approval of agricultural vehicles leads to a lack of legal and regulatory clarity. Industry and regulators must be familiar with some 60 directives, and ensure that they are aware of and apply any amendments to international standards. This can be a burdensome process and results in additional costs for administrations and industry. For industry, it has been indicated that the compliance cost for type-approval has increased due to this regulatory complexity and uncertainty. This situation is particularly a problem for SMEs which operate on this market.

The type-approval system is generally recognised as an effective framework to tackle various aspects (road and occupational safety, environment). However, national authorities in charge of the correct application of the Framework Directive are facing unnecessary additional costs in their attempts to operate in this complex regulatory framework. Many stakeholders have called upon the Commission to simplify the regulatory framework in order to obtain a less burdensome and less time consuming approach to type-approval.

# 2.2.2. Resource-intensive transposition without adding value

The Framework Directive and its separate Directives provide for the technical requirements to be complied with when granting EC type-approval. Both the enacting terms of the directives and their annexes are highly detailed and leave practically no room for discretion of Member States when transposing them. Thus, some Member States simply make direct reference to those Directives, while others develop a completely new legislative text that is meant to correctly transpose those requirements.

Nevertheless, amending Directives have to be transposed by Member States, and this has led to difficulties for EU manufacturers, as national transpositions may slightly differ for example concerning dates of publication and entry into force and even (mis-) interpretations with

regard to the substantive requirements, leading to unclarity between type-approval authorities. This problem is inherent in any EU legislation adopted in the form of a Directive, but it is particularly prominent in this case where the requirements are highly technical, very detailed, and likely to be very frequently amended due to frequent adaptations to technical progress. Transpositions are then using resources in national administrations without adding any value in terms of safety or environment protection. Additional administrative resources are consequently required to solve such problems of interpretation, which happen on a regular basis in the so-called Type-Approval Authorities Meeting (TAAM) where representatives of Member States and the Commission services meet.

### 2.2.3. Functioning of the internal market

Requirements under the Framework Directive are mandatory since 1 July 2005 for all new types of tractors in categories T1, T2 and T3, and are mandatory for all new tractors in these categories from 1 July 2009 onwards. For the remaining categories of vehicles (T4, T5, C, R and S) EC whole vehicle type-approval is not yet mandatory; today it is optional for certain categories; the manufacturers may choose. For others, not all special requirements have been harmonized at EU-level yet, thus, EC whole vehicle type-approval is not yet available. The Framework Directive provides in Annex II Chapter B a table listing the requirements that are to be specified in the separate Directives, and will be necessary for obtaining EC type-approval for the different vehicle categories. In most cases, existing directives for categories T1-T3 cannot be directly applied to the remaining categories. This is because the test procedure is not adequate (e.g. caterpillar or "crawler" tractors ordinarily have no steering wheel but two handles, used to accelerate, steer and brake and there is no adequate test procedure for such a system under the present directive), or different limit values must be defined for those categories.

Consequently an EC whole vehicle type-approval cannot presently be granted to these other categories. A regulatory framework harmonised at the European level is thus lacking for these categories, preventing the realisation of the internal market until each of these technical requirements have been harmonized for the vehicle categories for which this has not been done so far. As such a process would be particularly resources and time consuming for both EU and national administrations, the question is raised whether the completion of the mandatory EC whole vehicle type-approval is needed for these categories, and whether it can be done in a simplification exercise.

The absence of (some) EU harmonized technical requirements can be explained as follows: in 1970 the EC started with its regulatory work, with priority for automobiles and production in large series, completed in 1992 with the revision of the relevant Framework Directive 70/156/EEC: the package became mandatory for passenger cars. In 1974 a similar system was set up for (wheeled) tractors: Directive 74/150/EEC. This was partially completed with the new Framework Directive replacing Directive 74/150/EEC and making Type-Approval possible (and mandatory) for the main categories of tractors: T1, T2 and T3 (80% of tractors market). As of today, the full series of related specific directives is not completed due mainly to lack of capacity in combination with the lack of priority and urgency (for stakeholders), even if the most complex and high priority issues like exhaust gas emissions have been covered and updated by the legislation for all categories, while others, like braking, are currently being addressed for completion and updating. Braking proposals should be covered in implementing legislation, updating existing requirements and adding such for categories not covered in the old directive. A separate IA is planned for this subject in 2009/2010.

Directive 2003/37/EC provides for mandatory EC whole vehicle type-approval in article 23

Annex 6 gives the overview of the specific directives needed according to 2003/37.

A further consideration to be taken into account when choosing between different alternatives is whether completion of the EC whole vehicle type approval system would be too costly for SMEs like trailer manufacturers and end-users, if it would be on a *mandatory* basis. One alternative could be to complete the set of requirements but leave whole vehicle type-approval *optional* (the choice being for the manufacturer) for those categories, thus allowing full EC whole vehicle type-approval (or component type-approval) for those -larger- industries who can benefit.

A drawback is that Member States may need to maintain a set of national rules and requirements, in parallel to the EC Regulation now being proposed. It should also be considered whether mandatory EC whole vehicle type-approval is desirable for reasons of safety or environmental protection (the more so, since exhaust gas requirements are already mandatory for all tractors).

#### 2.3. Community competence and subsidiarity

Prior to the establishment of an EC type-approval for agricultural vehicles, regulations were established at Member State level. This legislation set by Member States often differed and manufacturers selling on several markets were then obliged to vary their production according to the Member States for which their products were intended and had their vehicles tested in every Member State, which was time consuming and costly. Different national rules consequently hindered trade, and had a negative effect on the establishment and functioning of the internal market.

It was, therefore, necessary to establish standards at the EU level. The Framework Directive 2003/37/EC, based on Article 95 of the EC Treaty, was designed to do this and aims at establishing an internal market while ensuring a high level of protection concerning health, safety and environment. Such a rationale is still valid today as Community action is necessary to avoid fragmentation of the internal market and to ensure a high and equal level of protection across Europe. Any change to this regulatory framework will be assessed in its compliance with the principle of subsidiarity as established in Article 5 of the EC Treaty.

#### **SECTION 3: OBJECTIVES**

### 3.1. Overall objective

One overall objective is the exercise of simplification which is a response to the commitment of the Commission to act in accordance with the principles of Better Regulation. This overall objective can be subdivided as described in 3.2. and 3.3. hereafter. Simplifying the regulatory framework of the type-approval of vehicles is furthermore in line with the recommendations of CARS 21, which gathered expectations of various stakeholders. Applying now this process to agricultural vehicles aims at addressing the problems identified by the Commission on the basis of the stakeholder consultation. The simplification exercise has thus as general objectives the reduction of the legal unclarity, the deletion of resource-intensive transpositions, and a move towards a better coverage of these agricultural vehicles by the EU type-approval system.

<sup>&</sup>lt;sup>1</sup> for all categories, some time after completion of all the necessary separate directives: 3 years for new types, 6 years for all new vehicles.

A second overall objective is to make the free movement of goods in the internal market possible by completing the type-approval system for all categories of agricultural ad forestry vehicles.

#### 3.2. Objective 1: Simplification of existing acquis (by repeal of existing directives)

The simplification exercise aims at addressing the complexity of using a Framework Directive, 23 detailed technical Directives, 36 amending directives and a whole corresponding set of transpositions into national legislations and assessing which regulatory approach could allow less time-consuming and less burdensome adaptations to technical progress. A clearer, better structured and coherent legislation would also be in line with the Better Regulation commitment, which is an important objective for the Commission.

# 3.3. Objective 2: Improved regulatory capacity for future acquis (by new split-level regulatory approach with use of references to international standards)

Another part of the simplification exercise is the elimination of technical specifications in EC Directives by replacing them by references to standards set by other international organisations such as the UNECE, OECD, CEN/CENELEC and ISO<sup>10</sup>, which are widely accepted inside and outside the EU. Direct references to them are already used in the existing type-approval legislation, often as alternatives. Those standards are not made mandatory, but the manufacturer may opt for compliance with those standards instead of the requirements set by the EC directly.

Through these references, duplication of technical requirements is created in the EU legislation and among regulations and standards of these international organisations. The second objective of simplification is thus to see how these duplications can be reduced in order for stakeholders to not be confronted with several sets of requirements addressing the same aspects.

It must be emphasized that this is an exercise of simplification only, and that no change in technical requirements should be introduced by using references to international standards. Such references would in principle only be used if the level of safety or environmental protection of those international standards is the same as the one of the EC Directives, and no loss in safety or environment protection levels is foreseen.

#### 3.4. Objective 3: Completion of the single market

The EC whole vehicle type-approval system under the Framework Directive is not mandatory for categories T4, T5, C, R and S, but according to the text of the directive manufacturers can voluntarily apply for EC (whole vehicle) type-approval for vehicles of these categories. However, technical requirements for these categories have not been established<sup>11</sup> yet for many of the aspects and the option to obtain an EC whole-vehicle type-approval remains therefore theoretical, despite what is provided in the directive: vehicles of these categories can only obtain a whole vehicle type-approval under national legislation. It follows that in order to obtain access to the different national markets, the same vehicle may need a whole-vehicle type-approval from several Member States. The simplification exercise is an opportunity to complete the EU regulatory framework for these categories of vehicles, so that they can benefit from a single EU system which gives access to the whole European market.

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United Nations Economic Commission for Europe; Organisation for Economic Cooperation and Development; CEN, the European Committee for Standardisation, and CENELEC, the European Committee for Electrotechnical Standardisation; International Standardisation Organisation.

Chapter B Part I of Annex II of 2003/37/EC provides with the list of requirements under the specific directives, and requirements which still have to be defined are marked with the symbol "(X)".

#### **SECTION 4: POLICY OPTIONS**

For these objectives the following options were evaluated.

# 4.1. Simplification I: Simplification of existing acquis (by repeal of existing directives

#### a) Option 1: No policy change

No change would be made to the current regulatory framework: the Framework Directive would still define the EC type-approval system, while technical requirements would still be established under separate Directives, which require transposition into national legislations. Amending directives would also require transposition through national acts. The Commission will have to continue to monitor transposition.

