



# **Impact Assessment for a possible revision of Directive 2006/1/EC**

Final report

Study contract no. MOVE/D3/2015-423



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*March – 2017*



**EUROPEAN COMMISSION**

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Luxembourg: Publications Office of the European Union, 2017

ISBN [number]

doi:[number]

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## EXECUTIVE SUMMARY

### *Purpose and scope of the study*

Directive 2006/1/EC ('the Directive') establishes a legal framework for the use of commercial vehicles hired without drivers. The Ex-post Evaluation of Directive 2006/1/EC, completed in early 2016, found the Directive to be effective and efficient overall, but also identified a few areas where possible revisions could be considered. Inter alia, existing option for Member States to restrict the use of hired vehicles over 6 tonnes for own account operations under Article 3(2) should be re-assessed with consideration given to removing it. Moreover, extending the scope of the Directive to ensure a harmonised legal framework across the EU for the use of hired vehicles registered in another Member State may be considered. The present study to support an Impact Assessment explores several policy options for amending the Directive.

### *Policy options analysed*

The following policy options for amending the Directive were retained for detailed analysis, in agreement with the European Commission:

- **Option 0: Issue Guidelines and Recommendations.** Develop recommendations and guidelines to clarify the application of the Directive and promote a common approach in terms of the restrictions applied at national level concerning the use of hired goods vehicles for own account operations and in terms of the used of hired goods vehicles registered in another Member State.
- **Option 1: Improve the functioning of the Directive by targeted legislative amendments.**
  - **Option 1a:** remove provision that allows Member States to restrict the use of hired vehicles for own account transport (currently restricted in Italy, Spain, Portugal and Greece);
  - **Option 1b:** allow the use of goods vehicles which an operator established in one Member State has hired in another Member State for a certain period of time (3-6 months) e.g. to meet temporary or seasonal demand peaks;
  - **Option 1c:** combination of Options 1a and 1b.

**Option 2: Option 1 +** negative impacts from the policy options. In all cases, the differences between options were small in absolute terms. Impacts on total operating costs in the road transport sector are always less than 0.1% in comparison to the baseline at EU28 level. However, individual own account operators newly able to access hired vehicles as a result of changes to the Directive may experience operating cost savings of up to 2% as a result.

The impacts of the policy options on the truck hiring sector are relatively stronger. Removing restrictions to hiring for own account operators in Southern European Member States (Option 1a) can potentially lead to an overall increase in the HGV hire market size of over 6%, while liberalisation of cross-border hiring (Option 1b) may lead to a further 1% growth in both hiring of LCVs and HGVs.

Overall, Option 1c, being a combination of Options 1a and 1b, has the highest impacts. Option 2, i.e. the inclusion of road passenger transport under the scope of the Directive, is expected to have virtually no impacts as, according to industry stakeholders, there is no relevant market for the hiring of buses and coaches despite there being few legal restrictions in place in Member States. Moreover, due to very poor data availability, it has not been possible to quantify the number of overall buses and coaches nor the number affected by a change in policy. Option 3 tends to be similar in impacts to Option 1a, as it would require Member States to remove restrictions on hiring for own account operators, but in most cases allow existing legislation on re-registration requirements of foreign vehicles used by domestic operators to be kept in place.

Given the very weak overall impacts on the road transport market, expected **environmental and social impacts** are similarly limited across all policy options. Opening the own account market to hired vehicles under Option 1a may lead to small reductions in average vehicle age in IT, ES, PT, EL, with positive impacts on air pollutant and CO<sub>2</sub> emissions. Intensified utilisation of vehicles under Option 1b may similarly lead to marginal reductions in fleet average age across Europe. In combination (under Option 1c), impacts on the total level of CO<sub>2</sub> and air pollutant emissions in comparison to the baseline in 2030 are not more than 0.04% under the most far-reaching scenario at EU28 level. At the Member State level, if the development of a hired HGV market in Greece led to early retirement of old HGVs, reductions in air pollutant emissions of up to 1.4% are conceivable.

In terms of social impacts, some stakeholders - the European Road Transport Workers' Federation, the Italian authorities, as well as a national haulage association - have raised concerns about possible adverse effects in working conditions as a result of changes to the Directive. In particular, liberalisation of cross-border hiring under Options 1b, 1c and, to a smaller extent, Option 3 mean that a road transport operator's Member State of origin may not necessarily correspond to the Member State of vehicle registration, and therefore the vehicle's licence plate, making more difficult to enforce road transport legislation. Under such circumstances, the concern is that this could lead to an effective weakening of the conditions of establishment and facilitate the operation of letterbox companies. The establishment of a pan-European register of hired vehicles could mitigate such issues.

As previously noted, Option 2 is not expected to have any notable impact on the hiring of buses and coaches, so consequently no environmental and social impacts are expected.

**Table 0-1: Summary of impacts for the different policy options compared to the baseline**

Key: Impacts expected				
xx	x	0	✓	✓✓
Strongly negative	Weakly negative	No impact	Weakly positive	Strongly positive

	Option 0	Option 1a	Option 1b	Option 1c (a+b)	Option 2*	Option 3
<b>Economic impacts</b>						
Economic impacts on road transport sector	0	✓	✓	✓	0	✓
Economic impacts on vehicle leasing sector	0	✓	✓	✓	0	✓
Impact on SMEs	0	✓	✓	✓	0	✓
Impact on specific markets/Member States		✓	0	✓	0	✓
Growth in road haulage sector	0	0	✓	✓	0	0
Growth in vehicle hiring sector	0	✓	✓	✓	0	✓
Impacts on passenger transport sector	0	N/A	N/A	N/A	0	0
Impact on competition/freedom to provide services	0	✓	0	✓	✓	✓
Impact on conditions for investment	0	✓	✓	✓	0	✓
Budgetary and other consequences for public authorities	0	0	0	0	0	0
Impact on consumer	0	0	0	0	0	0
Impact on modal shift	0	0	x	x	0	x

	Option 0	Option 1a	Option 1b	Option 1c (a+b)	Option 2*	Option 3
<b>Environmental impacts</b>						
CO <sub>2</sub> from road transport	0	✓	✓	✓	0	✓
Air pollution road transport	0	✓	✓	✓	0	✓
Efficient use of resources	0	0	0	0	0	0
<b>Social impacts</b>						
Employment in haulage sector	0	0	✓	✓	0	0
Employment in vehicle hiring sector	0	✓	✓	✓	0	✓
Working conditions	0	0	x	x	x	x
Road safety	0	✓	✓	✓	0	✓

Notes: \* while Option 2 has been defined as including all measures from Option 1, plus inclusion of passenger transport, this table only summarises the expected additional impacts from including passenger transport, i.e. additional costs/benefits over Option 1c.

Considering the **effectiveness and efficiency** of the policy options, all stakeholders consider that the development of guidance and recommendation will not help in removing existing restrictions in the case of own account operations or in accessing hired vehicles registered elsewhere. Therefore, **Option 0** would not be more effective than no change in policy. All sub-options under **Option 1** are expected to have a marginally positive contribution towards a more flexible use of vehicles in road freight transport operations as well as in the reduction of costs of road transport operations. Furthermore, all sub-options are expected to have a positive contribution in terms of increasing the freedom of providing vehicle hiring services across the EU, increasing competition, supporting the growth of vehicle hiring markets and investment into new vehicles. However, in the case of **Option 1a** the benefits will be largely focused on IT, ES, PT and EL where restrictions on own account operators are in place. There is an overall increase in the utilisation of the vehicle stock leading to annual savings for operators in the four Member States of up to €75m by 2030 (~0.10% reduction in overall transport costs within the four Member States). Regarding potential enforcement costs, the Italian authorities have opposed changes to the Directive on the grounds that providing own account operators with access to hired vehicles may increase incidences of own account operators illegally taking on transport for hire and reward. Therefore, more enforcement effort in this area may be required – thus increasing enforcement costs. Option 1a does not bring any changes to the current administrative costs for either transport operators or vehicle hiring companies. While specific cost estimates were not possible, it is expected that the benefits in terms of road transport cost savings exceed any additional enforcement costs.

In the case of **Option 1b**, the possible benefits are spread more broadly across all EU Member States where there are restrictions to cross-border hiring for a period above 6 months covering both the use of HGVs and LCVs in transport operations. It is thus expected that Option 1b will lead to an additional 1.1% increase in the number of vehicles replaced by hiring while the total number of hired vehicles remains constant. Nonetheless, given the greater size of the markets affected – particularly in the case of LCVs - the total operating cost savings under Option 1b reach up to €84m per year by 2030 (€47 million from the increased use of hired LCVs and €37 million from hired HGVs, a ~0.03% reduction in overall transport costs).

**Option 1c** is a combination of the benefits associated with 1a and 1b in terms of improved access to hired vehicles for own account operators, more efficient and flexible use of vehicle and operating cost reductions. The maximum conceivable annual savings are expected to be €161m (€47 million for LCVs and €115 million for HGVs, a ~0.06% reduction in overall transport costs) – slightly above the sum of Options 1a and 1b. The

increased effectiveness arises both from the opening of the markets in the Member States where there are currently restrictions as well as from the increased flexibility provided by the use of vehicles registered in another Member State.

In terms of potential costs, **Option 1b (and consequently Option 1c)** most probably entails some implementation costs. For most Member State authorities, the introduction of a minimum period of three to six months during which a hired vehicle registered in another Member State can be used will require changes to their legal framework. In 11 Member States, cross-border hiring by domestic companies for more than three months is already possible, while 17 Member States currently do not allow such practices. As indicated by some authorities and by leasing industry representatives, there is also a possible need to introduce a system through which hiring companies (or transport operators) provide information on the specific vehicle indicating the period during which it will be used in another Member State in order to be able to effectively monitor and enforce the maximum period. The costs of adoption and operation of such a system for the authorities and the users may vary depending on its specific features and the way that this is implemented (e.g. paper based system, electronic registry), and it may be possible to make use of existing systems. Overall, the analysis suggests that the cost of such a system would tend to be lower than the benefits in terms of estimated road transport cost savings. Moreover, some authorities pointed to the possible loss of tax revenues from vehicle registration fees as a result of registrations shifting to Member States with lower tax rates under Options 1b (and 1c). However, it has not been possible to quantify these losses. The risk of out-flagging should be reduced through the three to six month time limit on using vehicles hired in another country.

In terms of **Option 2**, while specific data are not available, the possible extension of the scope of the Directive to cover the use of hired buses and coaches is expected to have insignificant or very marginal benefits, while creating (limited) implementation costs to authorities. This is because there is no dedicated market for the hiring of buses and coaches without driver and limited interest from the sector.

Under **Option 3**, there are similar advantages to those under Options 1a and 1b in terms of ensuring access to vehicle hiring services across the EU. However, the effectiveness in terms of increasing vehicle utilisation only accrues to those Member States which currently temporarily restrict the hiring of vehicles registered abroad while allowing longer grace periods for vehicle re-registration by residents owning vehicles registered abroad (IT, IE, PT, LU). Only these Member States would need to change their legislation and align rental and owned vehicle re-registration periods. Consequently, the effectiveness in terms of vehicle utilisation and operating cost savings under Option 3 are lower than those under Option 1c with a total of €105 million in cost savings expected (€19 million for LCVs and €86 million for HGVs, a ~0.04% reduction in overall transport costs). Furthermore, in the absence of specific legislation on harmonised rules for vehicle re-registration (since the proposed Regulation has not been adopted), Option 3 appears to be ineffective in terms of simplifying and harmonising the legal framework in relation to the use of vehicles registered in another Member State. It will harmonise the requirement between owned and hired vehicles but will maintain the differences among Member States. The costs of implementation of Option 3 are expected to be largely similar to those under Option 1c.

The quantitative analysis performed indicates that the reductions in overall vehicle **taxation revenues** under all policy options due to intensified utilisation may be outweighed by an increase in corporate tax revenues as a result of the expected increased profitability and growth of the vehicle renting and leasing sector. The net benefits are expected to be €22 million under Option 1a, €11 million under Option 1b, €27 million under Option 1c and €20 million under Option 3. There is no specific figure calculated for Option 2 on the basis that there is no expected impact on the stock of hired buses and coaches. It should also be noted that in all cases the net savings are a tiny fraction of the total tax income from vehicles in 2014 (<0.07%).

Overall, the analysis suggests that **all policy options are largely coherent with the key EU policy priorities**. More specifically, they are in line with the key objective of the development of the internal market and the promotion of fair competition, aspects where the Evaluation found that the current Directive only partly corresponds to these EU policy priorities. A further aspect of coherence relates to the proposed Regulation on simplifying the transfer of motor vehicles registered in another Member State within the Single Market (European Commission, 2012), which would harmonise rules for vehicle re-registration across the entire EU28. Vehicles would then only need to be registered in the Member State where the holder of the registration certificate is based after a certain grace period (6 months). This would affect all motor vehicles, including goods vehicles, and may therefore make Options 1b, 1c and 3 partly redundant.<sup>1</sup>

In terms of the **proportionality** of the policy options, economic and other benefits are not expected to be sizeable but, at the same time there are no sizeable costs. In the case of Option 1a, EU action is not the only method available to address the problem of restricted access to the use of hired vehicles – action from the four Member States within the current legal framework could still provide an answer. However, there is no indication that the Member States concerned are prepared to take relevant action on their own. In contrast, 2 out of 4 relevant authorities (IT, PT) have clearly expressed their willingness to maintain the existing restrictions. On this basis, it can be argued that EU action is the only way to effectively address the problem.

There may be some issues regarding the extent to which the implementation of Option 1b (and consequently Option 1c) would indeed achieve a simplification of the regulatory framework. The implementation of Option 1b may lead to the harmonisation of the minimum period during which hired vehicles registered in other Member States may be used. However, by only applying this rule to hired goods vehicles, it may further complicate the rules at Member State level. An approach such as the proposed Regulation on harmonised vehicle registration rules (European Commission, 2012) may be more appropriate to simplify the fragmented system of national rules on all vehicle registrations.

Action in relation to the hiring of buses and coaches (Option 2) appears rather disproportionate. While there are some calls from stakeholders for a harmonised approach between vehicles used for the transport of goods and passengers, there is no obvious need for EU action given the absence of a real market for the hiring of buses and coaches and the view of almost all stakeholders that the existing legal framework is rather effective. The same considerations concerning the hiring of buses and coaches also applies in the case of Option 3 which is also less effectively addressing the problem of a complicated legal framework in relation to hired goods vehicles.

### **Preferred option**

There are particular uncertainties regarding the extent to which implementing the policy options would make the enforcement of existing road transport legislation more difficult and therefore increase the amount of unfair competition within the sector. Assuming these issues are successfully mitigated (e.g. through the introduction of a register of cross-border vehicle hire), Option 1c (combining 1a and 1b) is the option that, on balance, has the greatest benefits and most effectively and efficiently addresses the identified problems.

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<sup>1</sup> The Regulation on simplifying vehicle transfer, if adopted, is expected to cover the use of the vehicle hired abroad in the MS of establishment of the undertaking hiring it, but may not necessarily cover the use of such a vehicle in a third Member State. So, if a haulier from, say, Luxembourg hires a vehicle in nearby Metz (France), he may use it in Luxembourg for up to six months (given the re-registration deadline in the Regulation), but not necessarily in Spain. An adjustment to Article 2 of the Directive may thus be required should the Regulation be adopted.

In terms of the maximum period during which the use of vehicles registered in another Member State should be allowed, there is no clearly preferable period for most stakeholders. We consider that a period of 6 months is the maximum justifiable 'temporary' period in relation to Option 1b. However, a shorter period of 3 months would be sufficient to cover most, if not all, needs of the sector related to seasonal demand peaks. We think that this should be considered as the preferred time period. It should also be noted that any such option will need to be in line with the specific provisions of the proposed legislation on the re-registration of vehicles, should it be adopted.

It should be noted that there are currently no procedures included within the Directive that require Member States to monitor and evaluate the effects of the national legislation implementing the Directive. It is recommended that such a monitoring and evaluation framework be adopted along with Option 1c. Key elements would include regular measurement of the size of the market for hired goods vehicles, the number of vehicles registered in another Member State hired by transport operators, and the number of infringements related to the use of hired vehicles (total/cross-border).

## 1. INTRODUCTION

### 1.1. Purpose of the Impact Assessment

The purpose of this study is to provide support to the 'Impact Assessment for a possible revision of Directive 2006/1/EC (the hired goods vehicles Directive)', under specific contract (hereafter, the 'study').

Following the Ex-post Evaluation of Directive 2006/1/EC, the Commission identified a need for a revision of the Directive. The present Impact Assessment sets out to explore different options for amending the legislation around the use of goods vehicles hired without drivers.