# b) Option 2: Replace the current framework by two regulations

The Framework Directive, the 23 technical Directives and their 36 amendments would be repealed. A new Mother Regulation adopted by co-decision would contain the fundamental requirements of the EC type-approval system, while all detailed technical requirements would be gathered into a single implementing regulation, to be adopted and more easily updated in the future through the comitology procedure.

c) Option 3: Replace the current framework by a limited number of thematic regulations

Same as option 2, but the detailed technical requirements would be gathered into e.g. three thematic implementing regulations adopted by comitology procedure. Requirements could be grouped by coherent blocks under environmental aspects, road safety aspects, and occupational safety aspects<sup>12</sup>.

For both Option 2 and Option 3, beyond the implementing regulations mentioned before, further implementing acts would be needed in order to establish or modify certain annexes of the mother regulation containing detailed requirements for application forms, information folders, numbering systems, templates for approval certificates and other technical and administrative details which should not be adopted by the co-legislator, but by the Commission, using the comitology procedure.<sup>13</sup> In practical terms this means that these acts could after all be integrated in the main Regulation.

# 4.2. Simplification II: Improved regulatory capacity for future acquis (by new split-level regulatory approach with use of references to international standards)

a) Option 1: No policy change

No change would be made to the current framework, requirements and test procedures having to be followed as required under the 23 separate Directives.

b) Option 2: Use when possible references to UNECE Regulations

Similar to what has been introduced for motor vehicles in the General Safety Regulation (GSR), if equivalent technical standards have been defined by UNECE, the provisions of EC

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At this stage, the exact number of implementation Regulations has not been fixed yet.

Cf. Regulation 1060/2008, replacing certain annexes of the framework directive (2007/46/EC) for motor vehicles; OJ L 292 of 31.10.2008.

Directives should be repealed and replaced by a reference to these international standards. This option could take different forms which have to be assessed:

- Full references, where the text is fully copied and published by EU
- Simple fixed (static) references, where the EC legislation links to a dated international regulation
- General (dynamic) references, where the EC legislation links to a regulation of an international standardisation body, but without dating it: this would allow opening up to updates of these technical requirements.

From a point of view of legal certainty and control over EU legislation the latter possibility (dynamic reference) seems unacceptable; stakeholders agree on this. As a consequence this is not further analysed. It is intended to maintain the existing reference to motor vehicle directives, as far as they will continue to exist in the light of developments under the General Safety Regulation for those vehicles.

c) Option 3: Use references to all relevant international standards

Similar to option b), but now reference to OECD, CEN/CENELEC and ISO can be applied. OECD has introduced so called Codes for Roll-over Protection Systems, which are not available from UNECE; for other issues only standards from CEN/CENELEC or ISO exist.

In the table in annex 6 a preliminary indication is given of the international standards that could be used. This needs verification during the development of implementing legislation.

#### 4.3. Completion of the single market

a) Option 1: No policy change

No change would be made to the scope of the Framework Directive, the EC whole vehicle type-approval remaining optional, but de facto not available for categories T4, T5, C, R and S. Without any adaptation to technical requirements, the different national type-approval requirements will have to be complied with in order to obtain national type-approvals and have market access in different Member States of the EU.

b) Option 2: **Complete** the EC type-approval requirements and make EC type-approval **mandatory** for all categories of vehicles

The EC type-approval legislation will be completed for the categories not (fully) covered today. The missing technical compliance requirements for certain elements would be filled in. EC whole vehicle type-approval would be made **mandatory** for all categories presently covered by the Framework Directive, which means that vehicles from categories T4, T5, C, R and S would no longer have to pass national type-approval procedures: they should only fulfil requirements of EC type-approval and then gain access to all markets.

c) Option 3: **Complete** the EC type-approval requirements and leave EC whole vehicle type-approval **optional for certain categories** (T4, T5, C, R and/or S)

Like in option 2, the EC legislation would be completed, but the EC whole vehicle type-approval would remain optional for those categories. This would allow a manufacturer the choice between a national approval per Member State or an EU whole vehicle type-approval, the latter at probably higher costs but with the benefit of direct accessibility to the whole

<sup>14</sup> Cf. the explanation given under point 2.2.3. above.

internal market. The manufacturer would have an incentive to choose the profit maximising solution.

An alternative would be, as suggested by many stakeholders, to make certain requirements mandatory within this option. Some subjects mentioned are: braking, lighting and markings. This would harmonise those aspects within Europe and bring important road safety aspects up to a shared certain acceptable (minimum) level. For all tractors this already is the case for exhaust gas emissions requirements.

#### **SECTION 5: ANALYSIS OF IMPACTS**

# 5.1. Simplification I: Simplification of existing acquis (by repeal of existing directives)

#### a) Option 1: No policy change

Considering the positive side of no change in policy, it can be stated first that avoiding to change the whole regulatory framework will save the administrative cost necessary in national administrations to establish the new Regulation and repeal the current national legislation transposing the Directives. The extended impact assessment report presents the saving of €909.225 (average of values given by respondents; range from €18.225 to €3.653.100, caused by differences in legal systems in Member States; see TRL report paragraph 4.1.2) for this change in the 27 MS. This cost would be avoided if option 1 is chosen. If a look is taken at medium and long-term effects, this positive aspect is nevertheless weakened, because the annual cost of managing the current regulatory framework in the 27 MS is estimated at €533.993 (range: €29.160 to €2.435.400; TRL report paragraph 4.2.1.1), while it would be at €128.912 with a new Mother Regulation and an implementing Regulation. This situation can be explained by the different management requirements used by Member States administrations between the two legislative formats: an annual average cost per Member State of €19.778 in order to reflect the changes to Directives in their national legislation can be compared to an annual average of €11.858 for changes to implementing Regulations. Due to this difference, it can be calculated that the initial cost would turn to be beneficial from a cost/benefit point of view after a foreseen period of 3 years.

Apart from this budgetary point of view, the simplification process and replacement of the current framework Directive by a Regulation has not been opposed by stakeholders during the public consultation. Stakeholders welcome the simplification exercise and consider that the choice of a Regulation is a proper step on this way. But several actors, in particular industry, stress the need to deal firstly with other matters, considered to be more urgent<sup>15</sup>, before using time to tune the legal format of the regulatory framework. These actors underline that the simplification exercise should not delay such urgent dossiers. The shift to a Regulation is thus not opposed by stakeholders, but not deeply supported because of this scepticism on timing. This can be considered as a positive point for option 1, but it assumes that delays will indeed be introduced for dealing with current matters. The Commission services intend to tackle both aspects in parallel, using the comitology procedure (CATP-AT) to tackle urgent issues, in order for this negative input of the regulatory modification to be limited as much as possible. This impact can thus be considered as limited.

#### b) Option 2: Replace the current framework by two regulations

Replacing the Framework Directive and its set of 23 technical Directives (and 36 amending Directives) by one co-decision Regulation and one Regulation by comitology is proposed as an exercise of simplification. The proposal to apply simplification to agricultural vehicles responds to a clear demand coming from stakeholders in the public consultation, but also from the European Parliament, where several Members have expressed criticisms on the pointless complexity of the format of the current legislative framework, and asked the Commission to take measures to tackle this situation.

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One of these issues is to take agricultural tractors out of the scope of the Machinery Directive 2006/42/EC.

As mentioned above, replies from stakeholders during the public consultation have highlighted that a shift to a Regulation was welcomed as a simplification exercise. This proposal has also received the support of Member States representatives during the 83<sup>rd</sup> meeting of the Working Group on Agricultural Tractors, held on 21 November 2008. It must be stressed that in both cases the support is dependent on the format of the Regulation, which has to be of a split-level nature. Both Member States and industry insisted on the necessity of this approach: the functioning of the type-approval system, its scope and its fundamental requirements have to be included in the Mother Regulation decided by co-decision, while detailed technical requirements have to be contained in implementing legislation adopted through comitology procedure. Such a split-level approach allows a quick process of adaptation to technical evolution in the future. Commission services are aware of this demand and therefore intend to use this approach. The support for this format is thus a positive point for this option.

As far as administrative costs are concerned, the choice of such a format can be considered positive as well, because transpositions in national legislations will no longer be needed, and the Commission will also no longer be responsible for a time consuming scrutiny of these transpositions. Both national and EU administrations will thus benefit from this new format. As explained with figures in option 1, the cost of replacing the regulatory framework is quite high (estimated at €909.225), and this cost is a clear negative point for option 2. But taking a medium and long-term view (more than 3 years), the shift appears to be beneficial, and is then a positive point, which is well in line with the objective of simplification and reduction of administrative burden.

# c) Option 3: Replace the current Directives by four Regulations

The cost/benefit analysis did not show significant differences between cost to implement and operate one or three implementing Regulation(s); this reflects the view taken above that the difference between options 2 and 3 is small.

Actually, the exact number of implementing Regulations, setting technical requirements *via* comitology procedure, is not yet fixed. It is proposed to group these provisions by themes, like road safety, occupational (work) safety, and environmental protection aspects. Nevertheless, additional categories could be added, for example one for braking requirements.

This proposal should be seen as a generalisation for the simplification exercise, in order for technical experts in comitology to deal with sets of coherent groups of issues. This division is thus purely practical, intended to plan the adoption of the requirements, but will not indeed affect the requirements themselves. Such an approach using several sets of implementing Regulations is also seeking to increase the clarity of the regulatory framework for manufacturers which have to comply with it to obtain type-approval. It would be particularly the case if it is foreseen to choose the option of mandatory EC type-approval for vehicles in categories R and S, covering only aspects relating to road safety. This clarity for industry is an important benefit of the simplification exercise, considering in particular SMEs which have limited administrative resources to deal with complex regulatory requirements needed to obtain type-approval. This option for providing a clear and logical structure has been supported by industry representatives, for example during the stakeholders workshop organised by TRL on the 21 November 2008.

A negative aspect of using one implementing Regulation can be the length of processing: agreeing on one text including all requirements would indeed take a lot of time for the

<sup>&</sup>lt;sup>6</sup> Cf. point 4.3.

committee, which may need to involve different experts depending on the aspects covered. The positive side of grouping the requirements is the facilitation and rationalisation effects provided, by allowing experts to deal more coherently with aspects related to similar, limited objectives. And the timing issue can be minimised as implementing measures will be prepared in parallel to the co-decision process, allowing them to be adopted in a short term. The decision to go for one or a particular number of implementing Regulations should be agreed with the comitology committees.