The report has been submitted by Ricardo Energy & Environment, the consultants appointed to conduct this study, and aims at:

- Defining the problems (see Section 2);
- Assessing the EU right to act (see Section 3);
- Defining the policy objectives (see Section 4);
- Developing different policy options (see Section 5);
- Identifying impacts and analysing those (see Section 7);
- Comparing the options and establishing the preferred option (see Section 8);
- Outlining policy monitoring and evaluation (see Section 9).

In addition, the report gives an overview of the processes and the methodology followed (Section 6).

### 1.2. Policy context and summary of evaluation results

Directive 2006/1/EC (the Directive) lays down provisions for the use of vehicles hired without drivers for the carriage of goods by road. Its provisions date back to the year 1990, since Directive 2006/1/EC is the result of a codification of Directive 84/647/EEC as amended by Directive 90/398/EEC.

The Directive allows the use of hired goods vehicles for the purposes of cross-border transport operations between Member States under certain conditions<sup>2</sup>. It also gives Member States the possibility to restrict the use of hired goods vehicles with a total permissible laden weight of more than 6 tonnes for own account operations. The 1990 amendment removed the possibility of requiring a minimum hiring period, which had previously been allowed under Directive 84/647/EEC.

The Ex-post Evaluation found that having the option of hiring goods vehicles is seen to be beneficial by all stakeholders. Short-term vehicle hire allows flexibility in terms of providing access to additional capacity in the event of demand peaks or as replacement for defective/damaged vehicles. Moreover, many hauliers throughout Europe make use of the option of long-term vehicle hire as an alternative to purchasing vehicles. The Directive sets a general framework where hired commercial vehicles are treated on the same basis as owned commercial vehicles, and this is generally recognised as playing a positive role in the organisation and efficiency of transport operations. It requires Member States to permit the use of hired goods vehicles on their territory; a requirement which also entails very limited implementation and enforcement costs.

The objectives and priorities of the Directive as identified at the time of its adoption appear to remain relevant to the needs of the transport sector today. The Directive was

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<sup>2</sup> i.e. the vehicle is compliant with national laws, the contract relates to the hiring of a vehicle without a driver, the hired vehicle is at the sole disposal of the undertaking using it during the period of the hire contract and the hired vehicle is driven by personnel of the undertaking using it (Article 2(1))

also found to provide EU added value, as the EU level is the most relevant level to develop rules governing the use of hired vehicles in the road transport market.

However, the Directive still allows the restriction of the use of hired goods vehicles above 6 tonnes for own account operations. The restrictions still in place (in ES, PT, IT, EL) appear to be linked with underdeveloped hired vehicle markets with lower levels of use of hired vehicles – thus depriving operators of some of the potential benefits identified earlier. Moreover, the Directive does not provide a framework for the use of hired goods vehicles registered in a different Member State to that of the haulier, thus allowing Member States to restrict the hiring of goods vehicles to those vehicles registered in the same Member State in which the haulier is based.

Considering the coherence of the Directive with other EU road haulage legislation (in particular Regulation (EC) No 1071/2009 on access to the profession of road transport operator and Regulation (EC) No 1072/2009 governing the access to the international road haulage market), there are minor inconsistencies concerning the scope of the legal act as provided in the wider definition of a “vehicle” in the Directive. Furthermore, the limit of 6 tonnes maximum laden weight adopted in relation to the restriction of hired vehicles for own account operations does not correspond to the standard system of classification of commercial vehicles (by which heavy goods vehicles are those with a GVW above 3.5 tonnes). However, none of the identified discrepancies appear to have led to any significant issues in practice.

The Ex-post Evaluation therefore made the following recommendations:

- Re-assess the existing option for Member States to restrict the use of hired vehicles weighing over 6 tonnes for own account operations under Article 3(2). It is not consistent with the broader policy objectives towards the development of a Single Transport Area.
- Extend the scope of the Directive to ensure a harmonised legal framework across the EU for the use of hired vehicles registered in another Member State. This is necessary to address the needs of the industry to flexibly deploy the fleet of hired vehicles across the EU in response to demand. However, the possible implications on tax revenues need to be taken into consideration.
- In case of a revision: use the opportunity to improve the coherence of definitions between the Directive and the road haulage legislation.

In addition to the issues raised above, the Commission’s Inception Impact Assessment notes as further problems that hired buses and coaches are not covered.

The present study to support an Impact Assessment takes these recommendations as a starting point to explore, analyse and discuss a range of possible amendments to the Directive.

## 2. PROBLEM DEFINITION

### 2.1. Description of the problem

#### 2.1.1. What is the nature and scale of the problem?

Directive 2006/1/EC – codifying Directive 84/647/EEC as amended by Directive 90/398/EEC – regulates the use of vehicles hired without drivers for the carriage of goods by road. Together with Regulations (EC) No 1071/2009 and (EC) No 1072/2009, the Directive builds the core rules on how the road haulage market in the EU functions.

Directive 2006/1/EC was expected to respond to the following needs and issues:

- Help transport operators accommodate the expected growth in international transport services and to meet seasonal demand peaks: Greater flexibility in short-term commercial vehicle hiring could be useful during temporary or unexpected demand peaks (such as during temporary or seasonal peaks, or short-lived demand for special types of vehicle) (European Commission, 1989);
- Support the optimum allocation of resources, ensure flexibility and avoid unnecessary capital investment by road transport operators: As an alternative to investing in vehicles that would be underused, commercial vehicle hiring allows hauliers and own account operators to manage their finances more efficiently and cut their fixed costs (European Commission, 1989);
- Restrictions and a lack of harmonisation in the use of hired vehicles prevent the efficient use of resources: Restrictions lead to operators opting to buy their own vehicle fleet, which artificially curbs the development of the market for hired vehicles (European Commission, 1989); and
- The high environmental impact of road freight transport and the slow diffusion of cleaner vehicle technologies in the commercial vehicle fleet: Hired vehicles tend to be newer and are more likely to reflect the latest technologies in terms of reliability, safety and environmental protection (European Commission, 1989). Hence, the use of hired vehicles can allow hauliers to test more modern and cleaner vehicle types, and thus accelerate their take-up in the market.

The recently completed Ex-post Evaluation (Ricardo, 2016) concluded that Directive 2006/1/EC does provide a level of liberalisation as regards the use of hired goods vehicles contributing to addressing some of the above aspects. The objectives and priorities of the Directive as identified at the time of its adoption appear to remain relevant to the needs of the transport sector today. Facilitating the access to hired vehicles – both cross-border and at national level - contributes to greater flexibility and efficiency of haulage operations and vehicle leasing is a tool that is used by firms (particularly SMEs) across the EU. However, the Ex-post Evaluation also pointed to certain problem areas driven by the applicable legal framework governing the use of hired vehicles in road freight transport. More specifically, the evaluation concluded that there were two aspects of the legal framework that appear to be the root cause of problems:

1. Directive 2006/1/EC allows Member States to impose restrictions on the use of hired vehicles for own account operations in the case of vehicles of more than 6 tonnes laden weight.
2. Directive 2006/1/EC allows Member States to introduce restrictions in relation to the use of vehicles hired (and registered) in another Member State.

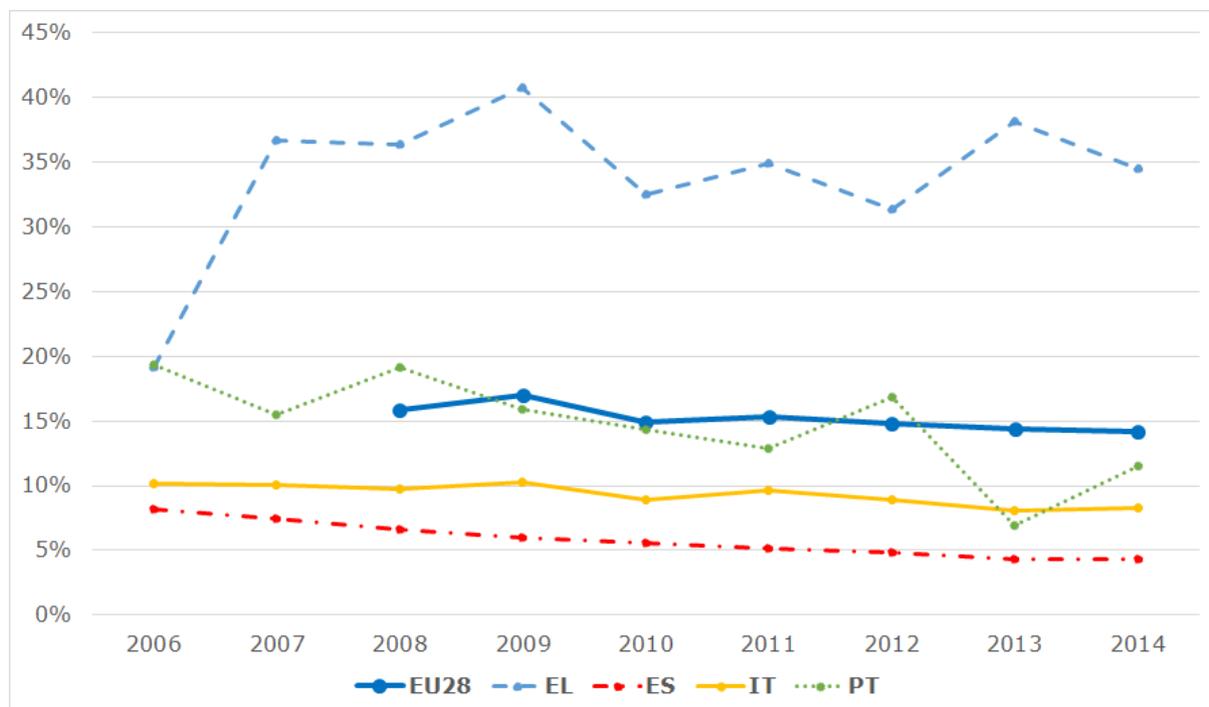
A number of problems are linked to these two root causes and are presented below.

### Problem 1 – Own account operators in certain Member States cannot use hired vehicles and take advantage of the benefits associated with their use

According to Article 3(2) of the Directive, Member States are allowed to impose restrictions on the use of hired vehicles of more than 6 tonnes laden weight for own account operations. Such restrictions are in place in Greece, Spain, Italy and Portugal.

In these four Member States, own account operators cannot use hired vehicles e.g. to respond to seasonal demand fluctuations or to disruptions due to damaged vehicles. This appears particularly relevant in Greece where own account operations account for 1/3 of total transport (measured in t-km) in 2014 and less so in Italy, Spain or Portugal where own account is less common (between 4.3% and 11.5% of total transport in 2014) (see Figure 2-1). In 2014, the four Member States together accounted for 21% of all national transport activity and 12% of all own account operations in the EU28 (Eurostat, 2016a).

**Figure 2-1 – Share of own account operations in total transport (in v-km) – EU28 and selected Member States**



Source: Eurostat (2016a)

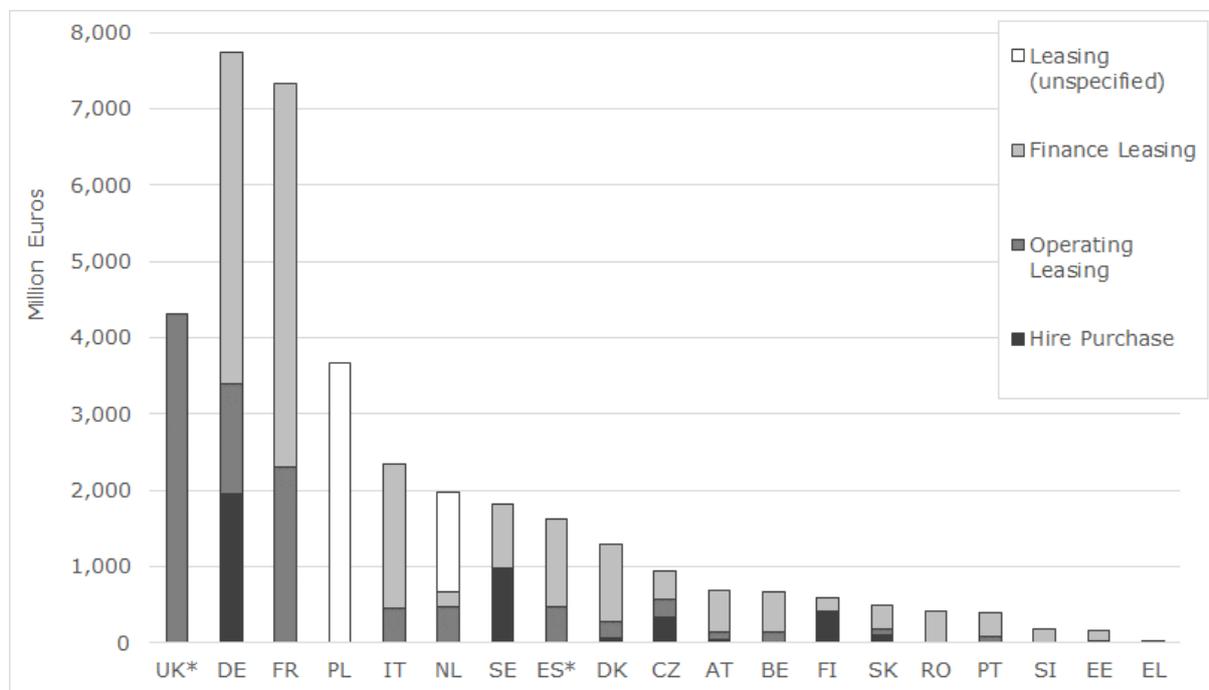
Furthermore, own account operators in these Member States cannot benefit from other advantages associated with the use of hired goods vehicles (e.g. flexibility in organising, cash flow management) and from the improved safety and environmental performance of hired goods vehicles that tend to be younger and better maintained than owned vehicles. On the basis of data from Leaseurope, the average age of the leased commercial vehicle fleet is 4 to 6 years lower than that of the overall fleet. These are all benefits linked to the use of hired goods vehicles (Ricardo, 2016).

The responses to the online public consultation also provide some support to the idea that existing restrictions represent barriers for such benefits. Between 40-60% of respondents indicated that these restrictions reduce the capacity to meet seasonal demand fluctuations, reduce flexibility, lead to the use of older vehicles and to a lower level of vehicle utilisation. At the same time, it should be noted that the interviews with relevant associations suggest that not being able to use hired goods vehicles is not seen as a priority issue. The flexibility of transport operations can still be served through the use of hire and reward operators or, as in the case of Greece, through the possibility of hiring vehicles from firms within the same sector.

**Problem 2 – Vehicle hiring markets in Member States with restrictions remain underdeveloped**

Restricting the use of hired goods vehicles for own account operations also has a broader impact on the development of the hired vehicles market. This is particularly evident in Greece, Portugal and Spain where the relevant markets remain largely underdeveloped (see Figure 2-2). A large vehicle hiring company indicated that they are not considering entering a market where restrictions are in place and the information from the Greek vehicle rental association is that there is currently no member that is active in the hiring of vehicles over 3.5 tonnes. The hiring of vehicles in these markets is restricted to a certain type of vehicle hiring – finance leasing – which is only long term and does not include other services (e.g. vehicle replacement, maintenance/service) that come with operating leasing that contributes to the flexibility of transport operations and to productivity improvements.

**Figure 2-2: New business volumes of Leaseurope members by type of lease**



Sources: Leaseurope (2015a; n.d.-a), Note : \* Data for UK and ES are Ricardo estimates based on Leaseurope data

**Problem 3 – Patchwork of restrictions and uncertainty concerning the use of hired goods vehicles in different Member States**

The second set of problems arises from the fact that there are restrictions related to the use of hired goods vehicles registered in a different Member State from that in which the operator is based. Table 2-1 presents the approach taken by the national authorities in the EU Member States. In the case of national operators, in eight Member States there are no restrictions to the use of vehicles registered in other Member States. For 12 Member States immediate registration of the vehicle in the Member State is required, while in the remaining Member States different periods after which a registration is required are applicable.

The situation is different – and less clear – in the case of hired goods vehicles used by non-national operators. Following the provisions of Article 2(1) of the Directive, all Member States have to accept the use of hired goods vehicles on their territory by

foreign operators as long as the vehicles have been hired in the Member State where the operator hiring them is established. However, there are different approaches when it comes to such operators using hired vehicles registered in another (third) Member State. 18 authorities that provided information as part of the Ex-post Evaluation suggested that they allow the use of goods vehicles hired elsewhere, on the condition that the foreign operators are in compliance with road haulage legislation (Regulations (EC) No 1071/2009 and (EC) No 1072/2009) and hold a Community Licence from the Member State of establishment. In practice this depends on the provisions concerning the use of hired goods vehicles in the home Member State, discussed earlier. In the case of Spain, the authorities appear not to have allowed the use of hired goods vehicles registered in another EU Member State in the past but seem to no longer enforce this rule. Information is not available for the remaining nine Member States where authorities did not respond to the relevant question in the survey conducted as part of the ex-post evaluation and to any subsequent requests. Finally, two national authorities (in Slovenia and Greece) also indicated that it was not clear what the approach should be when a combination of vehicles including a trailer or a semi-trailer registered in a different Member State from that of the hired motor vehicle was used. Currently, the common practice is that the trailer/semi-trailer documentation is not checked by the authorities.

**Table 2-1: Summary of restrictions concerning the use of hired vehicles registered in another Member State**

Member State	Number of Member States	List of Member States
<b>Use of foreign hired goods vehicles <u>by national operators</u> authorised for a period of</b>		
20 days or less	13	DE, IT, IE, EE, MT, FI, PT, LT, DK, LU, EL, HR, HU
30 days	2	AT, PL
3 months	2	LV, RO
6 months	2	BE, CZ
1 year	1	SE
No restrictions	8	UK, ES, FR, BG, SK, CY, SI, NL
<b>Use of hired goods vehicles on their territory by <u>non-national operators</u></b>		
Use of hired goods vehicles registered in the same Member State as the operator	28	Allowed in all EU Member States
Use of hired goods vehicles registered in another Member State than that of the operator:		
Allowed (assuming Community licence in place)	18	AT, BG, CY, DE, EE, EL, HU, HR, IT, NL, FI, FR, LT, MT, RO, SI, SE, UK
No information	10	ES, BE, CZ, DK, IE, PL, PT, LU, LV, SK

*Source: European Commission (2012) and Ex-post Evaluation (Ricardo, 2016)*  
*Notes: The information in this table slightly differs from that given in the Ex-post Evaluation (Ricardo, 2016). We have modified the table to be consistent with the findings in European Commission (2012). Generally, the applicable legislation regarding the re-registration of vehicles does not apply directly to hired goods vehicles registered elsewhere and requires interpretation – several parallel criteria often need to be considered, e.g. who owns the vehicle and how/where the vehicle is used. We have judged the European Commission paper to be more thorough in this regard as it made targeted enquiries to Member State authorities on re-registration periods for individual citizens, company fleets, leasing, rental, company cars used by employees, and vehicles used by the self-employed, thus requiring respondents to engage in detail with the applicable legislation in each case.*

The differences in the national approaches are considered to be an important problem. The majority of respondents to the online public consultation (21 out of 27) agreed that the presence of differing restrictions between Member States creates a complicated legal framework causing uncertainty for firms. One international leasing company focusing on short and medium term hiring estimated their overall compliance and administrative costs for all legislation around road transport to be in the range of EUR 10,000-100,000 per year, around 1% of total operating costs. This was mainly related to the use of consultants to map legal requirements across Member States and prepare the relevant forms and documents. In that respect, a number of stakeholders commented that a harmonised requirement would be beneficial. However, some feedback provided suggests that this is an aspect primarily related to the taxation of vehicles, which is a national competence and should be regulated at national level.

**Problem 4 - Vehicle hiring (leasing and rental) firms and transport operators face limitations in their capacity to use hired goods vehicles to respond to demand peaks and make the most efficient use of their fleet**

Besides the complicated legal framework, the existing restrictions concerning the use of vehicles registered in another MS can also be an obstacle to the flexibility of operations and the capacity to cope with seasonal fluctuations, both for vehicle hiring firms and for hauliers.

For vehicle hiring firms, the main issue is that they cannot use their vehicles registered in one Member State to meet supply gaps and seasonal demand in other Member States. In the Ex-post Evaluation, hiring industry representatives stated that they need to maintain some additional spare capacity in each Member State in order to be able to meet seasonal variations and this was a point that was repeated during the course of the study – in the online consultation and during the interviews with representatives of the industry. Furthermore, according to an earlier Impact Assessment on the proposal for a regulation to simplify the transfer of motor vehicles registered in another Member State within the Single Market (European Commission, 2012), there are significant difficulties and costs in the case that they would try to de-register and re-register the specific vehicle in another Member State. Such costs were estimated at around EUR 400 per vehicle. Particularly in the context of short-term rental for a few days or months, the re-registration of vehicles is most probably not a viable option.

From the point of view of transport operators (for the purposes of this study we use 'transport operator' to cover both hire and reward and own account operators), the presence of such restrictions means that they face limitations in their options of hiring vehicles from other Member States that may better meet their needs. The representatives of haulage operators that responded to the online consultation considered that the restrictions represented important limitations to the flexibility of transport operations and the competitiveness of the sector.

The Impact Assessment study on the transfer of motor vehicles (European Commission, 2012a) referred to an estimate of 100,000 transactions (i.e. requests by clients for vehicles) that are declined every year because of supply constraints. However, this includes demand for passenger cars (which represent 70% of the existing fleet) and includes both requests from citizens and businesses. Thus, the relevant figure related to the hiring of goods vehicles should be much smaller. Clients also cannot benefit from possible better offers provided by hiring companies in other Member States. The Impact Assessment study mentioned above (European Commission, 2012) also pointed to the fact that in the context of light-duty vehicles, rental firms often charge one way rental costs for the repatriation of vehicles which are typically passed to their clients in the form of higher prices.

It should be noted however, that the level of demand for the use of hired goods vehicles registered in another Member State appears rather limited. While specific data on the level of use of vehicles registered elsewhere were not provided by the leasing industry, the general comment from most representatives is that this is generally uncommon, even

where allowed. For example, as was pointed out by an EU-level haulage federation, Belgium specifically allows its operators to use vehicles from foreign hire firms for up to six months on a non-renewable contract. Yet this practice is apparently not very common. Moreover, it was reported that hauliers sometimes struggle to obtain certified copies of the Community licence if the vehicle is registered in another Member State. According to the federation, this generally does not appear to be an issue for operators from some Eastern European Member States. Some hauliers' representatives (e.g. IT, BE) indicated interest in harmonised rules on the hiring of goods vehicles in other Member States. However, most hauliers' representatives interviewed as part of the Ex-post Evaluation and in the context of this study indicated that generally the appetite for hiring vehicles registered in other Member States (as well as the current level of use of such vehicles where this is possible) is limited. Hiring industry representatives in Denmark indicated that some of their members with presence in multiple countries most often advise their clients to use the local entities in other countries rather than to use vehicles registered in Denmark. The same approach is followed by a German hiring firm, as indicated during the interview.

There appear to be several reasons why cross-border hiring is rarely made use of even where allowed:

1. Legal uncertainty: as pointed out under Problem 3 above, the legal situation tends to be complicated, so even in situations where cross-border hiring is legally possible it might not be made use of due to a lack of clarity (for all parties involved, including operators, associations and enforcement authorities).
2. Contractual enforceability and appropriate insurance: Perhaps one of the most important reasons why the possibility of hiring vehicles across borders is rarely made use of is the fact that enforcement of the hire contract, as well as appropriate insurance coverage, become more complex issues when the contract parties are based in different Member States. According to haulage industry stakeholders, even in the event of vehicles breaking down when in another Member State, hiring a replacement vehicle locally is generally a last-resort option (it is more common to seek repair and ask a colleague to complete the operation where necessary). Contractual complications are less likely to be an issue in the case of international rental/leasing companies moving vehicles between outlets in different Member States, so that transport operators continue to have a local contract and business partner. However, interviews with rental/leasing companies suggest that not much use is currently made of this option (for example between France and Belgium).
3. High cost of moving vehicles around: an interviewee from a truck rental company pointed out that transferring trucks across longer distances can be expensive (driver costs, fuel costs), in contrast to cars, of which several can be loaded onto a single truck and transferred. However, note that cross-border liberalisation could in some cases reduce the need for vehicles to be moved over longer distances, especially in border regions.

Another potential issue is that the restrictions on the use of hired vehicles may pose limitations to new entrants in the hired vehicles market. Hiring companies that may consider entering new markets do not have the option of using vehicles registered in another Member State as a possible first step. They will need to go through the process of a more formal establishment and re-register one or more vehicles with the relevant costs associated. Most probably, this represents only a minor issue and – besides one leasing company with presence in multiple countries – there was no reference made to it in the online consultation or during interviews with leasing industry representatives. For reasons indicated earlier, hauliers generally prefer to use vehicles registered in their Member State. Hiring companies also suggest that in general local presence is important in their operations. Overall, cross-border hiring of goods vehicles and the possibility to use such vehicles is primarily of interest to the vehicle hiring sector and does not appear to be a priority and issue for the haulage sector.

## **Problem 5 – Inconsistent legal framework concerning the use of hired buses and coaches limiting the access to hired vehicles for passenger transport**

Beyond the issues already identified in the Ex-post Evaluation, another problem area considered is related to the legal framework covering the use of hired buses and coaches for passenger transport. Currently, the use of hired buses and coaches for passenger transport is outside the scope of the Directive, which only covers goods vehicles (used for freight transport). The use of hired buses and coaches is governed by national legislation. On the basis of the information collected in the course of this study, most Member States do not impose any restrictions on the hiring of buses and coaches for either domestic or cross-border passenger transport. In a couple of Member States (including Italy, Greece and Hungary) partial or complete restrictions to the hiring of buses and coaches are in place<sup>3</sup>. Furthermore, the hiring of buses and coaches registered in another Member State is not regulated and restrictions to their use are similar to what applies to goods vehicles.

In principle, the absence of a specific legal framework for passenger vehicles should lead to similar problems to those related to the use of hired goods vehicles. In the case of Member States with restrictions there are potential limitations to the efficient use of buses and coaches and the flexibility of operations. However, the majority of stakeholders (represented by operators and authorities) indicated that the market of passenger transport is working without problems. Demand for hired buses and coaches is generally very limited – no industry representative provided comments to the contrary – and the absence of a harmonised legal framework was not seen as a problem.

A few stakeholders that responded to the consultation also referred to the legal uncertainty and a degree of market distortion from the absence of EU legislation. However, most of the passenger transport sector representatives stated that there were currently no problems from the absence of EU legislation covering a market that was in any case very small.

### **• Other issues**

The Ex-post Evaluation also pointed to some issues regarding the scope and coherence of the Directive in relation to the Regulations (EC) No 1071/2009 and (EC) No 1072/2009 governing the road haulage market. The Directive covers all goods vehicles (light and heavy) while Regulations (EC) No 1071/2009 and (EC) No 1072/2009 governing the road haulage market only cover heavy goods vehicles (i.e. those with a maximum mass > 3.5 tonnes). However, while this can be a potential source of confusion leading to different interpretations among national authorities, this was not identified as an actual problem / issue. In that respect, the possibility of harmonising the scope of the Directive with that of the Regulations 1071/2009 and 1072/2009 would mean that there would not be any legal framework in place at EU level concerning the use of hired light commercial vehicles. At the same time, the extension of the scope of the two Regulations is a topic addressed by ongoing studies. Thus, following discussion with the Commission services, it was concluded that this issue need not be considered further as part of the problem definition.

### ***2.1.2. How has the problem developed over time?***

The analysis performed in the Ex-post Evaluation suggested that the main features of the problem have not changed fundamentally since the adoption of the amended version of the Directive in 1990 (Directive 90/398/EEC). Besides the fact that two Member States removed restrictions related to the use of hired vehicles for own account operations (DE,

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<sup>3</sup> In Greece, the hiring of buses is only allowed among firms with a license of a tourist operator. In Italy, the hiring of buses/coaches is not allowed. The responses to the SME panel survey also suggest that there are partial restrictions in Hungary and Poland (although the specific nature of the restrictions is not indicated). It has not been possible to independently confirm this. Given contradicting responses in the SME Panel, the Estonian law was checked for provisions restricting the hiring of buses or coaches. No such provisions could be identified.

DK) in the 1990s, restrictions to own account operations still apply in the four identified Member States (EL, PT, ES, IT) and there is no evidence to suggest that there will be any changes to this in the absence of EU action.

In the case of Greece, the hiring of goods vehicles without driver becomes possible by allowing own account operators to hire vehicles of over 3.5 tonnes from other firms within similar sectors (law 4092/2012). However, the leasing of vehicles for own account operations from leasing companies is permitted only for vehicles up to 3.5 tonnes in breach of the provisions of Article 3(2) of the Directive that only allows Member States to impose restrictions in the case of own account operations for vehicles with a permissible laden weight of over 6 tonnes. The Greek authorities indicated that a complete removal of the restrictions could be considered but that this was not seen as priority since there had not been such requests from any of the relevant stakeholders. Our interviews with the Greek haulage associations suggests that they were not in favour of further opening of the hired vehicles market on the basis that the existing vehicle fleet is underutilised as a result of the ongoing negative economic situation in the country. The leasing association does also not appear to be particularly interested in such a step<sup>4</sup>. In the case of Italy, the current position of the national authorities is that a removal of such restrictions may have a negative impact on the road haulage market by making it even easier for own account operators to illegally compete with hauliers in the provision of hire and reward services. On the other hand, opening the hire market to own account operators may help reduce poor utilisation of own account vehicles, thereby reducing the incentive for own account operators to engage in illegal third account operations with the aim of improving vehicle utilisation. According to the Portuguese leasing industry representative (ARAC), the Portuguese authorities proposed in 2015 legislation that would maintain the existing restrictions. There was also no indication by the Spanish authorities of any plan to remove the existing restrictions.

On the basis of this, we expect that the problems identified in relation to the restriction to the hiring of vehicles by own account operators – and the relevant negative impact on the overall market in these 4 Member States – will remain. In relation to the hiring of vehicles registered in another Member State, there is again no indication that Member States will introduce changes to existing provisions in the absence of EU action. Possible changes would have happened as a result of the proposed Regulation on the 'transfer of motor vehicles registered in another Member State within the Single Market' in 2012 which foresaw that 'a Member State may only require the registration on its territory of a vehicle registered in another Member State if the holder of the registration certificate has his normal residence on its territory' and granted a six-month grace period for doing so (European Commission, 2012). However, some Member States strongly opposed the proposal in the Council and the proposed Regulation is currently on hold (Charanzová, 2015).

Furthermore, concerns over a possible loss of tax revenues as a result of the use of vehicles hired (and registered) in another Member State that were raised during the discussion of the 1995 proposal (Council of European Union, 1995) were also stated during interviews with a number of national authorities. As a result, it is reasonable to expect that relevant action from one or more Member States should not be expected in the absence of EU action.

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<sup>4</sup> The representatives of the vehicle rental association (STEEA- <http://www.steea.gr/>) whose members are currently involved in the short-term and long-term rental of passenger cars and vans did not participate in the survey. A brief questionnaire sent to all members of STEEA did also not produce any answer.