It must be kept in mind that two issues have to be distinguished: one is the number of regulations to be adopted, the other one is the number of regulations finally obtained. What is intended to become one (Mother) Regulation could be adopted in several stages, with one original (basic) regulation which is later on amended by other regulations. Thus, while the legislative process could be split up for practical reasons, the number of legal instruments obtained in the end could still be very small. This might well be the most suitable answer to the different pros and cons deliberated in the preceding paragraph.

While the difference between Option 2 and Option 3 is rather small, the difference from Option 1 is major. By moving from directives to the legislative instrument of regulations, options 2 and 3 would do away with the need for transposition on the side of Member States and the need for transposition control on the side of the Commission, and all discrepancies between national transposition acts would be avoided. With the introduction of the split-level approach, the co-legislator could concentrate on issues which must be decided by Council and Parliament, while delegating technical and administrative details to the Commission without losing control (the regulatory procedure with scrutiny would be the applicable comitology procedure, which ensures final control of the co-legislator also for comitology acts).

#### Position of stakeholders

Member States: some expressed preference for Regulations for faster and clearer legislation (DE, FR, FI, UK), none were against. NL: could accept, but fears additional administrative costs. Only one ministry was in favour of New Approach directives. Some expressed that this project should not delay prioritary work on specific other proposals.

Industry: CEMA agreed with a regulation; scope should be clear and agreed in co-decision.

No opinion was expressed on the number of Regulations to be used.

# 5.2. Simplification II: Improved regulatory capacity for future acquis (by new split-level regulatory approach with use of references to international standards)

# a) Option 1: No policy change

Regulations of the UNECE, under the 1958 Agreement, are widely recognized in countries inside and outside the EU, and the EU has itself acceded to a lot of them. A similar situation takes place with standards produced by other international institutions, such as OECD, CEN/CENELEC and ISO. Many provisions of EU Directives relate to these standards, and as a result manufacturers whose types of vehicles comply with their requirements can gain access to EU and various other markets using these same requirements. In practice, a manufacturer usually selects among those organisations the single most appropriate approval standard in order to get approval for a component or a type of vehicle. This promotion of international standards is thus supported by industry. But in the current situation, provisions are often duplicated in the European legislation, or are similar in technical requirements but

differ in formal details. An example is the date of entry into force of an amendment to a Directive, which usually is different as a result of (lengthy) procedures to update the Directive after e.g. UNECE introduced an amendment in its Regulation on the same subject. This causes unclarity and unnecessary administrative burden.

The positive point in "no policy change" is that no risk of loss in quality of requirements would be introduced by replacing provisions of EU Directives by references to international standards. Indeed, many respondents to the public consultation have expressed their worries that the referencing exercise could introduce loss in safety or environmental protection. But the negative side of option 1 is that the unclarity for manufacturers and administrations will remain, which is not in line with the Better Regulation objective, in particular because the duplication is considered as useless in terms of safety or environment. Continuing this approach would thus only add additional administrative burden on stakeholders. To reply to the worries about a weakening of requirements, it is stated clearly in the objectives that references will be proposed only in cases where the international standards are at least equal to the relevant EU Directives. This argument for the support of option 1 can thus be assumed to be non-applicable.

# b) Option 2: Use where possible references to UNECE Regulations<sup>17</sup>

This option, also applied in the General Safety Regulation for motor vehicles, is widely supported by stakeholders, as expressed in replies to the public consultation. The main positive point is that the legislation will be simplified by suppressing useless duplications. This will benefit all actors dealing with this legislation, being national authorities responsible for type-approval, or manufacturers whose vehicle types have to comply with these requirements. This will in particular benefit the SMEs which have limited resources to be attributed to regulatory affairs. The extended impact assessment done by the contractor has tried to quantify the changes implied by the references, offering a cost/benefit analysis of the different aspects of this shift.

Considering the cost of type-approvals for manufacturers, it has been estimated from previous studies and stakeholders' feedback that it would be approximately €15.000 per type on average. The cost of one whole vehicle type-approval taken individually can be above €100.000, but practically most manufacturers use a family approach, using results from one type to approve other types of vehicle. For example, a cab structure approved for the roll-over protective structure (ROPS) test can be used several times for different vehicle types using various engines and devices: the costly ROPS test would not need to be done again and again. This situation allows manufacturers to reduce costs and administrative burden. Using references to international standards and repealing EC Directives duplicating them is not likely to change this functioning. Manufacturers will continue to select the approval tests needed among UNECE and remaining EC standards. There will be no additional administrative or type-approval costs. Requirements of repealed Directives will be replaced by equivalent requirements. There is therefore no cost, but no direct benefit either in terms of cost reduction for manufacturers. The foreseen benefit will be the simplification and the clarification of the regulatory framework, but this is particularly hard to be quantified.

Considering the cost of attendance to meetings of EU, UNECE, OECD, ISO and CEN, it has been estimated that the average annual cost for all participants is €1.135.085 (range:

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Presently 8 Regulations specific for tractors and some 12 for motor vehicles which can applied to this sector too.

€310.536 to €2.608.200; TRL report paragraph 4.2.1.2). This cost is high and the simplification exercise could help to reduce it. Nevertheless, Member States representatives indicated that the proposed changes to the current type-approval framework will not put into question the necessity for them to attend meetings of these international organisations. A simplified regulatory framework could thus not claim to reduce costs for national administrations to this respect. Member States which mentioned a reduction stated it as being very limited, and difficult to quantify. As far as industry representatives are concerned, stakeholder feedback suggested also that the impact on attendance to meetings might be very limited. However, even if difficult to assess, there will be a reduction. For example, if all lighting requirements were based on UNECE Regulations, with only references in EC Regulations, there would still be a need to attend meetings of both organisations, but the work in EC working groups would be reduced, because it would only be necessary to agree on the updated version of the UNECE Regulation and to change the reference in the EC Regulation. As a result of this situation, a reduction of up to 10 % on annual meeting costs is assumed to take place, which means an annual benefit of €56.574 (average; TRL report paragraph 4.2.2.2). This benefit will compensate the initial cost of introducing a new Framework Regulation with references and repealing the current Directives (estimated at €533.993) after a few years.

Another aspect of the quantified cost/benefit assessment of using references to international standards is the reduction of translation costs. The annual cost for translations under the current regulatory system is estimated at €55.688 (average), because amendments to a Directive need to be translated into all languages. This cost should no longer be required if references to international standards are used. Nevertheless this benefit would exist only if the option of fixed references is used, with only the mention of the code of the international standard, and not a full reference with the text of the standard fully transferred or separately published by EC. However, even in the case of simple static references - which seem to be the most likely option - the Commission can commit to translate the texts of these international standards. It is already the case for UNECE, and it has been requested for OECD Codes.

To summarize, quantified benefits of using references are limited, but costs are also very limited. The global assessment is that this change has a very low impact for both manufacturers and EC and MS in terms of administrative or type-approval costs. The cost/benefit assessment is thus slightly but globally in favour of these references. The main argument for this option is therefore the simplification: a regulatory framework with more clarity will benefit both manufacturers seeking type-approval and administrations updating regulations to technical progress in an international environment. In addition, today the Commission services work on their own documents and on those from UNECE, OECD, etc. It would be much easier and more cost-effective for the Commission services and for the representatives of Member States in the working groups if the technical details were no longer duplicated in different set of legislations.

c) Option 3: Use references to all relevant international standards
Similar to option b), but now reference to OECD, CEN/CENELEC and ISO can be applied.

A certain number of subjects is dealt with in other international organisations than UNECE. In relevant cases the EU may wish to reference those other standards, for example the OECD Codes on roll-over protection systems. In other cases we can refer to CEN/CENELEC or ISO standards.

A further difference may be caused by the influence of the parties involved in decision making; in UNECE the EU has full voting rights, which is not the case in the other

organisations. Also, standards from CEN/CENELEC and ISO are mostly about definitions and test procedures, but do not contain limit values for approval or rejection.

Stakeholders from industry clearly expressed a preference to refer to ISO standards above UNECE and OECD. Furthermore there is an ongoing process to harmonise requirements between OECD and ISO, producing one single standard for both organisations for certain subjects.

In all cases of reference to international standards the Regulation should provide that the EU can act independently to introduce differing amendments if necessary.

#### Position of stakeholders

Member States: DE, FI, FR, NL, UK favourable to the use of international standards, especially UNECE and OECD, with some conditions (static reference; CoP requirements). None was negative.

Industry: General support, with preference for ISO standards; OECD and UNECE as alternative.

The idea of legislation based on New Approach was supported by one ministry (DK); others were against and insisted on sticking to the existing type-approval system (with either a Reg. or a Dir.).

#### **5.3.** Completion of the single market

The **baseline** (no change in policy) has been considered the completion of requirements on a mandatory basis as described in the current Framework Directive. The **preferred option** (3) considers the completion of all requirements, on a mandatory basis, for all tractors (for reasons of road and occupational safety and environment), while on an optional basis for trailers and towed equipment with the exception of the main road safety aspects that shall be made mandatory too. It has been considered that the baseline will not be achieved for a long time and will represent a problem in particular for SMEs it would be a problem.

#### a) Option 1: No policy change

Basically Directive 2003/37/EC provides for mandatory EU type-approval for all categories of agricultural and forestry vehicles (as soon as all relevant separate Directives would be available). At the moment of writing this report, vehicles from categories T4, T5, C, R and S should in principle be able to apply for EC type-approval on a voluntary basis. In the present situation technical requirements for many subjects still have to be adapted for this to be possible. In this situation, safety objectives set at the European level are not reached, and these vehicles have only to comply with provisions of national type-approval systems (as far as they exist). The free movement of these goods across the European market is thus not possible, as a same vehicle has to be approved in each country where a manufacturer wants to sell it or a user wants to use it. For some manufacturers and some types of product it is little or no problem (SME; small series for local/regional markets only). Larger manufacturers may produce larger series for many markets and wish to obtain EU type-approvals.

This option requires that Member States continue to implement future EU Directives and COM shall monitor this. To agree on the applicable technical requirements for categories T4, T5, C, R and S and producing such detailed Directives is a time consuming and sometimes cumbersome procedure.

b) Option 2: **Complete** the EC type-approval requirements and make EC type-approval **mandatory** for all categories of vehicles, as intended in the present Framework Directive

The expected main benefit of this option is considered to be that for society thanks to road casualties reduction (TRL: up to €51 million; paragraph 4.3.2.8), but the statistical basis for this assumption is very limited.

Going for mandatory EC type-approval for these categories T4, T5, C, R and S would help manufacturers saving costs of approving their vehicles in the different national type-approval systems. Vehicles are sold on average in between 4 and 14 Member States, which would indicate much less administrative costs for manufacturers if only one EC type-approval would be needed. This would allow the development of the internal market of this sector, and help manufacturers to develop by accessing various European markets. It may be an interesting option when considering that most manufacturers of vehicles in categories R and S are SMEs: these manufacturers would benefit from access to a wider market for less administrative burden and costs. But it must be highlighted that this option would introduce new European standards replacing national ones, and that this shift could imply important costs for manufacturers in order for their vehicles to comply with these new safety and environmental requirements. This is particularly a problem when considering that additional costs will be passed on to users and consumers of these vehicles, which are often SMEs: farmers, contractors and forestry enterprises. Establishing new mandatory requirements at EU-level has thus to be well assessed, in order to be cost/beneficial and not to add unnecessary costs on manufacturers. During the public consultation, the wide majority of stakeholders have replied that a completion under certain conditions is very welcome, and option 1 is thus not supported, but both administrations and manufacturers have expressed demands on how this completion should be made, with distinctions among types of requirements.

As stressed by stakeholders during the public consultation, a completion of the internal market is welcomed for these categories, and the EC type-approval system is supported as a good instrument for this purpose. But the mandatory version of option 2 is very unlikely to be applied: cost/benefit calculations must be done for each category, and the various aspects of the type-approval must be distinguished. As far as vehicles in categories C, T4, and T5 are concerned, stakeholders have agreed that, considering their use on the road and their higher speed capabilities, they should comply with common road safety requirements, and thus have mandatory EC type-approval for these aspects. Where these vehicles are used by larger companies or contracting firms, the additional cost of new requirements would be borne by large manufacturers and is not likely to add more costs on SMEs. For the larger manufacturers of these vehicles, the benefit would be less administrative costs for type-approval, and an easier access to markets.

Concerning the **T4.1** category (high-clearance tractors, used in vineyards), industry representatives have highlighted that these types of vehicles are currently covered by the exemption for small series existing in present the Framework Directive. The Commission services do not foresee modification of this exemption. If T4.1 category is to be included in the mandatory EC type-approval system, those types of vehicles can thus continue to be approved under the small series exemption. There will be therefore no cost for this enclosure. However, opting for the mandatory EC whole vehicle type-approval would cause manufacturers and administrations to prepare the ground for common road safety requirements for such vehicles, in case their market grows and is consolidated across Europe, which will impede the use of the small series exemption.

Concerning the T4.2 category (very large tractors), the feedback from manufacturers suggested that the current situation offers a large variety of situations among Member States in terms of technical requirements and road safety provisions. In the meantime, these types of vehicles are sold across the EU (typically in about 10 MS) which means that there is no common market for them and that manufacturers and users suffer from administrative and design/production costs due to the different national technical requirements. Mandatory EC type-approval could lead to a reduction of the cost of design, and finally to a reduction of the final cost of the vehicle. This would be an additional benefit, together with the benefits of having a common market established for these goods. The impact on the final price has been assessed in order to indentify the cost/benefit analysis on users, which include SMEs. It has been estimated that a reduction of 2% could occur, which means a benefit of €2.000 to €3.000 on vehicles of €100.000 to €150.000. As about 9.000 vehicles of this category are registered each year across Europe, an average of €22.500.000 could be saved by users (TRL report paragraph 4.3.2.2). Nevertheless, technical requirements will have to be adapted to this category, because the cost of compliance would otherwise cause an increase of price superior to the decrease permitted by the harmonisation.

Concerning the **T4.3** category (alpine tractors), these vehicles fall totally under the exemption for small series, which Commission services intend to maintain. To include this category in the mandatory EC whole vehicle type-approval framework will thus not add any cost for manufacturers or users. This exemption allows vehicles to be type-approved by a national type-approval system under its specific provisions, and the Member State then sends to the Commission and to other MS the list of its approvals; other Member States decide then individually to accept it or not if a manufacturer wants to sell the product in such other Member State.

Concerning the T5 category (maximum speed more than 40 km/h), diverging technical requirements are currently used across the EU, which prevent these types of vehicles from benefitting of the internal market. To ask these vehicles to meet mandatory type-approval requirements is likely to increase their final price, but this depends on the requirements selected. TRL calculated that if the requirements currently used by the German type-approval system were used for the mandatory EC whole vehicle type-approval, an increase of 2,5% (average) could be expected, which would lead to an increase in price per vehicle of €2.000 to 4.500 on a vehicle costing typically €100.000 to 150.000 now (TRL report paragraph 4.3.2.4). Considering that some 13.000 vehicles of this type are registered each year in Europe, such requirements would cost from €26 to 59 million to manufacturers due to higher prices. If other requirements were selected, such as mandatory fitting of ABS (as is currently required in the United Kingdom), the increase in price would be much higher, and so would be the global cost on users. Commission services consider that the EC whole vehicle typeapproval is nevertheless a good option for the T5 category, because those vehicles can reach high speeds (designed for > 40km/h, typically intended also for use on main public roads) and road safety is a real concern. The various provisions in force in Member States prove that all Member States agree that road safety requirements are indeed needed here, and to ask for common requirements at the European level is thus an opportunity to reach the benefits of the common market while ensuring a high level of road safety.

Concerning the C category, these vehicles are produced in low volumes for very specific markets, and therefore they all fall under the small series exemption that the Commission services propose to maintain, in accordance with what both national administrations and manufacturers have asked during the public consultation. In this situation, there will be no additional cost to include these types of vehicles in the mandatory EC whole vehicle type-approval framework.

As far as vehicles from categories **R** (trailers) and **S** (towed machinery) are concerned, a different assessment must be used. These vehicles are produced and bought directly mainly by SMEs, which would bear the costs of new requirements. Stakeholders are divided about the necessity to make the EC whole vehicle type-approval mandatory for these categories. Nevertheless, these vehicles are being used on public roads, and are sold across the EU in very high numbers (estimation of 625.000 vehicles for EU-25 in 2005). To require European road safety provisions for them is thus a policy option supported by the majority of stakeholders during the public consultation, being associations of users or governmental organisations. Commission services consider that mandatory EC whole vehicle type-approval for these categories could thus be introduced, but that this would be done only for road safety aspects.

This approach respects opinions expressed by stakeholders. Other aspects such as work safety are considered as sufficiently well covered by other European legislations, such as the Machinery Directive. Moreover, the majority of replies from national administrations state that for other aspects than road safety these vehicles are produced for specific regional needs which would be very difficult to cover with harmonised requirements at the European level. To choose a regulatory action would therefore not be in line with the subsidiarity principle. In addition, Commission services agree with the various stakeholders who expressed the opinion that exemptions such as included in the current legislation should be maintained. Small series and individual approvals will thus remain type-approved at the national level. Exemptions stated currently under Art. 2.2 of the Framework Directive will also be maintained, as demanded by stakeholders.

Concerning the **R** category, for which common technical requirements are currently missing, it covers a wide variety of trailers, ranging from large standardised productions to very specific vehicles used for particular works. Some of the specific productions would fall under the small series exemptions, defined in Annex V Section A of the Framework Directive, but the number authorised is smaller: 75 units instead of 150 units for the T categories. (This limit is set as the number of vehicles registered, offered for sale or put into service each year in each Member State.).

It has been estimated that common requirements for road safety (signs, lighting, braking etc.) would allow a harmonisation of design for all markets, which would lead to a better integration of these road safety devices on the vehicles, but also to a reduction of their final price. This reduction is estimated at 2 to 3 %, which means a decrease of €200 to 900 on a vehicle of between €5.000 and 30.000 (TRL report paragraph 4.3.2.6). Over a number of 125.000 units registered per year in the EU, there will be a benefit of €68.750.000 (average) for buyers of these vehicles, which are often SMEs. Manufacturers will also gain from common requirements, which will prevent them to adapt the safety devices of their vehicles in a badly integrated way, only in order to comply with the variety of national rules. It will thus simplify their design and production, as well as the functioning of their stocks and their logistics. Finally, asking for mandatory application of common road safety requirements will benefit to all citizens, as those vehicles are sold in high volumes and do circulate on public roads. To complete the internal market by setting common European road safety requirements is thus an option foreseen by Commission services, and it has been supported by a majority of stakeholders during the public consultation.

The current technical requirements are nevertheless not adapted to the category R. It has been estimated by a stakeholder that to comply with all current requirements of the EC type-approval framework would lead to an increase of €3.000 of the price per vehicle. This cost would be borne by buyers of these vehicles, among which there are many SMEs (farmers and

small forestry enterprises). As stated by national administrations during the public consultation, many of these vehicles are adapted for specific needs to perform jobs related to special agricultural of forestry work which are different across Europe. To standardise all safety and environmental requirements in such a situation would be very difficult, and would put into question the use of particular vehicles in certain regions. In respect of this situation, the Commission services could set new requirements for road safety only, and not make the EC type-approval system for other aspects mandatory.

Concerning the S category, types of vehicles are even more diverse than in the R category. Interchangeable towed machinery covers a wide variety of vehicles built to perform very specific tasks and with many regional specialisations across the regions of Europe. Given this situation, a high proportion of these types of vehicles (estimated as between 25 and 50 %) would fall under the small series exemption. Nevertheless, considering the low limit of this exemption for this category (set as 50 units registered per year in each MS), a majority of these types will have to comply with the requirements of the EC type-approval if it was decided to make it mandatory. The same approach as for category R has been followed to assess the cost/benefit of this choice (TRL report paragraph 4.3.2.7). An average reduction of €1.625 of the price per vehicle (2.5% of €65.000) could be gained due to harmonisation of road safety requirements and production harmonisation allowed by it. As some vehicles of category S are sold in a high numbers, it would mean a benefit of €812.500.000 (average reduction of €1.625 on 500.000 vehicles registered per year). This will be a benefit to buyers, which are often SMEs, as well as to manufacturers which will have simplified design and production stages.