### 2.1.3. Who is (mostly) affected?

The Ex-post Evaluation suggests that the current restrictions on the use of hired goods vehicles have an impact on the following stakeholders:

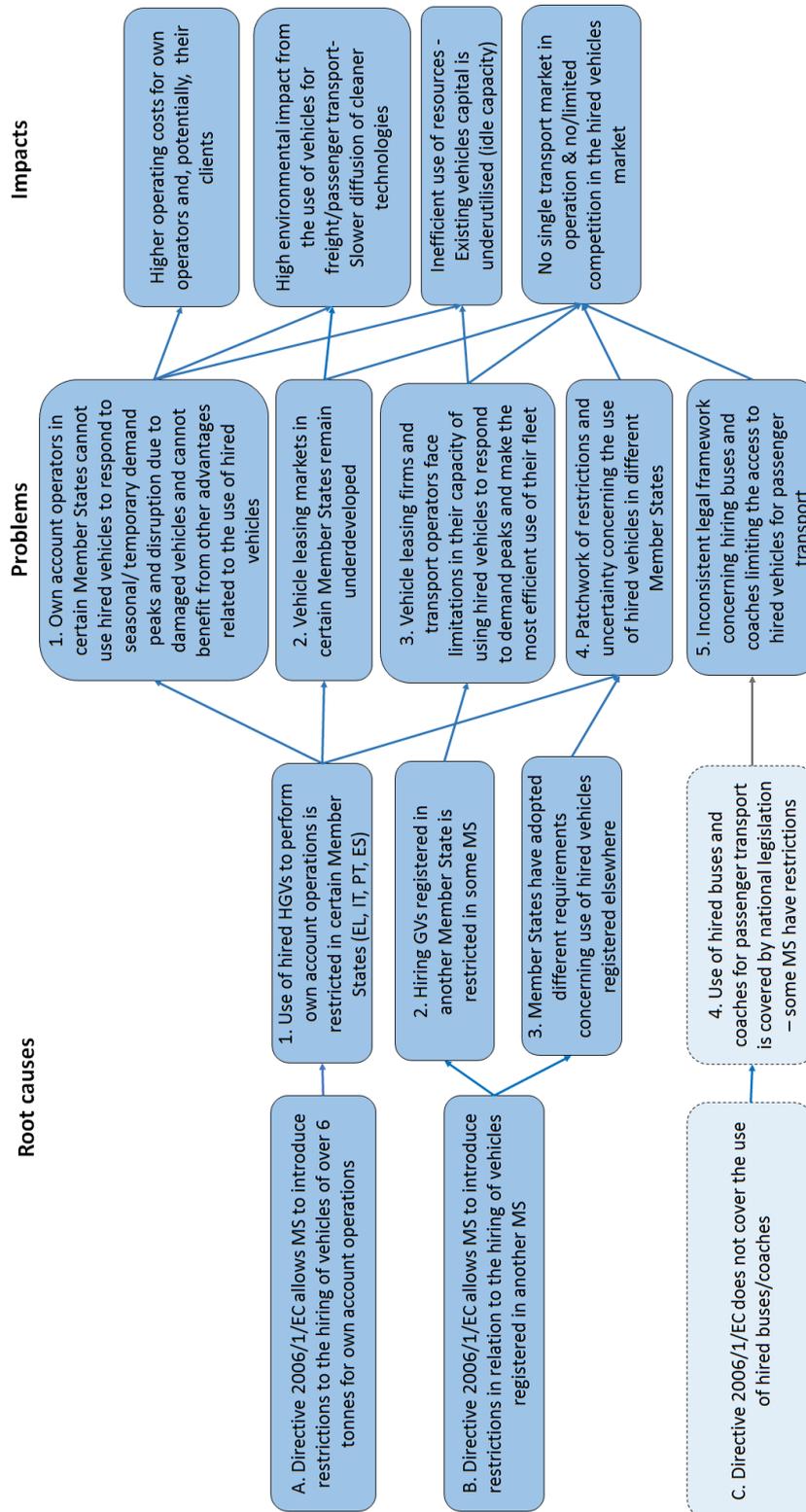
- **Own account operators** (including firms in multiple sectors) in the 4 Member States with restrictions that have no/limited access to a functioning and competitive market of hired goods vehicles and the relevant services and which, as a result, do not have the flexibility provided and hence may face higher operating costs and a reduced capacity to renew their fleet.
- **Hire and reward operators** are restricted in terms of their capacity to use vehicles registered in another Member State. However, as already indicated, the level of demand for such type of vehicle hiring is likely small. Furthermore, to the extent that restrictions imposed on the use of hired goods vehicles for own account operations limit the overall development of the hired vehicles market, transport operators are also affected. Since the majority of road haulage enterprises are SMEs (AECOM, 2014, p. 9), limited access to the hired vehicles market may limit their capacity to respond to demand fluctuations, to improve their cash flow and to spread the additional cost of newer technologies across a longer period of time.
- Furthermore, **hire and reward operators involved in international transport operations** (freight and passengers) that make use of hired vehicles may also be affected by the presence of different restrictions across the EU concerning the use of hired vehicles registered in another Member State. They face a legal framework that varies across the EU, which can create uncertainty and can lead to penalties in some Member States.
- **Vehicle hiring firms across the EU** (rental and leasing of goods vehicles and buses and coaches) are restricted in accessing specific national markets. They cannot access and satisfy existing or dormant demand and cannot make the most efficient use of their vehicle fleet to meet seasonal variations. They also face a complicated legal framework with different restrictions in each Member State that require resources to ensure compliance. In 2013, a total of 6,705 enterprises were involved in the renting and leasing of trucks (Eurostat, 2015), the majority of which were SME with only a few large multinational enterprises. There were also 30,681 enterprises active in renting and leasing of cars and light commercial vehicles, part of which (those involved in the leasing of vans) may also be affected.
- **National authorities** are not particularly affected by the legislation in its current form since the monitoring and enforcement costs are generally limited across the EU. Loss of tax revenues from hired vehicles (acquisition and circulation taxes) was not identified as an important issue in the Ex-post Evaluation, but possible changes leading to increasing use of vehicles registered in another Member State may have implications on the level of national tax revenues.
- **Indirectly, firms making use of transport services** may also be affected to the extent that they cannot benefit from reduced costs of transport operations. However, it should be noted that the Ex-post Evaluation did not identify this as an important group affected by the existing restrictions, nor was the effect considered to be important.
- Finally, **the society** in general is affected mainly by worse air quality due to an on average older vehicle fleet being used in Member States with restrictions (the fleet of hired goods vehicles tends to be newer, greener and cleaner than the fleet of vehicles owned by the operators).

This list covers the full range of stakeholders directly and indirectly affected by the Directive, albeit at different levels.

## 2.2. Problem tree

The problem tree diagram below summarises the main features of the problem and its drivers as identified in the previous sections. It points to elements directly linked to the Directive (the presence of restrictions and coherence issues) but also drivers related to the changes in the level of demand for transport services and the increasing need (demand) for flexible access to goods vehicles.

Figure 2-3 –Problem tree diagram



### 2.3. Baseline

Defining the expected evolution of the problem in the absence of EU action represents the baseline scenario and sets the basis for assessing the possible options for action.

In order to develop a relevant baseline, it is important that all types of vehicles potentially affected by changes to the Directive be covered. The Directive applies to “motor vehicle[s], trailer[s], semi-trailer[s], or combination[s] of vehicles intended exclusively for the carriage of goods”. Therefore, Light Commercial Vehicles (LCVs), rigid trucks and road tractors are covered in the quantified baseline. Trailers and semi-trailers can already be freely hired and used all across Europe without restrictions (facilitated by Regulation 1072/2009), hence they are not part of the baseline. Since one policy option includes buses and coaches, we attempted to include these in the quantified baseline. However, given the lack of data (see below) this has not been possible.

Moreover, the baseline should only include those forms of vehicle hiring that would be affected by changes to the legislation. As shown in Table 2-2, those forms of hire where the asset features on the lessee’s balance sheet (i.e. the transport operator) currently do not face any restrictions in any Member State.

**Table 2-2: Typology of typical leasing and renting contract types (provided by Leaseurope) and whether these are affected by the proposed changes to the Directive**

Differentiation of truck leases/rentals	Vehicle on lessee’s balance sheet	Contract term	Vehicle registration	Premature termination	Vehicle insurance	Purchase option	Affected by proposed changes in Directive
Financial leasing	Yes		Transport operator	No	Option	Yes	No
Financial leasing with services	Yes		Transport operator	No	Option	Yes	No
Rental with Buyback without services	No		Transport operator	No	Option	No	Yes
Rental with services	No		Transport operator	No	Option	Yes	Yes
Full service op. leasing	No		Transport operator	No	Option	Yes	Yes
Pool rental (all inclusive*, no split)	No	1 day – 36 month	Supplier/ rental co.	Yes	Standard	No	Yes

Notes: \*excluding driver and fuel

In Member States with restrictions for own account operators, these restrictions tend to apply to all types of hire where the asset remains on the leasing/rental company’s balance sheet. In Spain, Orden de 20 de Julio de 1995<sup>5</sup> explicitly excludes own account operators from hiring vehicles above 6 tonnes GVW, but specifically excludes financial leasing with a purchase option from the scope of the legislation. In Italy, the Ministry of Infrastructure and Transport has stated in response to our stakeholder consultation that own account operators may apply for a permit to use a vehicle above 6 tonnes GVW if they have acquired it through purchase, or under a leasing, usufruct (usage right), or retention-of-title (comparable to hire purchase) contract.

<sup>5</sup> <https://www.boe.es/boe/dias/1995/08/02/pdfs/A23665-23670.pdf>

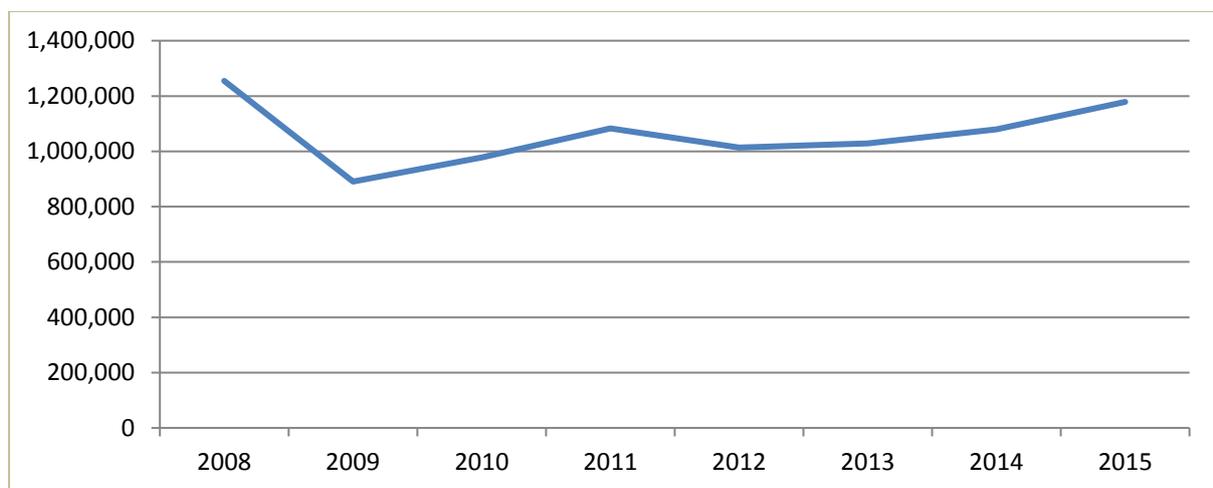
### 2.3.1. Market developments

The present section sets out a pathway for market developments in the absence of changes to the Directive.

#### Overall market for hired commercial vehicles

Available figures for overall commercial vehicle leasing from Leaseurope, the European federation of leasing and vehicle rental company associations, for 17 EU Member States and Switzerland indicate a steep reduction in the number of new leasing contracts from 2008 to 2009 and a slight, gradual recovery (average annual growth rate of 3.8% between 2010 and 2015), with the overall number of new vehicle contracts not yet having recovered to pre-crisis levels (see Figure 2-4). These figures include all commercial vehicles, including LCVs, rigid trucks and road tractors. All types of hire are covered, including financial leasing (which is not affected by the Directive, see above).

**Figure 2-4: Estimated number of new leased commercial vehicle contracts over time (17 EU Member States and Switzerland) (Leaseurope, 2015)**



*Notes: Next to CH, the data cover the following 17 Member States: AT, BE, CZ, DE, DK, EE, ES, FI, FR, IT, NL, PT, RO, SE, SI, SK, UK. New and used commercial vehicles are included; operating and finance leases; LCVs < 3.5 t and HGVs > 3.5 t.*

Concerning the **bus and coach** sector, there is very limited potential for any quantification. The overall data situation on buses and coaches is poor and there are no quantified estimates of the share of hired vehicles within the market or the share of international transport, as shown by a recent, dedicated study on the bus and coach market (Steer Davies Gleave, 2016) conducted in the context of evaluating Regulation (EC) No 1073/2009.

It should be noted that the market for road passenger transport is very different from that of road freight transport. Regular bus and coach services are often provided by publically owned operators or large government contractors. These are complemented by a large number of typically small, independent operators providing hire services with driver, including tourism services, school bus services or operating as subcontractors to carry out regular bus/coach services.

The available information suggests that the rental of buses and coaches without drivers does not appear to play a significant role in the market. Bus and coach associations at European level and from Member States have stated that hiring without driver is not particularly common and is only practiced between coach operators. In many cases, operators respond to seasonal changes in demand by subcontracting, effectively hiring a vehicle with driver. There is no separate market for dedicated rental vehicles as in the freight transport sector. Therefore, it is not possible to develop a quantified baseline for this activity.

### ***2.3.2. Development of a quantified base year estimate for hired commercial vehicles***

Data on the number of hired commercial vehicles across Europe is patchy. It is therefore necessary to make a number of assumptions to be able to develop an overall estimate. The basic data on which the estimate is built is taken from an annual survey of data that Leaseurope collects from its members. For the year 2015, 14 European leasing and rental associations have provided the total number of outstanding contracts for LCVs up to 3.5 tonnes GVW, and 11 associations have also provided such data for HGVs >3.5 tonnes. Following the recommendation of Leaseurope, we have assumed that one contract on average covers one vehicle. All Member States' hire markets are classified into 'mature' or 'developing' markets, based on estimated current market size and/or geographical location<sup>6</sup>.

The average share of leased vehicles for mature and developing markets was calculated separately for the two market types using the available data. These averages were then used to gap-fill estimates for those Member States with no available leasing data by multiplying the average share of leased vehicles (for 'developing' or 'mature' status depending on their categorisation) by the overall vehicle stock in each Member State taken from Eurostat (see coloured values in Table 2-3).

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<sup>6</sup> Following comments from leasing industry stakeholders, Western European markets are generally mature markets whereas significant growth potential is seen in Southern and Eastern European markets. An exception has been made for Italy, which - given its high share of vehicles held under operating leasing contracts - needs to be classified as a mature market, as it would otherwise significantly distort the average for developing markets' size.

**Table 2-3: Deriving an estimate of the overall number of leased commercial vehicles in the EU28**

Member State	Mature/dev -ing market	Leaseurope data [1]: stock of leased vehicles in 2015		Eurostat data [2]: overall vehicle stock		Calculated share of leased vehicles		Overall leased vehicle stock plus gap-filled estimates	
		LCV	HGV	LCV	HGV	LCV	HGV	LCV	HGV
AT	m			341,000	76,000			40,613	16,053
BE	m			656,000	145,000			78,130	30,628
BG	d			261,000	106,000			6,650	10,245
HR	d			90,000	49,000			2,293	4,736
CY	d			97,000	17,000			2,472	1,643
CZ	d	43,200	54,600	468,000	136,000	9%	40%	43,200	54,600
DK	m	75,400	30,100	396,000	41,000	19%	73%	75,400	30,100
EE	d	11,400	8,200	52,000	36,000	22%	23%	11,400	8,200
FI	m	46,000	46,000	411,000	109,000	11%	42%	46,000	46,000
FR	m	535,700	84,300	6,257,000	534,000	9%	16%	535,700	84,300
DE	m	314,800	209,100	1,986,000	776,000	16%	27%	314,800	209,100
EL	d	900	3,600	840,000	280,000	0%	1%	900	3,600
HU	d			331,000	147,000			8,434	14,208
IE	d			283,000	27,000			7,211	2,610
IT	m	231,000	115,600	3,385,000	759,000	7%	15%	231,000	115,600
LV	d			40,000	37,000			1,019	3,576
LT	d			51,000	79,000			1,300	7,636
LU	m			30,000	10,000			3,573	2,112
MT	d			2,000	40,000			51	3,866
NL	m	132,200		828,000	135,000	16%		132,200	28,516
PL	d	34,900	50,000	2,303,000	898,000	2%	6%	34,900	50,000
PT	d	23,600		1,225,000	88,000	2%		23,600	8,505
RO	d			492,000	228,000			12,536	22,037
SK	d	18,000	22,200	209,000	84,000	9%	26%	18,000	22,200
SI	d			54,000	31,000			1,376	2,996
ES	d	111,900		4,475,000	671,000	3%		111,900	64,854
SE	m			516,000	80,000			61,456	16,898
UK	m	689,500	90,500	3,736,000	506,000	18%	18%	689,500	90,500
<i>Developing market average</i>		243,900	138,600	11,273,000	2,954,000	3%	10%	287,242	285,512
<i>Mature market average</i>		2,024,600	575,600	18,542,000	3,171,000	12%	21%	2,208,373	669,808
<b>Total</b>		<b>2,268,500</b>	<b>714,200</b>	<b>29,815,000</b>	<b>6,125,000</b>	<b>9%</b>	<b>17%</b>	<b>2,495,615</b>	<b>955,320</b>

Note: **Green** values are estimates of leased vehicle stock based on total MS vehicle stock multiplied by average share of leased vehicles for developing markets; **red** values are estimates of leased vehicle stock based on total MS vehicle stock multiplied by average share of leased vehicles for mature markets.

Sources: [1]: Leaseurope annual members' survey, data for 2015. [2] Eurostat datasets [road\_eqs\_lorlum] (2015a), [road\_eqs\_roaene] (2016b) – sum of stock of road tractors, and lorries (payloads <1,500 kg for LCVs <3.5t GVW) for 2012 or 2013. Gaps in Eurostat data for BE, DK, FR, EL, HU, LT, LU, NL, PT, SK, SE, UK were filled using national sources from the years 2010-2016 using the latest year available.

In the Leaseurope annual members' survey, various member associations have also indicated the number of commercial vehicle contracts falling into the category of operating leasing (as opposed to financial leasing). We took the operating leasing share to include all types of vehicle rental (short and long term).

It is assumed that the share of operating leasing/rental in total leased commercial vehicles is equally distributed between LCVs and HGVs. A gap-filling procedure analogous to the procedure described for Table 2-3 was used (see coloured values in Table 2-4).

**Table 2-4: Deriving an estimate of the number of operating leasing/rental vehicles in the EU28**

Member State	Mature/developing market	Share of operating leasing among all commercial vehicles [1]	Estimate of vehicles held under operating leasing contracts		Overall operating leasing vehicle stock plus estimates	
			LCVs	HGVs	LCVs	HGVs
AT	m		-	-	25,089	6,741
BE	m		-	-	48,265	12,861
BG	d		-	-	1,201	1,841
HR	d		-	-	414	851
CY	d		-	-	446	295
CZ	d	19%	8,383	10,595	8,383	10,595
DK	m	17%	12,641	5,046	12,641	5,046
EE	d	20%	2,235	1,607	2,235	1,607
FI	m		-	-	28,416	19,316
FR	m	100%	535,700	84,300	535,700	84,300
DE	m	21%	66,037	43,864	66,037	43,864
EL	d		-	-	162	647
HU	d		-	-	1,523	2,553
IE	d		-	-	1,302	469
IT	m	36%	83,941	42,007	83,941	42,007
LV	d		-	-	184	643
LT	d		-	-	235	1,372
LU	m		-	-	2,207	887
MT	d		-	-	9	695
NL	m	74%	98,014	21,142	98,014	21,142
PL	d		-	-	6,301	8,985
PT	d		-	-	4,261	1,528
RO	d		-	-	2,263	3,960
SK	d	14%	2,490	3,071	2,490	3,071
SI	d		-	-	248	538
ES	d		-	-	20,203	11,654
SE	m		-	-	37,964	7,096
UK	m		-	-	425,934	38,002
Developing market average			18%	18%	51,861	51,304
Mature market average			62%	42%	1,364,208	281,263
Total			59%	38%	1,416,069	332,567

Note: **Green** values are estimates of operating leasing stock based on total MS leasing stock multiplied by average share of operating leasing for developing markets; **red** values are estimates of operating leasing stock based on total MS leasing stock multiplied by average share of operating leasing for mature markets.

Source: [1]: Leaseurope annual members' survey, data for 2015.

Thus, as a base year estimate, the total number of vehicles potentially affected by changes to the Directive is around **1.4m LCVs and around 330,000 HGVs**.

### 2.3.3. Development of a quantified baseline trajectory for commercial vehicles held under operation leasing/rental contracts

This section draws together insights from the previous two sections on market developments over time and current size of the operating leasing/rental market for commercial vehicles in order to develop a baseline trajectory for the market up to the year 2030.

Stakeholders from the leasing industry have emphasised that there is a gradual growth and maturing of the market for hired vehicles in Eastern and Southern Europe, both in leasing and in rental, while there is less growth in the 'mature' markets of Western Europe. Hire markets typically take off with more basic forms of financial leasing and gradually move towards full-service leasing and short term rental. As the market structures and habits of market actors in Eastern and Southern Europe change to create more favourable environments for leasing and rental, the industry expects further growth in these.

In order to estimate a baseline trajectory, Member States were further divided into three market categories, following industry comments:

1. Mature markets, with little further growth potential for hired vehicles,
2. Developing markets:
  - a. Fast growing markets, which according to industry stakeholders are converging with mature markets, typically found in Eastern Europe, and
  - b. Slow growing markets, which are also expected to grow their share of rental vehicles and eventually become mature markets albeit at a slower pace. These are typically found in Southern Europe.

Table 2-5 provides a summary of the categorisation.

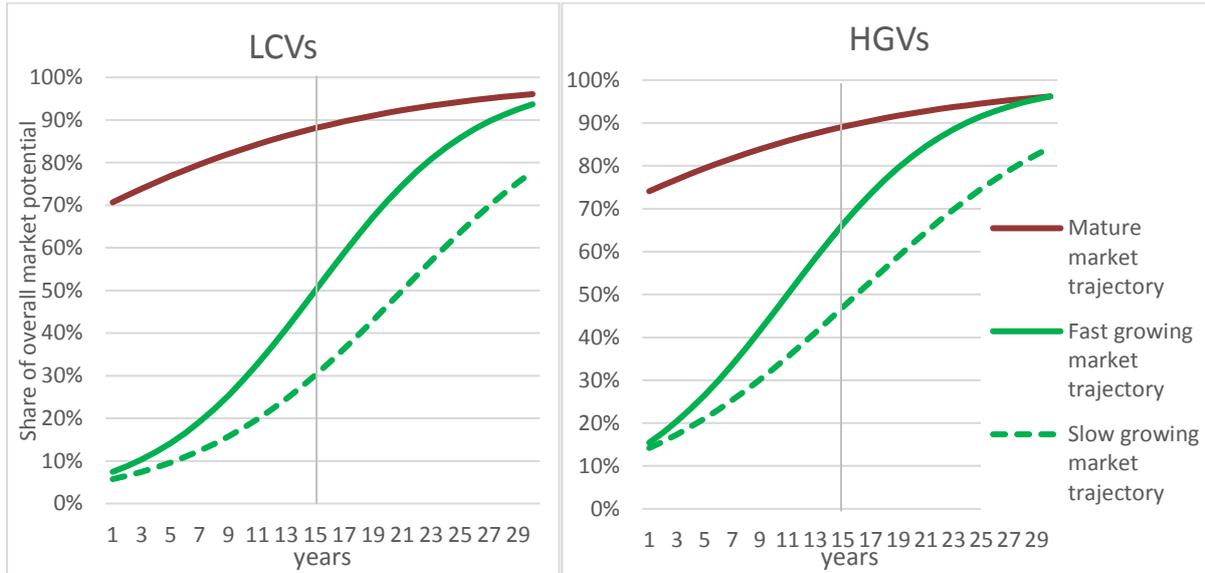
**Table 2-5: Categorisation of Member States into rental market types**

Mature markets (11)	Slow growing markets (4)	Fast growing markets (12)
Austria	Cyprus	Bulgaria
Belgium	Greece	Croatia
Denmark	Portugal	Czech Republic
Finland	Spain	Estonia
France		Latvia
Germany		Lithuania
Italy		Hungary
Luxembourg		Poland
Netherlands		Romania
Sweden		Slovakia
United Kingdom		Slovenia
		Ireland

*Note: Malta is not included in the baseline due to poor data availability.*

Figure 2-5 shows the assumed development trajectories for the different market types as a share of overall market potential, following the typical S-shaped diffusion trajectory according to Rogers (1962), which are used to characterise the gradual cumulative adoption of many innovations/new products. These are defined in terms of the diffusion rate (i.e. the number of years to reach 50% of the maximum market penetration). The starting points of the curves and maximum market potentials (12% for both LCVs and HGVs) have been calibrated to broadly reflect the Member State operating leasing/rental stock sizes as estimated in Table 2-4. Moreover, the slopes of the curves have been set such that the average annual growth rate of 3.8% experienced over the next few years is similar to the average sector-wide growth between 2010 and 2015 (see Figure 2-6 and Figure 2-7).

**Figure 2-5: Market growth trajectories**

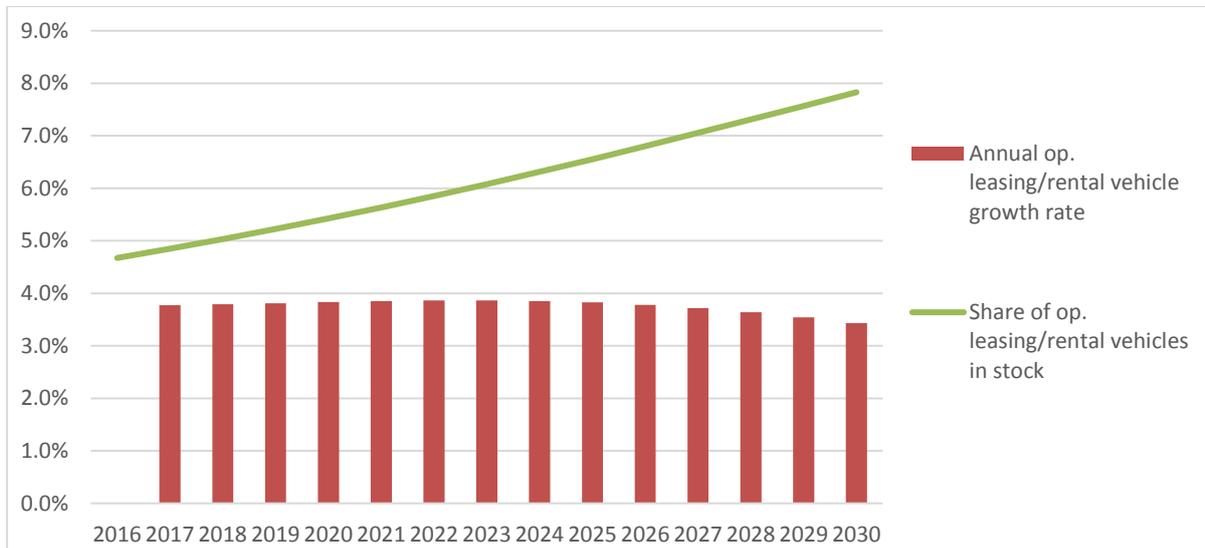


Notes: In most cases, 2016 is assumed to be year 1; by 2030, year 15 is reached.

In addition, since the implementation of Option 1a has significant potential impacts on the Spanish, Italian, Greek and Portuguese markets for HGVs, the base year market shares for these Member States were specifically calibrated to match the country-specific estimates in Table 2-4.

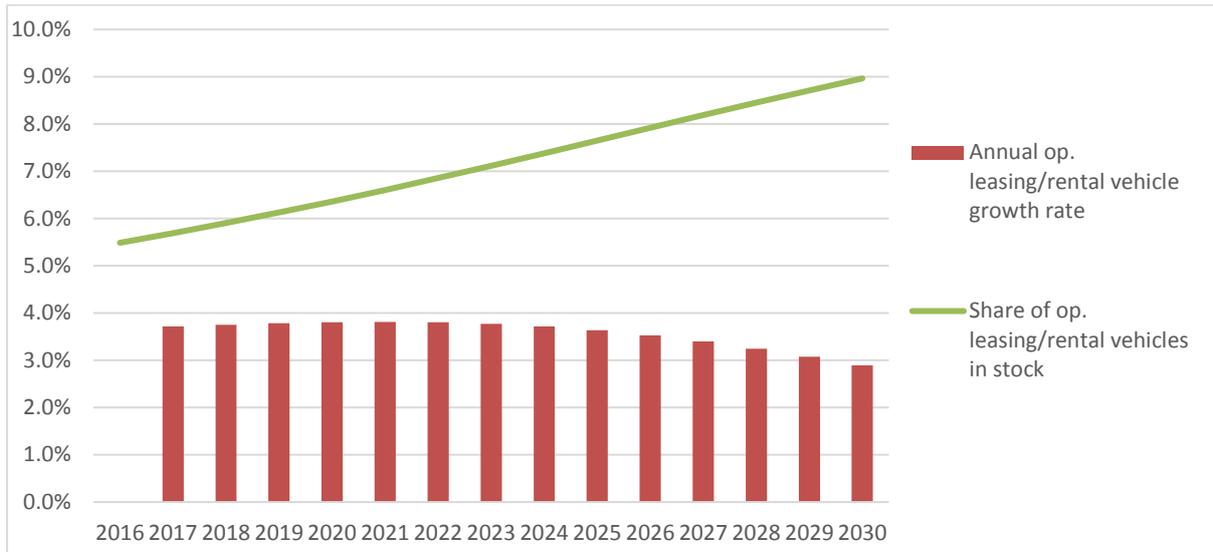
Overall, under the assumed growth trajectories, the EU28 average share of LCVs held under rental/operating leasing contracts increases from 5% in 2016 to 8% in 2030.

**Figure 2-6: EU average LCV rental vehicle growth rate and share in total stock**



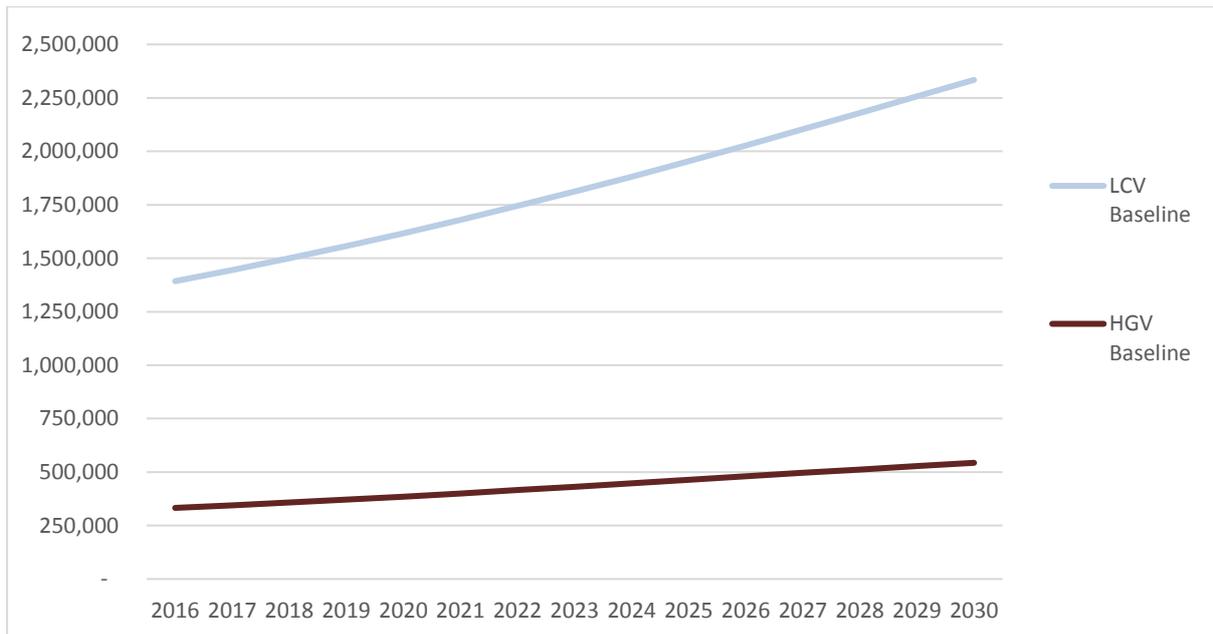
For HGVs, the EU28 average share of vehicles held under rental/operating leasing contracts increases from just under 6% in 2016 to 9% in 2030.

**Figure 2-7: EU average HGV rental vehicle growth rate and share in total stock**



Using the above growth rates, the following baseline trajectory on the number of rental and operating leased vehicles emerges. Rental/leased LCV stock grows from some 1.5m in 2016 to 2.6m in 2030 while rental/leased HGV stock grows from some 370,000 to some 604,000 over the same period.

**Figure 2-8: EU28 baseline trajectory for the number of rental/operating leasing LCVs and HGVs**



### **2.3.4. Legislative developments**

As a baseline assumption, Directive 2006/1/EC remains unchanged and in place over the coming years. However, other legislative developments may also affect the legal situation of hired vehicles. For example, the three Regulations forming the 2009 road transport package<sup>7</sup> explicitly address hired vehicles; they do not permit Member States to discriminate against operators using hired vehicles when issuing Community licences and when authorising establishments to be road transport operators. Changes to these rules are not expected.

A harmonisation of vehicle registration rules could also have implications for hired vehicles, especially regarding issues around hiring a vehicle that is registered in a different Member State to where the operator is established. The Commission proposed a Regulation on the 'transfer of motor vehicles registered in another Member State within the Single Market' in 2012<sup>8</sup> which foresaw that 'a Member State may only require the registration on its territory of a vehicle registered in another Member State if the holder of the registration certificate has his normal residence on its territory' and granted a six-month grace period for doing so. The Regulation aims at removing the obligation of re-registration of hired vehicles for a period of up to 6 months (European Commission, 2012).