Nevertheless, the technical requirements are not yet adapted, and in the current situation, if vehicles from category S had to comply with all requirements of the separate Directives specified in the EC type-approval Framework Directive, the cost of all the additional requirements would be much higher than the benefits from the standardisation (approximately twice as much, estimated as €3.000 per vehicle). This means that a cost of €687.500.000 would be implied. In this situation, asking for mandatory EC type-approval for this category is not a good cost/benefit option, particularly if considering that the increase in the cost per vehicle would be borne by a large number of SMEs. And as stated above, it cannot be assumed that the small series exemption will cover sufficiently the very specific types of vehicles, in order for them not to see their price increase drastically; they might even not be allowed on the market anymore, not meeting the EU requirements.

With such an assessment, it is clear for Commission services that technical requirements will have to be adapted and defined precisely in order to allow vehicles to comply with the new common requirements at a minimum cost. At the same time and in the present market conditions it seems undesirable to introduce mandatory new requirements because of rising costs.

c) Option 3: **Complete** the EC type-approval requirements and leave EC whole vehicle type-approval **optional for certain categories** (T4, T5, C, R and S)

This option is similar to b) above, but in this case the EU requirements (to be completed) would not be mandatory but it will be left to the choice of the manufacturer whether to apply for EC whole vehicle type-approval or for national type-approval or not.

The advantages and disadvantages are similar to the option above, but the manufacturer can decide whether his choice is beneficial for him and his product.

An additional disadvantage is, however, that Member States will have to maintain a national homologation system in parallel. In addition, an optional system requires that for each

separate substantive requirement set at EU-level, the legislation specifies whether this requirement is mandatory, including in the context of national type-approval, or optional.

Also, if certain requirements are left optional, various MS may choose a different level of protection. This may be appropriate for the local / national conditions, but it may hinder trade if the vehicle is to be used elsewhere later on.

Presently the Commission services are of the opinion that there are no supporting data in accident statistics, nor in trade aspects, that would justify a mandatory system. In 7 to 10 years it could be useful to reassess this situation.

The preferred option would be option 3, but with addition that certain road safety requirements would be mandatory in order to guarantee road safety (e.g. braking, lighting, marking). From the point of view of proportionality this seems the most appropriate choice; in numbers the categories T1, T2 and T3 are about 80% of the tractors market, so 'completion' would be for 20% only and these vehicles are very seldom used on the roads – with the specific exemption of T5 (fast tractors) that will need special attention in implementing legislation. For environmental apsects it should be noted that the requirements of Directive 2000/25/EC are already mandatory for all tractors and the intention is that this will not change, so the present project of introducing a Mother Regulation should not lessen environmental protection levels.

#### Position of stakeholders

#### Member States:

Austria: should be optional

Finland: mandatory for all tractors; partly optional for others.

France: completion on mandatory basis, as soon as possible.

Germany: mandatory for all, but with some possibilities for exemptions.

Netherlands: the use of "small series exemptions" causes a need for national legislation, which is contrary to the idea of a Regulation. TA only for large series, should be limited to tractors.

United Kingdom: mixed, depending on cost/benefit. Mandatory for all tractors, maybe optional for T5.

#### Industry:

CEMA favours mandatory legislation for T1, T2 and T3 tractors only; the requirements for all other categories should be optional and for R and S be limited to road safety aspects. For some industries (SME) full EU type-approval would be too costly and they fear that it might prove impossible to build in enough flexibility in requirements to fit the needs for all different types of vehicle (e.g. the various higher masses and dimensions for special large tractors and machines). Requirements to be adjustable to regional needs.

Some delegations have indicated that "self-propelled machinery" (or equipment) should be included in this Regulation on an optional basis (ES, NL, CEMA), for road safety issues.

SECTION 6: OPTIONS COMPARISON AND CONCLUSIONS

Summary of impacts of different options for all objectives

Objective	Dollar ontions	Criteria						
Objective	Policy options	effectiveness		efficiency	coherence	18		
	1 - No policy change	0		0		0		0
	2 - Replace current framework by two regulations	simplification of the regulatory framework		initial cost	_		+	
cquis			+	slight risk of delaying urgent matters	_			
ng a ectiv				cost reduction on the long term	+	better than baseline		+
- Simplification of existing acquis (by repeal of existing directives)				a quick process of adaptation to technical evolution in the future	+			
cation of exi				initial cost	-	even more positive	+	
implifi repeal	3 - Replace the current	simplification of the		slight risk of delaying urgent matters	_	(increased clarity for industry)		
1 - S (b)	framework by limited number of thematic regulations	regulatory framework	+	easier processing	+	6 11.		++
				cost reduction on the long term	+	facilitation and rationalisation effects: more	+	
				implementing measures will be adopted in a short term	+	coherence for experts		

<sup>18</sup> Explanation: 0 means 'neutral' (no change) + means 'better'

	D-1'4'	Criteria							
Objective	Policy options	effectiveness		efficiency	coherence		clusion		
acquis ional	1- No policy change	0		0	0		0		
capacity for future		simplification	+	slight reduction of costs and administrative burden	+	+			
oacity f	2- Use references to UNECE	reduction of duplications	+	improved management of procedures	+	increase clarity for industry and administrations	+	+	
latory cap oach with rds)	Regulations			UNECE texts also need to be translated and published, like EC legislation	0			Т	
d regulator y approach standards)				potential risk of weakening requirements	_				
Improve	3- Use references	simplification	++	OECD texts also need to be translated and published, like EC legislation and UNECE	0	same as in 2.2			
ication t-leve	to all relevant international	reduction of duplications ++		reduction of costs and administrative burden	+			++	
Simplification: new split-level 1	standards		++	improved management of procedures	+				
2 – Si (ne				potential risk of weakening requirements	-				

	D. I.	Criteria						
Objective	Policy options	effectiveness		efficiency	coherence	clusion		
	1- No policy change	0		0	0	0		
market	2- Complete the EC TA requirements and make EC type-approval mandatory for all categories of vehicles			high costs of new requirements for T4.2, T5, R and S	-			
single		completion of internal market (mandatory)	+	access to a wider market with less administrative burden	+		0	
of the				new specific technical requirements needed	-			
ion c				increase in road safety	+			
- Completion of the single market	3- Complete the EC TA requirements; leave EC	completion of the internal market (optional)		gains from harmonised designs  allows open market with cheapest option	+			
$\kappa$	WVTA optional for certain categories (T4, T5, C, R			new specific technical requirements needed	-		+	
	and/or S)			increase in road safety	+			
				gains from harmonised designs	+			

In conclusion, the preferred options would be to simplify the legislation by introducing a codecision Regulation with a limited number of implementing Regulations through Comitology, using as much as possible the standards available from UNECE, OECD, ISO and CEN/CENELEC. some of the road safety related prescriptions should be made mandatory (like already the case for emission requirements for all tractors).

Furthermore, the preferred option for completion would be to maintain the 'mandatory' approach for tractor categories T1, T2 and T3, to require mandatory application of road safety requirements (at least braking, lighting, marking) for T4, T5, C, R and S vehicles and make the additional requirements (as listed in annex 3) optional at the choice of the manufacturer. Most stakeholders agree with the need for mandatory road safety requirements. CEMA would wish to maintain 'optional' for all except T1-T2-T3. Optionality means the need to keep national legislation, but 'mandatory' would be too expensive.

It can be noted that for all 'automotive sectors' (motor vehicles, two- and three wheelers an agricultural vehicles) the following applies:

- a. Self-regulation / voluntary codes: since 1970 many actors, including Member States national authorities have indicated that in Europe these are not acceptable approaches for road safety, occupational safety and environmental protection, hence the existing (framework) Directives. Member States do not accept a change and prefer type-approval. A typical example for this approach is provided by the reasons for regulating CO<sub>2</sub> emissions from passenger cars; another example is the situation relating to 'pedestrian protection' (bumpers of cars).
- b. An additional option to make use of all international standards combined with 'no EU action': in this case EU would maintain the system of Directives but amend them progressively by replacing the technical content by a reference to such standards; this would be a viable option, but less desirable than when combined with a new Regulation. As explained the Directives are a relatively cumbersome, time-consuming and costly system, lacking some legal clarity, for all parties involved.

Impact on health, safety and environmental protection: the 'Mother Regulation' should not have a major impact on health, safety and environmental protection as the Commission does not intend to change the technical requirements; as indicated before the proposal involves first of all a system change. For health and environmental protection there should be no impact at all (same requirements as today, no new categories); for road safety a slight improvement may be expected as categories R and S would fall under harmonised requirements. Later, in implementing legislation, positive effects should come from improved requirements for braking, to be applied to categories not covered today. On the other hand, the external study was not able to quantify these effects due to lack of detailed information (see annex 2).

Ensuring existing level of protection: when agreeing a reference to UNECE, OECD or other, there should be agreement with the experts that equivalence is shown; of course the Commission is obliged under the Treaty to strive for a high level of protection when it proposes legislation, so a step back would not be acceptable. Not for the Commission, nor for the MS. A positive change may occur, also in the case where a MS did not have requirements until now and will have to apply

the new rules. This approach is similar to what has been accepted for the 'General Safety Regulation' for motor vehicles recently.

### **SECTION 7: MONITORING AND EVALUATION**

No specific system is foreseen but the Commission's Working Group on Agricultural Tractors (WGAT) will be used for the follow-up with the implementing measure

#### ANNEX 1

# PUBLIC CONSULTATION ON OUTLINE PROPOSALS FOR A FRAMEWORK REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL FOR AGRICULTURAL VEHICLES

**Summary of Responses** 

#### 1. CONTEXT

The Commission launched an open public consultation seeking to gather views of interested parties on its outline proposals for new legislation for agricultural vehicles. A consultation document has been published to provide background and ask for opinions on this new framework, which should replace the Framework Directive and 23 separate directives and their many amending directives. These outline proposals are thus embedded in the EU strategy to improve the regulatory environment towards simplification. In particular, comments of interested parties have been asked over three main aspects: concerning the choice and format of the legislation; on the completion and the mandatory nature of the type-approval system; and over its scope and coverage.

#### 2. OVERVIEW OF RESPONDENTS

The consultation was launched on 03 July 2008, with 12 September as deadline for submission. The Commission services received 19 responses, among which 9 contributions have been provided by Member States governmental organisations, and 10 by industrial organisations. Business responses came from European federations of producers and users, national associations of producers and users, and single manufacturers of vehicles and components.