However, some Member States have strongly opposed the proposal in the Council and at present it is not clear how the issue will be solved (Charanzová, 2015). The baseline assumption is that the proposal is withdrawn, and the current fragmented legislation at national level persists.

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<sup>7</sup> Regulations (EC) No 1071/2009, (EC) No 1072/2009 and (EC) No 1073/2009

<sup>8</sup> COM(2012) 164 final

### 3. EU RIGHT TO ACT

The analysis in the Ex-post Evaluation of the Directive (Ricardo, 2016) has already established the legal basis for action at EU level. The provisions of setting out legislation on the use of hired goods vehicles at EU level rather than at national level are based on Article 91 of the Treaty on the Functioning of the European Union. This states, inter alia, that the European Parliament and the Council shall lay down common rules applicable to international transport to or from the territory of a Member State, or passing across the territory of one or more Member States, as well as the conditions under which non-resident carriers may operate transport services within a Member State. National legislation cannot ensure common rules at EU level.

In terms of the specific problems identified, restrictions to the use of hired goods vehicles by own account operators are allowed at national level by Article 3(2) of the Directive. As such, EU action is required if such restrictions are to be removed. Furthermore, from the point of view of providers of goods vehicles (leasing/hiring companies), that are present in multiple Member States, only EU level action can ensure a consistent and coherent legal framework that can facilitate a level playing field.

In relation to the second issue, concerning restrictions to the use of hired goods vehicles registered in a different Member State from that in which the operator is based, EU action is considered justified by the majority of stakeholders in the online public consultation in order to ensure a common approach in terms of the applicable requirements and help rectify the existing patchwork of restrictions with different requirements and maximum periods set depending on the Member State.

From the point of view of leasing companies (providers of vehicles) that operate in multiple countries it is clearly relevant that a common legislation concerning the use of hired vehicles across the EU Member States is in place. From the point of transport and own account operators, while the use of vehicles registered in another Member State is still uncommon (even where explicitly allowed, e.g. BE), EU level action can ensure common EU rules and facilitate access to a broader market of hired vehicles, including leasing firms in other Member States and vehicles registered in another Member State.

The above arguments are supported by the great majority of respondents to the online public consultation with 18 of the 26 respondents representing hauliers, leasing companies and authorities agreeing that EU action is necessary. The arguments brought forward in support of EU action were related to the need to avoid a fragmentation of the legal framework. The fact that hired vehicles represent an important aspect in overall road freight transport activities – which is regulated at EU level – is also seen as necessitating EU action to ensure access to hired goods vehicles. Only two respondents indicated that they disagree but did not explain the reasons behind their position.

However, the responses to the consultation are less supportive of the need for EU action in relation to the use of hired buses and coaches. 8 organisations (out of 26) suggested that there is no need for EU action on the basis that, despite the absence of EU legislation, there are no problems in the operation of the specific market which, in any case, is very limited. The interview programme – which included associations and individual operators – also leads to the same conclusion. Only 6 organisations – including one national authority, 4 organisations representing haulage companies and one hiring company - indicated that there are problems from the absence of EU legislation. In most cases the argument was that, as a matter of principle, the legal framework should be the same for all categories of vehicles.

The assessment of the situation (see also Section 2.1) found that 13 Member States require immediate (up to 20 day) re-registration when an operator based on their territory uses a hired vehicle registered in another Member State. Seven Member States allow temporary use between 30 days and one year, while eight Member States seem not to impose any restriction on this practice.

#### 4. POLICY OBJECTIVES

This section defines the policy objectives against which the policy options will be evaluated. Following the Better Regulation Guidelines we have worked towards the development of general and specific objectives reflecting the problem definition.

The starting point has been the objectives of the revision of the Directive as set out in the terms of reference:

*The initiative aims at removing outdated restrictions on the use of hired goods vehicles and thus at opening up new possibilities for operators and leasing/hiring companies alike. This should lead to more efficient operations, higher productivity and lower negative environmental impacts as fleet renewal will be promoted.*

The second sentence provides a general objective towards transport operations that are more efficient and productive, with reduced environmental impacts. However, the first sentence combines specific objectives related to the provision of new opportunities for transport operators and leasing companies with what appears to be one of the proposed policy options, namely the removal of restrictions on the use of hired vehicles. While the problem analysis did identify the presence of restrictions as a root cause it cannot be considered as a policy objective by itself. It also goes against the Better Regulation Guidelines, which require that objectives should not a-priori favour a specific option.

On the basis of the problem analysis presented in Section 2 we have identified the following general and specific objectives.

**Table 4-1: Proposed general and specific objectives of the initiative**

General Objectives	Specific Objectives
Ensure efficient use of factors of production (vehicles) in transport operations	<p>Improve resource efficiency through the more efficient and flexible use of goods vehicles from firms across the EU</p> <p>Reduce costs/increase profitability of road transport operations</p>
Increase productivity and flexibility of transport operations	<p>Strengthen the capacity of EU firms to respond to changes in demand through the use of hired goods vehicles</p> <p>Simplify/improve regulatory framework concerning the use of hired goods vehicles</p>
Support further integration and level playing field of the EU transport market	Ensure regulatory framework provides EU firms with equal access to market for hired vehicles
Reduce environmental impacts from road transport	Reduce fuel consumption and air pollution from road (freight) transport

## 5. POLICY OPTIONS

In an early version of its Inception Impact Assessment, the European Commission proposed a preliminary set of original policy options, which was reduced over the course of the project, following the screening procedure set out in the inception report. In this section, first, the options retained for detailed impact analysis are presented. Second, the discarded policy options, and the reasons for discarding them, are discussed.

### 5.1. Presentation of selected policy options

- **Option 0: Issue Guidelines and Recommendations.** Develop recommendations and guidelines to clarify the application of the Directive and to promote a common approach in terms of the restrictions applied at national level concerning the use of hired goods vehicles for own account operations and in terms of the use of hired goods vehicles registered in another Member State.
- **Option 1: Improve the functioning of the Directive by targeted legislative amendments.**
  - **Option 1a:** remove provisions that allow Member States to restrict the use of hired vehicles for own account transport (currently applied in IT, ES, PT, EL);
  - **Option 1b:** allow the use of goods vehicles which an operator established in one Member State has hired in another Member State for a certain period of time (3-6 months) e.g. to meet temporary or seasonal demand peaks;
  - **Option 1c:** combination of Options 1a and 1b.
- **Option 2: Option 1 + extension of the scope of the Directive** to the hiring of buses and coaches without drivers.
- **Option 3: Same rules for hired vehicles as for owned vehicles.** Hired vehicles are treated identically to vehicles owned by operators. Member States may not impose specific restrictions on hired vehicles. Hired vehicles will be bound by existing Member State legislation around vehicle registration requirements.

### 5.2. Discarded options

Additional options initially identified by the Commission services (in the Request for Services document) were discarded following the submission of the inception report and discussion with the Commission services. These were:

- Aligning the definition of the term 'vehicle' with that of Regulation (EC) No 1072/2009. The latter definition does not include trailers/semi-trailers. This option could have borne the risk of de-liberalisation of the legal framework concerning trailers/semi-trailers without offering any significant benefit.
- Extending the scope of the Directive to hired goods vehicles and/or buses and coaches *with drivers*. No associated policy problem to motivate this extension could be identified. The extension would introduce a legally ambiguous activity that has been identified as 'virtually identical' to hire and reward in a previous proposal amending the Directive (COM(89) 430 final).
- Complete liberalisation of the use of hired vehicles. The initial definition of option 3 envisaged the complete liberalisation in the sense of allowing the use of hired vehicles for all forms of carriage of goods (and passengers) by road at all times and everywhere in the internal market and without any restrictions related to the place of registration and time period. It would require over-riding all Member State legislation on vehicle registration rules. It would likely cause issues around MS taxation revenues which would make this measure disproportionate and politically unfeasible. Thus, Option 3 was amended to '*same rules for hired vehicles as for owned vehicles*' to emphasise that the intention is to subject the use of hired vehicles not to more restrictive conditions than those that apply to vehicles owned by the operators.

## 6. METHOD/PROCESS FOLLOWED

### 6.1. Process / methodology

In the following, the data collection used to support and inform all steps of the impact assessment is described, starting from the problem definition to the analysis and comparison of options. The following data collection activities have been carried out as part of the study:

- Desk research and data collection to support the assessment of the impacts for the different policy options
- Open public consultation
- Interviews with selected stakeholders
- An SME panel survey to support the assessment of specific impacts on SMEs

#### 6.1.1. Desk research and data collection

##### 6.1.1.1. Desk research

We have been conducting desk research to support the various parts of the analysis expanding on the work conducted during Phase 1. The literature review covered the key documents and reports related to the Directive and the hired vehicles market. These included: Commission documents, other relevant legislative texts (including Regulations (EC) No 1071/2009 and (EC) No 1072/2009), general EU transport policy and strategy documents, studies on the hired vehicles market and articles from the transport sector press.

Around 40 pieces of literature were used (see list of references at the bottom of this report). All of the literature is referenced throughout the report and was used to supplement responses from stakeholders and official data sources.

##### 6.1.1.2. Data collection

In addition to the data collected for the Ex-post Evaluation, several data sources were identified that would aid the impact assessment. These include:

- Updated data on the hired vehicles market for the year 2015 as well as a split of the data into more granular levels (commercial vehicles up to 3.5 tonnes versus vehicles >3.5 tonnes; type of lease/rental agreement) (from Leaseurope)
- Information on the current legal situation around vehicle registration across Member States and state-of-play concerning a possible harmonisation at EU level (input from interviews)

Further information was sought via stakeholder interviews, where we asked for stakeholders' qualitative assessment of the impacts of the different policy options, which has helped us in gathering information on the options.

In summary, the main dataset and sources for this impact assessment include:

- Data on the status of the hired goods vehicle market (to develop the baseline): Eurostat, the European leasing industry association (Leaseurope), the German Federal Motor Transport Authority (KBA), national associations, market reports
- Data on the status of hired passenger vehicles market: Eurostat, Steer Davies Gleave (2016), Interviews with EU associations
- Data to help assess the impact of options to the hired vehicles market (level of demand, prices): data on index growth in truck leasing from own account liberalisation to size of own account sector relative to hire and reward sector, data on price elasticities from existing literature, e.g. Significance & CE Delft (2010), data/estimates from industry representatives

- Data to help assess the impacts on authorities: Interviews with national authorities, data on wages (OECD etc.), ITF study on HDV<sup>9</sup> taxation (International Transport Forum, 2012), and TAXUD data (European Commission, 2016)
- Data to help assess environmental impacts: Real world data on HDV fuel consumption and NO<sub>x</sub> emissions, e.g. Eurotransport (2014), TNO (2015)
- Data to help assess social impacts: Estimate of changes in road transport demand and employment statistics from Eurostat.

Additional data sources are referenced throughout the analysis section (see Section 7).

### 6.1.2. Open public consultation

The public consultation was open for responses from the 11<sup>th</sup> August 2016 until 4<sup>th</sup> November 2016 (a total of 12 weeks). The final questionnaire was developed based on feedback from the European Commission. The questionnaire has also been agreed with the Commission's Inter-Service Steering Group. It has only been published in English, although responses have been accepted in all EU languages.

In total 27 responses to the questionnaire were received, covering a variety of stakeholder groups, as shown in Table 6-1. Notably, there has been no input to the public consultation from trade unions or other bodies representing the interests of workers in the road transport sector (although input from the European Transport Workers' Federation was received as part of the stakeholder interviews in Section 6.1.3).

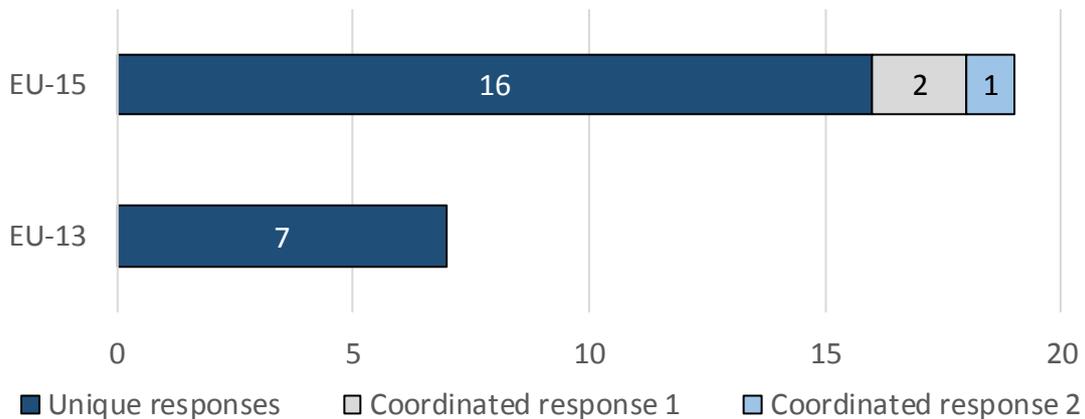
**Table 6-1: Classification of stakeholders responding to the questionnaire**

Stakeholder category	Number of responses
Transport operators / their representatives	14
Vehicle leasing companies / their representatives	4
Organisations representing general and SME business interests	2
Public authorities	5
Private individuals	1
Public/communal enterprise associations	1
Workers' representatives/trade unions	0
<b>Grand Total</b>	<b>27</b>

Responses were received from 15 Member States (Austria, Belgium, Czech Republic, Estonia, France, Finland, Germany, Italy, Latvia, Malta, the Netherlands, Poland, Spain, Sweden and the United Kingdom). Two respondents indicated that they were based in a number of Member States. The number of respondents based in EU-15 Member States (18) is much larger than those based in EU-13 Member States (7), as shown in Figure 6-1.

<sup>9</sup> The term heavy duty vehicle (HDV) includes all road vehicles above 3.5t GVW, including buses and coaches. Heavy goods vehicles (HGVs) are a subset of HDVs not including buses and coaches.

**Figure 6-1: Distribution of responses by whether a respondent is based in an EU-15 or an EU-13 Member State**



The open public consultation report in Annex 1 provides a detailed overview of the consultation results.

### 6.1.3. Stakeholder interviews

Besides the open consultation, we conducted 33 interviews with selected stakeholders to provide us with relevant input on the proposed policy options and the expected impacts. The interviews have also been used for the collection of additional data available (see Section 6.1.1.2) that helped address some gaps in parts of the analysis.

We aimed at a balance of national authorities and industry representatives, conducting interviews with the main representatives at the EU level, together with interviews at national levels with authorities, national associations and/or individual firms.

For the national level, a specific focus was set on Member States which restrict the use of hired goods vehicles by own account operators (IT, ES, PT and EL) as well as on some of the Member States where a maximum service period for the use of goods vehicles hired elsewhere applies (PL for 30-60 days, BE for 6 months, SE for up to 12 months).

Table 6-2 provides an overview over the number of organisations contacted as well as the number of completed and declined interviews and the stakeholders who did not respond to our request. The table shows that we contacted at least one representative per stakeholder type in the interview programme. There are some gaps at some of the hierarchy levels. Notably, national leasing associations did not respond to repeated requests for input, despite an invitation by the European association (Leaseurope) to all its members. Nonetheless, at least one representative at the association level or the member level was included. We have also interviewed at least one stakeholder for each of the seven prioritised Member States (BE, ES, EL, IT, SE, PL, PT)<sup>10</sup>.

In order to increase the number of interview partners, the study team sent out several rounds of reminders, followed up with phone calls, and expanded the initial list of interview contacts to a total of 137. We also gave priority to specific categories of stakeholders (e.g. individual hauliers and passenger transport operators, leasing associations) and also to focus on the key Member States indicated earlier.

Annex 3 gives the complete list of organisations that have been involved in the interview activities.

<sup>10</sup> An important gap in the list of stakeholders contacted is the Institute of Mobility and Transport (IMT) in Portugal which is the entity responsible for the implementation of the Directive. While the IMT representatives initially indicated that they would be willing to contribute to the study, it has not been possible to arrange an interview despite multiple reminders.

**Table 6-2: Stakeholder interviews**

Type of stakeholder	Contacted	Carried out	Declined/ no response
	<b>137</b>	<b>33</b>	<b>104</b>
Haulage Operator	4	1	3
Passenger Transport Operator	12	0	12
Vehicle manufacturer	1	0	1
Vehicle leasing company	7	4	3
National Road Haulage Operators Association	38	7	31
National Passenger Transport Operators Association	24	3	21
National Leasing Association	12	1	11
National Association of Customers of Road Transport Operators	10	2	8
National Road Transport Enforcement Authority	5	2	3
National Ministry	13	6	7
International Road Transport Association	1	1	0
International Road Haulage Operators Association	2	2	0
International Road Passenger Transport Operators Association	3	1	2
International Leasing Association	1	1	0
International Association of Customers of Road Transport Operators	3	1	2
International Transport Workers' Association	1	1	0

The input from the interviews was used in different sections of the analysis and is referenced throughout.

#### **6.1.4. SME panel survey**

The impact assessment also includes the examination of a particular and/or disproportionate impact of the policy options on SMEs.

The Ex-post Evaluation pointed to the particular importance that access to hired vehicles may have for haulage operators, the majority of which are SMEs (99.8% SMEs at EU level, with 92% less than 10 employees) (Eurostat, 2016c) . This is related to the capacity of hired goods vehicles to increase transport capacity and improve flexibility without the need for initial capital and there is also an important benefit from an associated better management of cash flows. The same benefits apply to own account operators since it is mainly large firms that have the capacity to maintain own fleets. Furthermore, the motor vehicle leasing sector is dominated by SMEs (over 99%), although it is only the large leasing firms that are active in cross-border activities.<sup>11</sup>

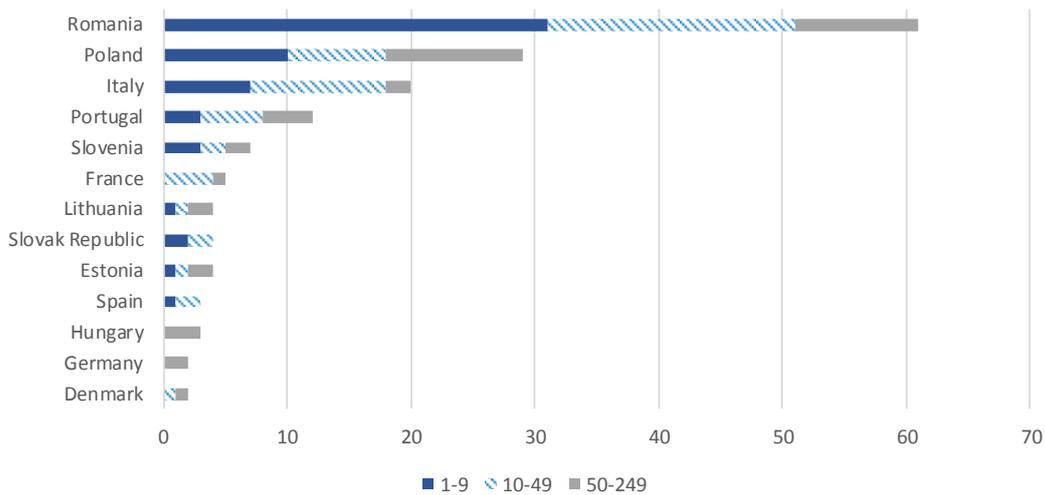
Based on discussions with the Commission services we developed two sets of questions, one on the use of hired goods vehicles without drivers and one on the hiring of vehicles used in passenger transport (buses/coaches).

The survey was launched on 22 September 2016 and remained open until 14 November 2016 (a total of 7 weeks). For the SME questionnaire covering the use of hired goods vehicles, 156 responses were received. Responses were received from respondents

<sup>11</sup> Detailed data on the truck leasing sector are not available. However, based on structural business statistics on the truck leasing sector (NACE 77.12) the average firm size in 2012 was 3.88 persons employed (largest in the UK: 10.5 persons employed, smallest in Greece: 1.25 persons employed) (Eurostat, 2016c).

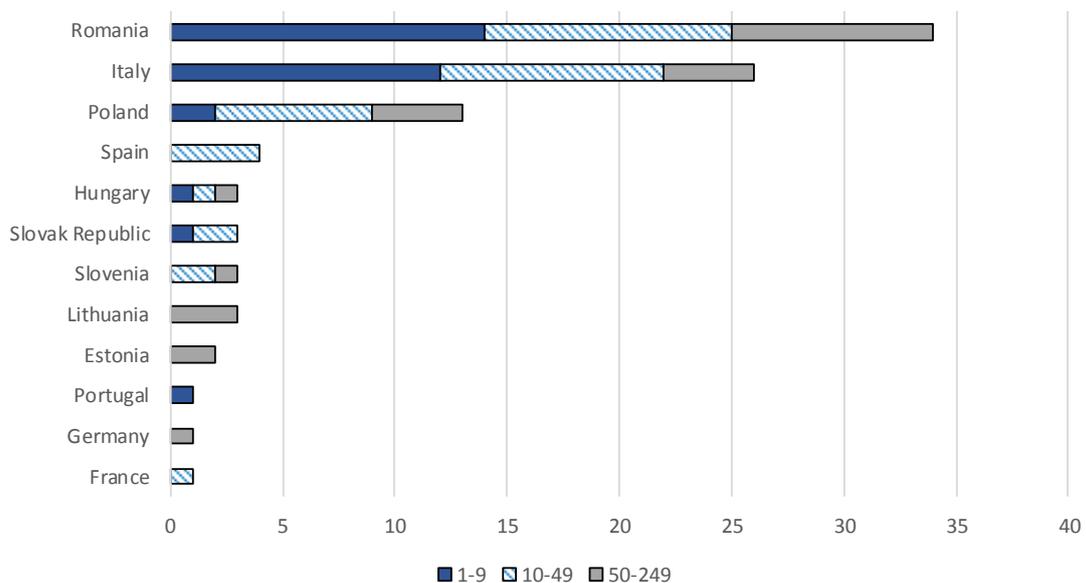
residing in, or operating from, 13 EU Member States (Denmark, Estonia, France, Germany, Hungary, Italy, Lithuania, Poland, Portugal, Romania, Slovak Republic, Slovenia and Spain). The distribution of responses by Member State of residence (for individuals) or by Member State of operation (for organisations) is shown in Figure 6-2, with each Member State broken down by size of firm based on the number of employees. In total, 39% of the responses were from Romania, 19% from Poland and 13 % from Italy. More than 70% of all respondents were from these three countries.

**Figure 6-2: Distribution of the responses to the goods vehicle survey by Member State of residence/operation and size of firm (number of employees)**



The bus and coach survey received 94 responses from respondents residing in, or operating from, 12 EU Member States (all of the above except for Denmark). The distribution of responses by Member State of residence (for individuals) or by Member State of operation (for organisations) is shown in Figure 6-3, with each Member State broken down by size of firm based on the number of employees. In total, 36% of the responses were from Romania, 28% from Italy and 14% from Poland. These three countries together hence accounted for more than 77% of all respondents.

**Figure 6-3: Distribution of the responses to the bus and coach survey by Member State of residence/operation, disaggregated by number of employees as a metric for firm size**



The input received through the survey has fed into the assessment of the impacts of the policy options considered and are referenced throughout the analysis (see Section 7). A detailed analysis of the responses can be found in Annex 2.

## **6.2. Research limitations – robustness of findings**

### **6.2.1. Literature and data sources**

A common limitation of the information found through the desk research was an overall poor level of specificity to the current impact assessment study. While reports on the use of hired vehicles in general could be found, they typically lacked quantitative data relevant to understand the impacts (e.g. costs, benefits) of the options under consideration. The study team aimed to mitigate this as far as possible by asking stakeholders to direct them to relevant reports, as well as by searching in multiple languages (English, German, and French).

Another issue is that quantitative information in relation to a number of possible impacts was sparse. In a number of occasions the only source of data (or estimates) was Leaseurope, who represent the European leasing sector, or individual leasing firms. This means that there is a potential over-representation of the views of the specific group (albeit this group is also most likely to hold some relevant information). This is a particular concern when analysing the potential costs and benefits associated with measures to liberalise the market and to remove restrictions. We tried to cross-check the figures provided by other stakeholders (e.g. transport and own account operators) but this has not always been possible. When it was possible to do so, we examined the accuracy and credibility of the data provided and we also considered the data as representing the “best case” or “maximum impact” scenarios.

### **6.2.2. Limited stakeholder input**

A range of stakeholders potentially affected by possible changes of the Directive have been contacted as part of the study. They were asked to provide relevant input on the proposed policy options and on the expected impacts through interviews and a public consultation. Even though the study team contacted a large amount of stakeholders for the interviews (more than 130 contacts) the overall response rate was low. Following up with stakeholders by phone, it became clear that many stakeholders were not familiar enough with the legislation or considered the Directive not to cause any issues or to be of very low priority and therefore felt they could not provide any useful input. Even for some of the 33 conducted interviews the input that could be provided was very limited.

A similar observation could be made for the public consultation where only 27 responses were received. The limited amount of data that was provided by stakeholders affects the robustness of the conclusions that can be drawn in particular in terms of the differences in impacts of changes in the legislation between stakeholder types and/or Member States.

## 7. ANALYSIS OF IMPACTS OF POLICY OPTIONS

This section summarises the analysis of possible economic, environmental and social impacts from pursuing the policy options, building on the stakeholder interviews as well as quantitative modelling.

### 7.1. Economic impacts of proposed policy options

The analysis of economic impacts of the proposed options covers the following aspects:

- Impact on operating costs in the road transport market (see Section 7.1.2)
- Impact on markets (road transport and vehicle hiring) (see Section 7.1.3)
- Impact on competition and the operation of the single market (see Section 7.1.4)
- Impact on the conditions for investment (see Section 7.1.5)
- Impact on SMEs (see Section 7.1.6)
- Impact on authorities (see Section 7.1.7)
- Impact on consumers (see Section 7.1.8)
- Impact on modal split (see Section 7.1.9)

#### 7.1.1. Introduction to the policy option modelling approach

The quantified estimates in the following subsections mainly draw from the modelling approach used for the development of the baseline trajectory that has already been described in Section 2.3.3. The impacts of the policy options are estimated relative to this baseline. It has been generally assumed that all policy options gradually start taking effect from 2020. In the year 2020 25% of the policy impact is felt, in 2021 50%, in 2022, 75% and in 2023 100%. The trajectory for **Option 0** is presumed to be equal to the baseline. Under **Option 1a**, the market for rental and operating leasing HGVs is opened to the own account sector in those Member States for which it is currently restricted (IT, ES, PT, EL). The share of own account operations in total goods vehicle mileage in those Member States is used as a basis for estimating the growth in hired vehicles under this option (see Table 7-1).

**Table 7-1: Estimate of the number of hired HGVs under Option 1a based on own account mileage share and baseline number of hired vehicles**

Member State	Share of own account operations (vkm) [1]	Number of hired HGVs in baseline in 2030	Number of hired HGVs in Option 1a in 2030	Additional hired vehicles above baseline through Option 1a
Italy	12%	81,143	92,114	10,971
Spain	11%	37,847	42,735	4,888
Portugal	22%	5,911	7,585	1,674
Greece	55%	14,496	31,923	17,427
Sum (4 MS)	-	139,397	174,357	34,960

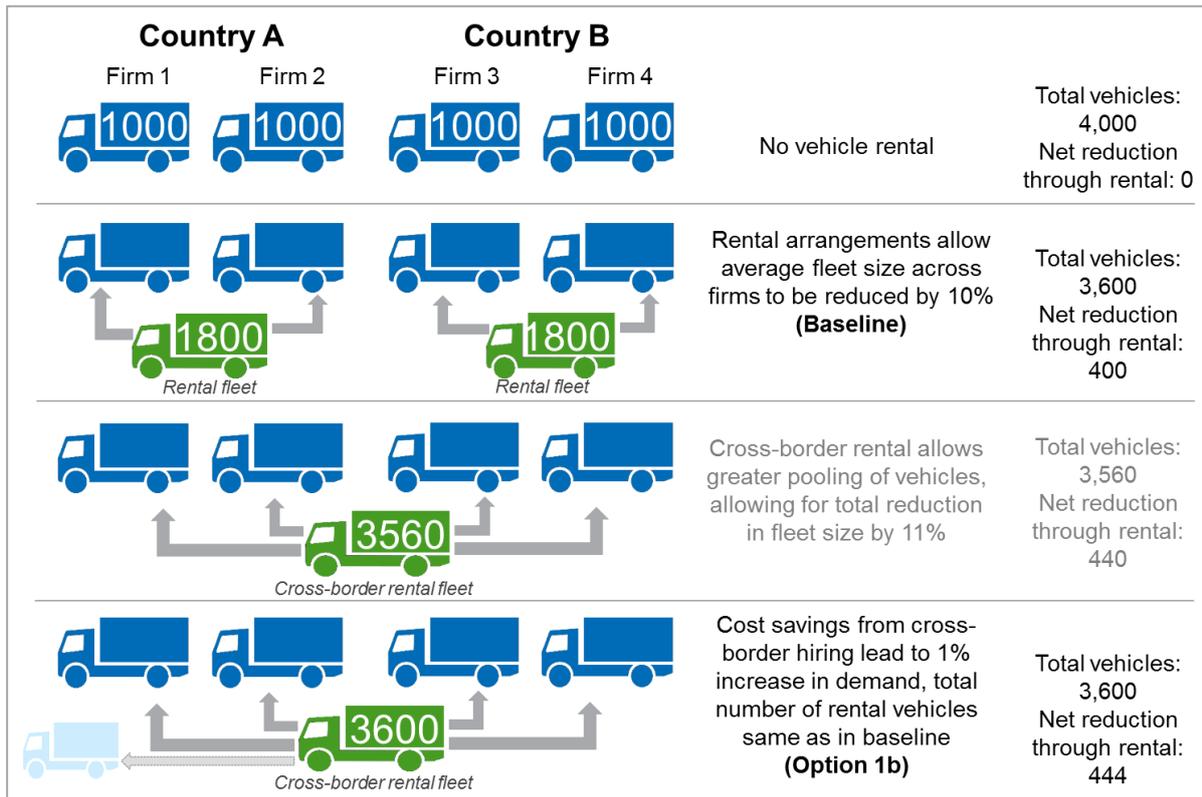
Source: [1] Eurostat (2016a)

Notes: Number of vehicles in Option 1a calculated as [Baseline] x [Inverse of 1-% own account share]

**Option 1b** applies to both LCVs and HGVs. It is assumed that the harmonised rules for cross-border hiring means that hired vehicles can be even better utilised, as it allows for a larger number of companies sharing a pool of vehicles. However, quantifying the potential impact on utilisation has not been trivial given the absence of specific data. Leasing industry stakeholders have stated that they would welcome harmonised rules for temporary cross-border hiring but have not been able to quantify the potential benefits this may have. A stakeholder from a large logistics company commented that they did

not see any potential for improvement in fleet utilisation through a change in legislation to include cross-border hiring, as business is so tight and marginal that generally it is not possible to improve utilisation further. However, analogous to the baseline assumption, we have sought to ensure that potential gains from liberalising cross-border hiring are not underestimated. Therefore, it has been assumed (as upper bound estimate) that fleet size reduction through cross-border hiring increases from 10% (see Section 2.3.3) to 11%. Figure 7-1 further illustrates the approach taken. We also assume that any benefits will not apply to the markets of those Member States where the use of goods vehicles hired in another Member State is allowed for longer than the minimum period of 3 months (i.e. BE, CZ, SE, UK, ES, FR, BG, SK, CY, SI, NL) (see Table 7-2).

**Figure 7-1: Illustration of the approach for quantifying the impacts of Option 1b**



As can be seen from the illustration, the overall number of hired vehicles under Option 1b remains the same as in the baseline. However, the increase in utilisation rate means that these vehicles displace a greater number of owned vehicles. Consequently, the number of vehicles replaced by hired vehicles provides a useful indicator for comparing the effective growth of the hire sector between policy options. A trajectory for each option has been provided in Figure 7-2 and Figure 7-3 below.

**Option 1c** is simply a combination of Options 1a and 1b.

**Option 2** aims to include hiring of vehicles for passenger transport under the Directive. Since there appears to be no significant market for hired buses and coaches despite there being no restrictions on hiring in most Member States no notable impacts from this option are expected. Consequently, no quantification of impacts has been undertaken.

The aim of **Option 3** ("Same rules for hired vehicles as for owned vehicles") is to prevent rules which discriminate against hired vehicles by allowing greater legal flexibility in the use of owned vehicles compared to hired vehicles. Introducing Option 3 therefore means that the four Member States with restrictions on hiring for own account operators would be required to lift these restrictions, as under Option 1a. In addition, refinements to some Member State rules on vehicle re-registration may be required, with the effect of some limited liberalisation in cross-border hiring. According to a survey undertaken by

the European Commission as part of the 2012 legislative proposal on simplifying the transfer of vehicles between Member States<sup>12</sup>, requirements for vehicle registration vary significantly between different Member States and depend on whether a foreign-registered vehicle is owned/held by a resident, or rented by a resident. The analysis suggests that in several cases, rules for rented vehicles are actually less restrictive than for owned vehicles (Table 7-2). For example, a Swedish company buying a vehicle abroad would be required to re-register it in Sweden immediately, while the same company renting a vehicle from abroad would be allowed to do so without re-registering for a year.