#### 3. SUMMARY OF RESPONSES

#### 3.1 Choice of the legislative format

There is a general support for the use of the Regulation format, which should help in the simplification process. Only one (governmental) organisation highlighted the usefulness of a New Approach system. The majority of stakeholders have stressed the necessity of the split-level approach, where fundamental requirements are included in a Mother Regulation decided by co-decision, while detailed technical requirements are contained and updated in implementing regulations, using the comitology procedure. Business actors consider this approach as very needed in order to grant in the future the quick adaptation to new requirements.

### 3.2 References to international regulations and standards

Comments from both governmental and business responses are highly positive about increasing references to international regulations and standards, being Regulations from the United Nations Economic Commission for Europe (UNECE), or standards developed by OECD, CEN/CENELEC or ISO. This approach is supported because of its welcomed simplification effect, provided that references should be done on a case by case basis, and only when standards are at least equal to existing parallel EU legislation, i.e. supporting the achievement of an equal level of safety. Moreover, many stakeholders stressed that static references should be used.

#### 3.3 The type-approval system as legislative approach

The broad majority of stakeholders, both public and private, consider the use of the type-approval system as efficient and support it as a legislative approach, even if it could be improved in order to become less time-consuming for the process of updating to technical progress.

#### 3.4 Completion and mandatory nature of the type-approval system

Both public and private stakeholders broadly (but not unanimously) support a mandatory type-approval system at the European level for all agricultural and forestry tractors (defined as categories T and C in the Framework Directive). Some want limitations if a cost/benefit analysis support it. Concerning trailers and interchangeable towed machinery (categories R and S), half of governments consider that mandatory type-approval at the European level could be applied, provided that exemptions should be maintained for small series and very specific needs. The other administrations would rather see the type-approval of these vehicles at the European level as optional, or only mandatory for road safety aspects. They are backed in this position by most manufacturers representatives, who also ask for a voluntary harmonisation only. National (type)-approval systems are in their opinion still necessary considering regional specific uses across Europe. Still concerning trailers and interchangeable towed machinery (categories R and S), most governmental and business organisations are asking for a distinction between road safety aspects, which should be covered by the type-approval system, and other aspects such as occupational safety, which are already covered by the requirements of Directive 2006/42/EC on machinery.

#### 3.5 Aspects to be covered

All stakeholders but one agree on the fact that road safety aspects have to be covered in the type-approval system. Concerning occupational safety of vehicles from categories T and C, respondents ask for an inclusion of the risks falling currently under the Machinery Directive, so tractors would no longer fall under the requirements of Directive 2006/42/EC. As mentioned above, occupational safety aspects in vehicles of categories R and S are considered as sufficiently covered by the Machinery Directive. Additionally, some stakeholders have shown interest for new requirements concerning aspects such as anti-lock braking (ABS).

#### 3.6 Need for exemptions

Both governmental and business actors consider that exempting full classes from type-approval is not the right option. Stakeholders are nevertheless divided concerning specific exemptions. Some responses only ask for exemptions contained in the Framework Directive, such as vehicles produced in small series or on individual basis, to be maintained in the new Regulation. Others would like to see new specific exemptions introduced, for example for vehicles adapted for special forestry needs, or about small vehicles from categories R and S which do not contain a braking system. Moreover, several manufacturers representatives ask for exemptions from particular requirements, such as vehicles from category C out of noise specifications, or vehicles from categories T2 and T4.1 out of updated exhaust emissions requirements.

#### **ANNEX 2**

# DESCRIPTION OF THE TASKS REQUESTED TO THE EXTERNAL CONSULTANT AND METHODOLOGY USED

#### **Tasks**

A. <u>General assessment:</u> identification and estimation of likely economic, safety, social and environmental effects for each policy objectives proposed.

This implies firstly to provide a general overview of the relevant market, with a special emphasis on vehicle categories for which EC type-approval is not mandatory yet, and also with a particular interest for SMEs. Moreover, the contractor has been asked to include wherever possible the 27 Member States. And it has also been asked to provide market data on the share between vehicles produced inside and outside Europe.

Secondly, always for each policy option, data have been requested on both positive and negative impacts on road and work safety, on the environment, and on costs for manufacturers as well as for national administrations. The necessity to integrate these different aspects has been stressed, and it has been asked to consider impacts in short, medium and long-term. Moreover, the contractor should study the possible improvement of the competitiveness of the relevant industry on the global market. And as costs are concerned, an integrated approach should be adopted with measurements to be done at the various stages from manufacture, assembly, and testing to the final type-approval of vehicles.

B. <u>Simplification of the legislation (Part I):</u> assessment of a simplification exercise where the current legislative framework consisting of 24 Directives would be replaced by a single Regulation adopted by co-decision and a limited number of implementing regulations adopted by comitology procedure.

This simplification is deemed to enable the co-legislator to focus on the main political issues, whereas technical issues will be dealt at the level of experts. Advantages foreseen are a quicker adaptation and moreover and prevention of burdensome transpositions by Member States, as well as the related scrutiny of these transpositions by the Commission. The contractor has been requested to assess, if possible in monetary terms, the impacts of such a simplification for the different stakeholders. Three scenarios have been established: the "nopolicy change", the introduction of one co-decision Regulation with one implementing comitology regulation covering all aspects, and the introduction of one co-decision Regulation together with several implementing regulations covering different aspects (road safety, work safety and environment).

C. <u>Simplification of the legislation (Part II):</u> assessment of the replacement of existing detailed technical provisions in current separate Directives by references to relevant international or European standards (UNECE, OECD, CEN/CENELEC and ISO <sup>19</sup>).

The study should analyse three scenarios: the "no-policy change", referencing in a single codecision Regulation, and referencing in one "mother" Regulation and in a limited number of specific implementing measures (divided between road safety, work safety and environment

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<sup>&</sup>lt;sup>19</sup> United Nations Economic Commission for Europe; Organisation for Economic Cooperation and Development; CEN, the European Committee for Standardisation, and CENELEC, the European Committee for Electrotechnical Standardisation; International Standardisation Organisation

aspects). Cost/benefit calculations have to be assessed for direct references and for full publication, where translations would then be needed considering that OECD documents are only available in FR and EN while EU Regulations need to be made available in all 23 official languages. (For UNECE, the Commission is already publishing all relevant Regulations.)

D. <u>Completion for categories T4, T5, C, R and S:</u> assessment of the cost/benefit and the feasibility of a completion towards mandatory type-approval for these categories, for which requirements are sometimes specified and sometimes still to be determined depending on the different Directives.

# Methodology

A literature review was performed, including the CARS 21 initiative, the present set of Directives for the sector and the public consultation done by the Commission services in 2008. An enquiry form was sent to all relevant stakeholders: representatives of ministries in all Member States and industry organisations. Twenty-two replies were received, of which 12 contained useful information; 10 from Member States and 2 from industry. Consultation meetings were planned in October and November, but due to unavailability only the one on 21 November was held, with representatives of one Member State and of industry. A reminding letter was sent by the Commission services, which caused 4 more replies (included in the numbers given above) with some useful information.

On this basis the contractor drafted a report, which was then presented in the Working Group on Agricultural Tractors (WGAT) on 20 February 2009.

The following statement by the contractor is to be noted: "The confidence in the estimates could be improved if additional responses and data were available from stakeholders. The lack of data has meant that some of the estimates made in this impact assessment have relied heavily on assumptions made by TRL or on anecdotal evidence from stakeholders."

Although the Commission has to accept the report prepared by the contractor because of the limitations for the study there is uncertainty about the figures used; that is why ranges of values have been indicated. Also the figures given by some of the stakeholders might not be fully comparable because of a different (but unknown) breakdown of the costs involved.

The contractor has used a figure of 3.5% for the discount rate in stead of 4% given in the IA Guidelines, but it is considered that this should not have a relevant impact on the outcome of the study.

The report by TRL can be found at the following website: http://ec.europa.eu/enterprise/automotive/projects/index.htm

# DEFINITION OF VEHICLE CATEGORIES AND VEHICLE TYPES 20

#### AND BACKGROUND TO THE TYPE-APPROVAL SYSTEM

#### A. The vehicle categories are defined as follows:

- 1. Category T: Wheeled tractors
- Category T1: wheeled tractors with a maximum design speed of not more than 40 km/h, with the closest axle to the driver<sup>21</sup> having a minimum track width of not less than 1 150 mm, with an unladen mass, in running order, of more than 600 kg, and with a ground clearance of not more than 1 000 mm.
- Category T2: wheeled tractors with a maximum design speed of not more than 40 km/h, with a minimum track width of less than 1 150 mm, with an unladen mass, in running order, of more than 600 kg and with a ground clearance of not more than 600 mm. However, where the height of the centre of gravity of the tractor<sup>22</sup> (measured in relation to the ground) divided by the average minimum track for each axle exceeds 0,90, the maximum design speed is restricted to 30 km/h.
- Category T3: wheeled tractors with a maximum design speed of not more than 40 km/h, and with an unladen mass, in running order, of not more than 600 kg.
- Category T4: special purpose wheeled tractors with a maximum design speed of not more than 40 km/h (as defined in Appendix 1).
- Category T5: wheeled tractors with a maximum design speed of more than 40 km/h.
- 2. Category C: Track-laying tractors

Track-laying tractors that are propelled and steered by endless tracks and whose categories C1 to C5 are defined by analogy with categories T1 to T5.

- 3. Category R: Trailers
- Category R1: trailers, the sum of the technically permissible masses per axle of which does not exceed 1 500 kg.
- Category R2: trailers, the sum of the technically permissible masses per axle of which exceeds 1 500 kg but does not exceed 3 500 kg.
- Category R3: trailers, the sum of the technically permissible masses per axle of which exceeds 3 500 kg but does not exceed 21 000 kg.
- Category R4: trailers, the sum of the technically permissible masses per axle of which exceeds 21 000 kg.

Each trailer category also includes an «a» or «b» index, according to its design speed:

- «a» for trailers with a maximum design speed below or equal to 40 km/h,
- «b» for trailers with a maximum design speed above 40 km/h.

In accordance with standard ISO 789-6: 1982.

Directive 2003/37/EC and proposal for Regulation

For reversible driver's position tractors (reversible seat and steering wheel), the closest axle to the driver to be considered must be the one fitted with the biggest diameter tyres.

Example: Rb3 is a category of trailers for which the sum of the technically permissible masses per axle exceeds 3 500 kg but does not exceed 21 000 kg, and which are designed to be towed by a tractor in category T5.

- 4. Category S: Interchangeable towed machinery
- Category S1: Interchangeable towed machinery intended for agricultural or forestry use, the sum
  of the technically permissible masses per axle of which does not exceed 3 500 kg.
- Category S2: Interchangeable towed machinery intended for agricultural or forestry use, the sum
  of the technically permissible masses per axle of which exceeds 3 500 kg.

Each category of interchangeable towed machinery also includes an «a» or «b» index, according to its design speed:

- «a» for interchangeable towed machinery with a maximum design speed below or equal to 40 km/h,
- «b» for interchangeable towed machinery with a maximum design speed above 40 km/h.

*Example*: Sb2 is a category of interchangeable towed machinery for which the sum of the technically permissible masses per axle exceeds 3 500 kg, and which is designed to be towed by a tractor in category T5.

### **B.** Definition of vehicle types

#### 1. Wheeled tractors:

For the purposes of this Directive:

- «type» means tractors of the same category that do not differ in respect of at least the following essential aspects:
- manufacturer;
- manufacturer's type designation;
- essential construction and design characteristics:
- backbone chassis/chassis with side members/articulated chassis (obvious and fundamental differences),
- engine (internal combustion/electric/hybrid),
- axles (number);
- «variant» means tractors of the same type which do not differ in respect of at least the following aspects:
- engine:
- operating principle,
- number and arrangement of cylinders,
- power difference of no more than 30 % (the highest power being no more than 1,3 times the lowest power),
- cylinder capacity difference of no more than 20 % (the highest figure being no more than 1,2 times the lowest figure);
- powered axles (number, position, interconnection);
- steered axles (number and position);
- maximum laden mass differing by no more than 10 %;
- transmission (type);

- rollover protection structure;
- braked axles (number);
- «version» of a variant means tractors which consist of a combination of items shown in the information package in accordance with Annex I.
- 2. Track-laying tractors: idem wheeled tractors.
- 3. Trailers:
- «Type» means trailers of the same category that do not differ in respect of at least the following essential aspects:
- manufacturer;
- manufacturer's type designation;
- essential construction and design characteristics;
- backbone chassis/chassis with side members/articulated chassis (obvious and fundamental differences);
- axles (number);
- «variant» means trailers of the same type which do not differ in respect of at least the following aspects:
- steering axles (number, position, interconnection);
- maximum laden mass differing by no more than 10 %;
- braked axles (number).
- 4. Interchangeable towed machinery: idem trailers.

#### C. BACKGROUND TO THE TYPE-APPROVAL SYSTEM

#### How the system works

Before the EU developed the type-approval system most Member States used to have their own, differing national requirements for new vehicles to be allowed on the market. The directives for motor vehicles (under 70/156/EEC) and for tractors (74/150/EEC) were set up to counter the problems for industry created by these differences and separate approval procedures by harmonising the minimum requirements to be fulfilled. Execution of testing and approval activities was left to the MS. In the directives it is stated that other MS have to accept approvals given in one MS (mutual recognition, based on EU requirements; an approach of mutual recognition based on –differing- national requirements has been discussed in the past but has never been accepted by Member States).

Costs: the system has inherent costs: the directives have to be developed (meetings of experts, drafting by Commission services and experts from MS; procedural costs related to getting the draft approved by the co-legislators; cost of implementing directives in national legislation and its verification by the Commission; costs for manufacturers to get their product tested (including provision of products for testing) and approved; follow-up costs if product needs to be adapted and again approved. Available figures are in this report and the supporting external report.

Every Member State appoints a 'Type-approval authority' (TAA; under 2003/37 – agricultural vehicles as well as under 70/156 – motor vehicles and 2002/24 – two and three wheelers). This TAA must be notified to the Commission and other MS to perform the necessary tests or other institutes (testhouses) can be notified for this purpose.

A manufacturer who proposes a new vehicle or component (e.g. headlamp) contacts the TAA and the testhouse, submits the prescribed completed information document, makes the vehicle or component available for testing and pays the fees.

It may prove that the test is not passed; in such case the product can be adapted and resubmitted for testing.

If all is well the manufacturer obtains the test report(s) and approval form(s). These forms are defined in the SDs. Then the manufacturer is able to sell his product everywhere in the EU, provided he puts the prescribed marking on the product and, for vehicles, provides a CoC (Certificate of Conformity) with every vehicle delivered.

In case of a vehicle, the manufacturer can obtain TA in one step (all testing etc in one go), or step-by-step (separate approvals for every component / system; in the end, for the vehicle as a whole, he submits the approvals given before. In the latter case, which is must usual, many part-approvals may have been obtained by other (component) manufacturers. Another option foreseen is that one manufacturer builds a basic but incomplete vehicle and the next finishes it by e.g. building the bodywork on it, or modifying it for a specific purpose: multi-stage approval.

A manufacturer can submit a product for TA only in one MS, to one TAA (no 'shopping').

The TAA must inform the other authorities about TA's given, denied or withdrawn. The latter because the TAA is responsible towards the others in case it is found that products are marketed which are not in line with the TA given.

As long as the EU system allows "optionality", this means that he may choose to apply for an EU TA for the vehicle or component. EU requirements are often somewhat stricter than national requirements and thus the product may have to be somewhat more expensive; on the other hand if his markets are in more MS he can choose his best option.

The approval procedure for a vehicle may be time-consuming, often starting in the first year of development, lasting 3 to 4 years. It's important for the manufacturer not to have to repeat this a number of times in different countries.

#### MARKET OF AGRICULTURAL VEHICLES

1. Number of tractors and trailers sold in 2005 (EU-25; source: TRL final report, 2009)

Vehicle type	Number sold	Price	Turnover
T1	120,000		
T2	15,000		
Т3	1,650		
T4	15,000		
T4.1			
T4.2		100,000 -150,000	
T4.3			
T5	13,000	100,000 -150,000	1,300,000 - 2,000,000
Sub total	164,650		
С	5,000		
Total	169,650		
R	125,000	5,000 - 30,000	625,000,000 - 3,750,000,000
S	500,000	65,000 *	32,500,000,000

<sup>\*</sup> indication of average

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CEMA information for the years 2001 and 2004 – tractor market, turnover etc.

- Turnover tractors: 2001 €6,180 million for 154,000 units (12 member countries); average price €40,130 / unit. For 2004: €7,300 million for 156,200 units, €46,700 / unit.
- In Europe 5 manufacturing groups are active, with more than 20 brand names, most from the EU.

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2. Tractors - new registrations per MS, 2006 - 2008 (source: TRL final report 2009).

Registrations	2006	2007	2008
Austria	7,152	6,792	7,737
Belgium	2,748	2,680	
Bulgaria			
Cyprus			
Czech Republic	2,225	2,730	
Denmark	3,110	3,479	
Estonia			437
Finland	4,172	4,245	
France	27,388	29,129	
Germany	29,009	28,469	
Greece	3,518	4,170	
Hungary	1,045	2,045	
Ireland	4,221		
Italy	29,752	26,837	
Latvia			
Lithuania			
Luxembourg			
Malta			
Netherlands	3,823	4,054	
Poland			
Portugal	5,415	6,122	
Romania			1,077
Slovakia			1,450
Slovenia	1,853	2,084	
Spain	16,605	17,241	
Sweden	4,233	4,465	
United Kingdom	13,829	14,941	
Total	160,098	159,483	10,701

(for empty boxes: no information was received)

3. Import/export of new agricultural tractors, 2007, EU27 (Comext database, Eurostat) 23

#### **Track-laying tractors** Wheeled agricultural tractors **Import Import Export Export Import Import Export Export** Value Units Value Value Units Value Units Units **Belarus** 95.038.622 7.378 12.964.865 95 9 Canada 200.412 2.677.990 295 62.964.860 2.328 Chile 137.999 7 11.756.464 706 China 130.670 25 114.480 5 25.851.834 8.488 10.044.776 283 Croatia 96.146 4 450.727 13 34.752.302 1.160 Iceland 40.539 8 15.522.714 422 Iran 17.239.503 514 Israel 32.256 2 15.063 4 11.423.125 505 Japan 439.696 206 147.060.521 25.068 45.213.966 1.183 Malaysia 6.269.559 455 Mexico 213.457 28 9.413.104 454 Morocco 198.088 21 28.016.583 1.747 New Zealand 16.205 1 8.135 1 61.428.357 1.874 29 599.060 1.626.906 154.734.409 Norway 438.338 60 93 5.354 Russia 287.813 8 6.981.647 170 151.558 20 72.359.710 1.370 Serbia 17.439 1 151.341 4 511.653 17.239.770 413 38 South Africa 3.463.204 34 166.840 41 71.097.548 2.829 South Korea 20.661.795 36.586.678 1.200 2.248 Switzerland 580.763 28 416.682 16 7.732.927 210 93.881.975 2.921 Tunisia 9.230.970 585 2 Turkey 4.482.968 1.467 246.126 9.754.638 621 67.533.886 3.060

<sup>&</sup>lt;sup>23</sup> Values in Euros and units

Total	44.259.674	2.144	18.061.683	558	789.018.717	86.647	1.625.491.673	55.978
Venezuela	8.000	1	336.321	12			7.440.827	280
United States	37.641.319	368	2.082.490	188	476.626.178	42.049	742.673.712	25.882
Ukraine			3.181.355	26	469.873	52	25.702.010	358

# STAKEHOLDERS POSITION ON THE OBJECTIVES AND OPTIONS

(information from public consultation and WGAT)

	Objective 1 – Simplification: Directive or Regulation		Objective 2 – Simplification: international standards		: Objective 1 – Completion			Comments		
	Option 1: no policy change	Option 2: 2 Regulations	Option 3: 4 Regulations	Option 1: no policy change	Option 2: reference to UNECE Regs	Option 3: reference to more standards	Option 1: no policy change	Option 2: complete & mandatory for all cat's	Option 3: complet e but partial optional	
Stakeholders - MS										
Austria	Change from Dir. to Reg., with basically the same contents, seems possible. Not of vital importance how this is done.									
Bulgaria	Approach of 2007/46/EC must be followed: one framework Directive with TA requirements + separate reg's with technical req's, or references to UN/ECE reg's where applicable		separate reg's with technical requirements, or references to UN/ECE reg's where applicable							
Denmark (Working Environment Auth.)										

Finland	Reg. would save costs for governments.	Positive about reference to internat. documents, but updating could be a challenge; reference always to latest version.		Emissions: Dir 97/68 sufficient => should cover tractors.
France	agree with Reg; no preference for 2 or 3; no priority issue; should not delay some other issues	Favourable (also i.r.t. OECD), but (static) references to dated standards require update of regulation; New Approach possible to avoid that, but then need "guaranties" from CEN/ISO; codification should be stopped.	option 2, ASAP	
Germany	Agree with the replacement of dir by a Reg			
Netherlands	Regulation accepted, but fear additional administrative burden.	Like the 2007/46/EC system with direct reference to UNECE Regs. Can do that in a Reg		
United Kingdom	Support for simplification, but concern about transition, self-certification and COP.			

Stakeholders – industry			
CEMA	Agrees in principle with Reg. but new items or change in scope must be under Co-Decision. Scope must be considered carefully.		
SYGMA (Fr)	Not against Reg, but priority for adaptation to techn. Progress; MD distinction issue; New items in the Reg. and scope modifications under Co-Decision.		
VDMA (DE)	Reg. or Dir. not important; positive on bringing several Dir's together in one Reg, Be careful with loss of clarity.		
CEETTAR	Positive on Reg., because it promotes harmonisation.		
ETRMA	Welcome the CARS21 approach on better regulation. Favours Impact Ass. prior to drafting.	Welcome the CARS21 approach on reference to international docs (UNECE Reg. 106 on tractor tyres).	
TLN (NL)	No different from road vehicles	by using ECE Reg's, new EU reg's can be sooner	
AECC	Agree with Reg.		

J.C.Bamford	Against Reg with systematic co-decision; Comitology is needed (split-level)		
Knorr Bremse	Little benefit is expected for industry (compared with existing consolidated dir's). So not demanding, particularly considering updates might be more difficult		
ACAP (PT)	Reg. is very positive and necessary		

# LIST OF SEPARATE DIRECTIVES, RELATION WITH UNECE AND OECD

Directive 2003/37/EC, Annex II [similar table for special tractors:T4.1 – T4.3]

Note: the relation between directives and UNECE Regulations / OECD Codes is indicative only and needs confirmation during preparation of implementing legislation. For CEN/CENELEC and ISO no suitable information is available.

No	Subject	Equivalency with UNECE (R) and	Base Directives and Annexes	Applicability (for T4 and C4 see Appendix 1)						
		OECD (C)		T1	T2	Т3	T5	С	R	S
1.1.	Maximum laden mass		74/151/EEC I	X	X	X	X	(X)	(X)	(X)
1.2.	Registration plate		74/151/EEC II	X	X	X	X	I	(X)	(X)
1.3.	Fuel tank		74/151/EEC III	X	X	X	X	I	_	_
1.4.	Ballast masses		74/151/EEC IV	X	X		(X)	I	_	_
1.5.	Audible warning device	R28	74/151/EEC V	X	X	X	X	I	_	_
1.6.	Sound level (external)	R51	74/151/EEC VI	X	X	X	(X)	I	_	_
2.1.	Maximum speed		74/152/EEC Annex, para 1	X	X	X	(X)	I	_	_
2.2.	Load platforms		74/152/EEC Annex, para 2	X	X	X	(X)	I	_	_
3.1.	Rear-view mirrors		74/346/EEC	X	X		(X)	I	_	
4.1.	Field of vision and windscreen wipers	R71	74/347/EEC	X	X	X	(X)	I	_	
5.1.	Steering	R79	75/321/EEC	X	X	X	(X)	(X)	_	
6.1.	Electromagnetic compatibility	R10	75/322/EEC	X	X	X	X	I	_	_
7.1.	Braking devices		76/432/EEC	X	X	X	_	(X)	(X)	(X)
		R13	71/320/EEC	_	_	_	X	_	_	
8.1.	Passenger seats		76/763/EEC	X	_	X	(X)	I	_	
9.1.	Sound levels (internal)		77/311/EEC	X	X	X	(X)	I		_
10.1.	ROPS	C3	77/536/EEC	X	_	_	(X)	(X)		_
12.1.	Driving seat		78/764/EEC	X	X	X	(X)	(X)	_	_

13.1.	Lighting installation	R86	78/933/EEC	X	X	X	(X)	I	(X)	(X)
14.1.	Lighting and lightsignalling devices	R1, 3, 4, 6, 7, 8, 19, 20, 23, 38, 98	79/532/EEC	X	X	X	X	X	(X)	(X)
15.1.	Coupling and reversing devices		79/533/EEC	X	X	X	(X)	I	_	_
16.1.	ROPS (static testing)	C4	79/622/EEC	X	_		(X)	I	_	_
17.1.	Operating space, access to the driving position		80/720/EEC	X	_	X	(X)	I	_	_
18.1.	Power take-offs		86/297/EEC	X	X	X	(X)	I	_	_
19.1.	Rear-mounted ROPS (narrow-track tractors)	C7	86/298/EEC	_	X	_	(X)	I	_	_
20.1.	Installation of the controls		86/415/EEC	X	X	X	(X)	I	_	_
21.1.	Front-mounted ROPS (narrow-track tractors)	C6	87/402/EEC	_	X		(X)	I	_	_
22.1.	Dimensions and trailer mass		89/173/EEC I	X	X	X	(X)	I	(X)	(X)
22.2.	Glazing		89/173/EEC III	X	X	X	_	I	_	_
		R43	92/22/EEC	_	_	_	X	_	_	_
22.3.	Speed governor		89/173/EEC II, 1	X	X	X	(X)	I	_	_
22.4.	Protection of drive components		89/173/EEC II, 2	X	X	X	(X)	I	_	_
22.5.	Mechanical couplings		89/173/EEC IV	X	X	X	(X)	I	(X)	(X)
22.6.	Statutory plate		89/173/EEC V	X	X	X	(X)	I	(X)	(X)
22.7.	Trailer-brake coupling		89/173/EEC VI	X	X	X	(X)	I	(X)	(X)
23.1.	Pollutant emissions	R49, 96	2000/25/EC	X	X	X	X	X	_	_
24.1.	Tyres <sup>24</sup>	R106	[/EC]	X	X	X	X	_	(X)	(X)
25.1.	Stability <sup>2</sup>		[/EC]	_	_		SD	_	_	_
26.1.	Seat-belt attachment points	C3, 4, 6, 7, 8	76/115/EEC	X	X	X	X	X	_	_
27.1.	Safety belts		77/541/EEC	_	_	_	X	_	_	_

Pending the adoption of directives on tyres, stability and rear protective structures, the absence of a separate directive on this does not prevent the granting of the whole vehicle type-approval.

28.1.	Reverse and speedometer	75/443/EEC		_		X	_	_	_
29.1.	Spray-suppression systems	91/226/EEC	_	_		X	_	(X)	_
30.1.	Speed limitation devices	92/24/EEC	_	_	_	X	_		_
31.1.	Rear protective structures <sup>2</sup>	[//EC]				_	_	SD	
32.1.	Lateral protection	89/297/EEC	_	_	_	X	_	(X)	_

# Legend:

X	=	applicable as is
(X)	=	applicable in amended form
SD	=	separate directive
_	=	not applicable
I	=	same as T according to the category

# COST / BENEFIT COMPARISON TABLE

Objective 1 : Simplification of the regulatory framework through a split-level approach									
Indicators	Option 1	Option 2 Option 3							
	No policy change	frai	place current mework by 2 egulations	frame	ace current ework by [4] gulations				
Costs									
Annual cost to EU-27	€29,160 to €2,435, 400 average €533,993	€7,560 to €1,217,700 average €320,153							
Initial investment cost		€18,225 to €3,653,100 average €909,225							
Benefits									
Cumulative benefit (Costs include an uplift of 2 % per		Year	Lower limit	Average	Upper Limit				
annum and a discount rate of 3,5 %)		1 €3,375 - €695,385 - €2,435,4							
1440 01 3,3 70)		5 €86,690 €129,430 €2,261,4							
		10	€184,219	€1,094,970	€7,759,675				

Objective 2: Simplification through use if international standards						
Indicators	Option 1	Option 2	Option 3			
	No policy change	Use when possible references to UNECE Regulations	Use references to all relevant international standards			
Costs						
Type approval costs	Approximate costs per type (component) on average: €15,000  The cost of one whole vehicle-type approval can be above €100,000					
Translation costs						

Annual staff cost for attending meetings	Estimated average annual cost to attend EC,UNECE,OECD, ISO & CEN meetings €1,135,085 (range: € 310,536 to €2,608,200)		Estimated average annual cost to attend meetings with reference to existing standards € 1,078,331 (range: € 279,482 to €2,608,200)		
Investment cost for EU-27			€ 909,225 (range: €18,225 to €3,653,100)		
Benefits					
Annual saving from Type approval costs			0		
Annual average savings from attending meetings			€31,054 (range: €0 to €56,754)		
Translations			0		

Objective 3 : Completion of the regulatory framework						
Indicators	Option 1	Option 2		Option 3		
	No policy change	Complete the EC type-approval requirements and make EC type-approval mandatory for all categories of vehicles		Complete the EC type-approval requirements and leave EC whole type-approval optional for certain categories of vehicles (T4,T5,C,R and S)		
Costs						
Estimated average cost per vehicle category (1)		T4.1	€0			
per venicle category (1)		T4.2	€112,500,000			
l		T4.3	€0			
		T5	€40,625,000	similar to option 2		
		С	€0			
		R	€200,195,313			
		S	€257,812,500			
Estimated average annual administrative costs (2)		€36,190,000				
Total cost (1+2)		€647,322,813 (range: €364,440,000 to €996,565,000)				
Average investment cost <sup>25</sup> for EU-27		€32,980,000* (range: €3,860,000 to €62,100,000)				
Benefits						
Estimated casualty savings		€50,750,409				
Estimated average cumulative benefits		Year 1: - €629,552,403				
(Costs include an uplift of 2 % per annum and a		Year 5: - €3,057,835,295				
discount of 3,5 %)	Year 10: - €5,900,418,586					
Benefits from standardisation (saved by	<b>T4.2 Category:</b> benefit of €22,500, 000 (average)					
buyers)		on 9,000 vehicles registered p.a.  R Category: benefit of €68,750,000 (average)				
		on 125,000 vehicles registered p.a.				
		S Category: benefit of €812,500,000 (average)				
		on 500,000 vehicles registered p.a.				