**Table 7-2: Overview of maximum length of use by residents in a MS of vehicles registered in another MS**

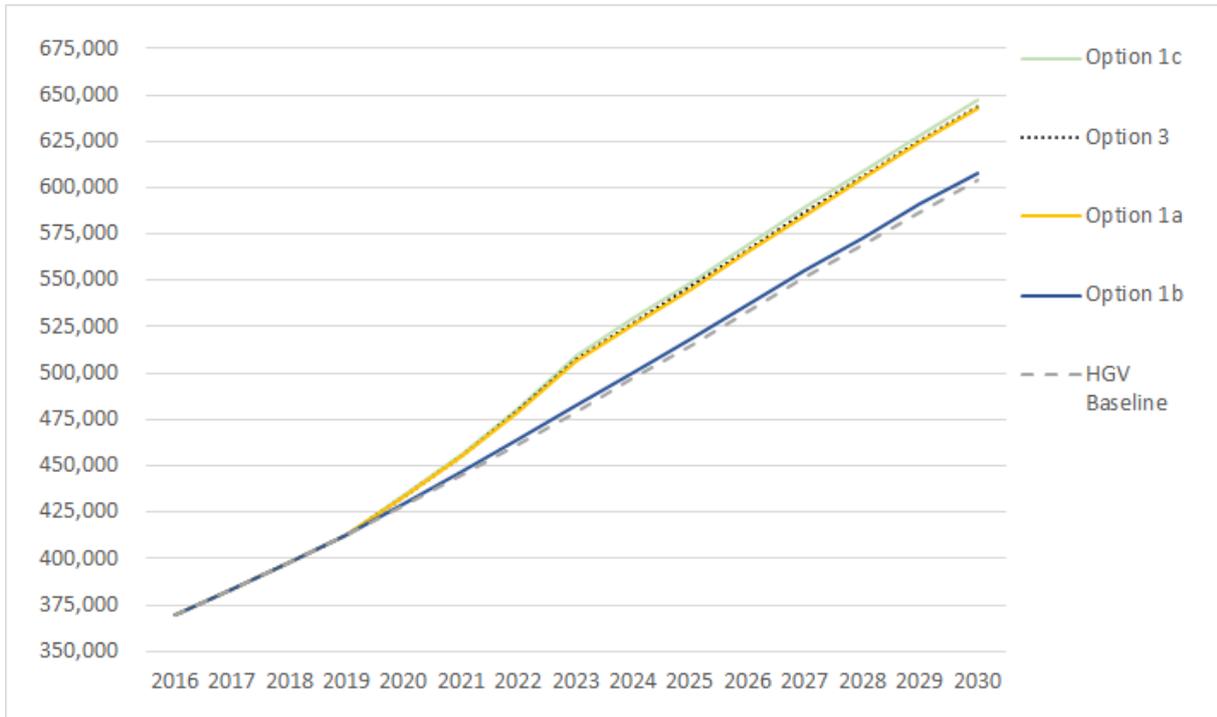
Re-registration deadline	Vehicle owner/holder is resident	Vehicle rented by resident
immediately-20 days	DE, UK, SE, LT, EE, LV, DK, BG, EL, HR, MT, CY, FI	DE, <b>IE, IT</b> , EE, MT, FI, <b>PT</b> , LT, DK, <b>LU</b> , EL, HU, HR
30-60 days	AT, HU, <b>IE</b> , ES, <b>PT</b> , PL, FR	AT, PL
3 months	RO	LV, RO
4 months	NL	-
6 months	BE, <b>LU</b> , SI	BE, CZ
1 year	<b>IT</b>	SE
No deadline	SK	BG, UK, ES, FR, SK, CY, SI, NL
No information	CZ	-

*Notes: The information in this table is based on a Member States survey undertaken as part of the development of the legislative proposal COM (2012) 164. The Non-paper analysing the survey was provided to the project team by the European Commission. Complementary information on re-registration periods for rental vehicles for PL, HU and HR from the Ex-post Evaluation survey (Ricardo, 2016).*

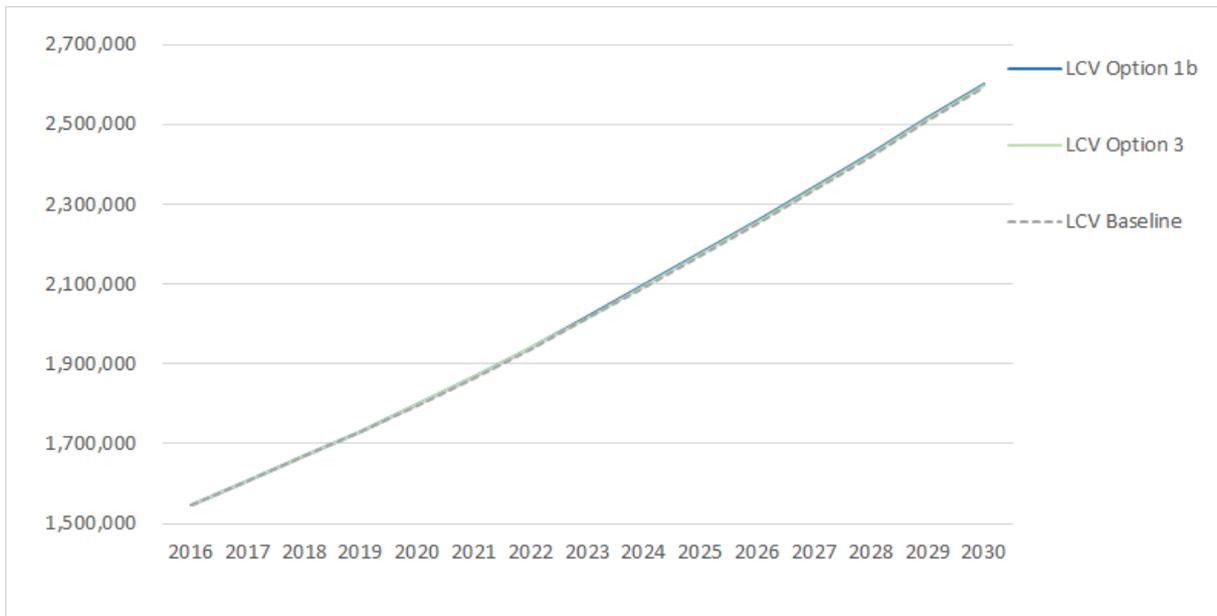
Option 3 should therefore be interpreted as a rule against disadvantaging rented vehicles over owned vehicles from the perspective of the transport operator, rather than requiring Member States to reduce temporary periods of cross-border hiring to the deadline for re-registration of vehicles purchased in another Member State. Consequently, the improvement in utilisation from cross-border hiring (as in Option 1b) only accrues to those Member States which currently restrict residents from temporarily hiring vehicles registered abroad while allowing longer grace periods for vehicle re-registration by residents owning vehicles registered abroad (IT, IE, PT, LU – see Table 7-2), as it is expected that only these Member States would need to change their legislation and align rental and owned vehicle re-registration periods.

<sup>12</sup> COM(2012) 164 final

**Figure 7-2: Overall number of HGVs replaced by hiring under baseline and under the policy options**



**Figure 7-3: Overall number of LCVs replaced by hiring under baseline and under the policy options**



**7.1.2. Impact on costs of operation in the road transport market**

A first set of possible impacts of the proposed policy options is related to the operating cost savings that may arise for transport operators. In this section we present the main mechanisms through which those costs savings may arise and the key assumptions made in order to quantify the impacts of the different options.

## Summary of potential operating cost savings through hiring and key assumptions

The main potential operating cost saving to operators using hired vehicles arises from the advantages of **increased flexibility, which in turn may allow operators to reduce their overall fleet size**. A potential key advantage provided by the more flexible usage arrangements of rental schemes is an improved capital productivity (and therefore operational efficiency) due to an improved vehicle utilisation rate. Companies can respond to fluctuations in demand more quickly and draw on a pool of short-term rental vehicles. This means that operators can reduce their overall fleet size – leasing industry representatives claim that fleet size can be reduced by up to 10% (Leaseurope, n.d.), i.e. an average fleet size of 10 vehicles can be reduced to 9 vehicles. In stakeholder interviews, leasing companies have even reported fleet size reductions of up to 30% in the heavily seasonal food and beverage sectors. However, it is not clear to what extent those fleet size reductions can be attributed to improved vehicle utilisation (e.g. doing the same job with 30% fewer vehicles would be equivalent to a 43% improvement in utilisation), or whether the 'missing' vehicles are just temporarily added back onto the fleet through flexible hiring arrangements during peak periods. During non-peak periods, the peak vehicles can be rented out to other customers, thus leading to slight overall improvements in utilisation. In general, the scope for improved utilisation is likely to be limited, as generally peak periods in road transport demand tend to coincide across sectors and regions (e.g. Christmas and Easter), so vehicles used for peak operations are likely to be under-utilised during the rest of the year. However, there are some possible exceptions; for example, as part of the Ex-post Evaluation, leasing industry stakeholders have pointed to peak demands for vehicles in coastal regions during summer holiday periods, and similar winter peak demands in skiing regions. As discussed in Sections 2.3.3 and 7.1.1 above, we have assumed that average fleet size is generally reduced by 10%, with a proportionate increase in utilisation (11.1%) when a fleet newly moves to an operating leasing/rental contract (intensified under Option 1b).

Besides the possible reduction in the fleet size, **another potential mechanism for cost savings is if the hired vehicles are more fuel-efficient than the owned vehicles that they replace**. This is a potential benefit that was highlighted in the Ex-post Evaluation, arising from the possibility that hire companies have market knowledge not possessed to the same extent by transport operators when making vehicle purchase decisions. The rationale for this is that the rental and leasing industry see helping customers save fuel as one of their potential selling points. Fraikin, a truck hire company, together with certifying agency Dekra performed fuel economy tests on 15 Euro VI trucks, including five tractors, finding that the best-performing tractor had almost 7% lower fuel consumption than the average, under highway operating conditions, while the best-performing rigid trucks had a 4-5% lower fuel consumption than the average under highway conditions (Fraikin, 2014). Thus, in order to explore the potential impact of improved fuel efficiency of hired vehicles over other new vehicles, we have also included a sensitivity analysis which quantified the effects of a 5% reduction in fuel consumption from hired vehicles for each policy options.

Finally, leasing industry stakeholders also point to other advantages from a financial perspective that could not be quantified, including freeing up cash and provide tax and balance sheet advantages to the operator (Fraikin, 2016). It is also suggested that the vehicle rental sector (including operating leasing and other types of long and short term rental) can offer cost savings to operators, enabling companies to purchase 'full-service' mobility packages at fixed monthly rates which entail tacit discounts on vehicle price, insurance, breakdown cover and maintenance, aided by leasing providers' bargaining power, internal market knowledge, use of generic parts and economies of scale (Leaseurope, n.d.). However, the magnitude of these savings in practice is uncertain and, given the strongly competitive nature of the road transport market, rental may not be the most economical option for operators in all cases. As such, these additional benefits were not quantified, and the operational cost saving calculations focus on the first two categories – reduced fleet size due to improved flexibility, and fuel cost savings.

## Operating cost savings

In this section, we provide an estimate of overall gross and net operating cost savings achievable through moving to an operating leasing/rental contract. It builds on the assumption developed above that hiring reduces vehicle fleet size by 10% and improves average vehicle utilisation accordingly.

Assuming that the annual fixed operating cost of a leased/rented vehicle are equal to those of a permanent company vehicle, a 10% reduction in vehicle stock also means a 10% reduction in fixed operating costs. Fuel, tyres, repair and maintenance are generally counted as variable, mileage-based costs and will consequently remain unaffected by the reduction in fleet size. Not all of the savings through improved utilisation accrue to the transport operator (both hire and reward and own account) – some accrue to the leasing operator to cover the cost of operations and profit (see following section). As shown in Table 7-3, typical fixed operating costs in the UK have been estimated at around €10,000 to €20,000 per year depending on vehicle type, and so a 10% reduction in permanent vehicle stock translates into a gross saving of around €1,000 to €2,000 per year per vehicle replaced by a rental scheme.

**Table 7-3: Annual non-fuel operating cost of two representative types of HGV for the UK (DFF International Ltd, 2014)**

Type of cost	3.5t van	12t rigid truck	Road tractor
Depreciation	€ 7,500	€ 12,200	€ 13,700
Vehicle insurance	€ 1,800	€ 2,300	€ 4,400
Interest on capital	€ 900	€ 1,800	€ 2,500
Total fixed costs	€10,200	€ 16,300	€ 20,600
Cost saving per vehicle replaced (10% saving through hire scheme)	€ 1,020	€ 1,630	€ 2,060

*Note: Information based on the UK Road Haulage Association's (RHA) 2014 operating cost tables, currency converted from GBP to EUR at an exchange rate of 1.3 and rounded*

For comparison, a transport operator's overall average cost per vehicle is estimated at around €65,000 to €160,000 for the UK (see Table 7-4), meaning that gross operating cost savings from vehicle hire schemes amount to some 1.3 to 1.8%, depending on the vehicle type.

**Table 7-4: Operators' overall annual costs by vehicle, for two representative types of HGV for the UK (DFF International Ltd, 2014)**

Type of cost	3.5t van	12t rigid truck	Articulated truck
Driver employment	€ 33,200	€ 36,400	€ 42,900
Depreciation	€ 7,500	€ 12,200	€ 13,700
Licences	€ 300	€ 300	€ 1,600
Vehicle insurance	€ 1,800	€ 2,300	€ 4,400
Interest on capital	€ 900	€ 1,800	€ 2,500
Company overheads per vehicles	€ 6,500	€ 11,700	€ 26,000
Repair, maintenance and tyres	€ 3,900	€ 6,300	€ 9,500
Fuel	€ 10,700	€ 20,700	€ 60,900
<b>Total annual cost per vehicle</b>	<b>€ 64,800</b>	<b>€ 91,700</b>	<b>€ 161,500</b>

*Note: Information based on the UK Road Haulage Association's (RHA) 2014 operating cost tables, converted from GBP to EUR at an exchange rate of 1.3 and rounded.*

Since the costs of driver employment, fuel and overheads, as well as the interest on capital can vary significantly between Member States, we have adjusted the numbers for each Member State. The cost weighting in each Member State is based on a detailed analysis undertaken as part of the Road Haulage Legislation Impact Assessment for DG MOVE (Ricardo, forthcoming). Graphs showing the costs used for each Member State are provided in Annex 4.

As shown in the previous section, depending on the vehicle type, gross savings of up to around €2,000 per year per vehicle replaced through hiring are conceivable. Table 7-5 below illustrates how **net cost savings** to transport operators are derived for LCVs and HGVs. The HGV figure is an average of the fixed costs for rigid trucks and road tractors, weighted by the ratio of rigid trucks to road tractors in each Member State. In order to derive net cost savings for the operator, we assume that 50% of gross savings accrue to the transport operator. In part, this reflects the need for the transport operator to book a hire vehicle when needed rather than simply taking a spare vehicle from its forecourt, thus creating additional transaction costs to the operator. Moreover, there is likely to be some split of the savings between the hire company and the transport operator in order to make it worthwhile to trade, and in the absence of more precise information we assume the gains are equally shared.

**Table 7-5: Net cost savings for transport operator per vehicle replaced by hiring**

Type of cost		LCV	HGV
Annual fixed cost (EU28 average)		€ 9,737	€ 16,502
Stock reduction/fixed cost saving through hire	x	10%	
Gross cost saving per vehicle replaced	=	€ 974	€ 1,650
Proportion accruing to operator	x	50%	
<b>Net cost saving accruing to operator</b>	=	<b>€ 487</b>	<b>€ 825</b>

### Impact of the policy options on operators' net savings

On the basis of the above assumptions and estimates of operating cost savings per vehicle, we can now provide an assessment of the EU-level impacts for each of the policy options considered.

Virtually all stakeholders we have interviewed have commented that they did not believe that the publication of additional guidelines and recommendations as foreseen under **Option 0** would affect the use of hired vehicles. Given the nature of the proposed measures – focusing on clarification of the existing legal framework without changes to the existing restrictions – it is reasonable to expect that there will be no change to existing behaviour. Therefore, it is assumed that economic impacts under Option 0 would not differ from the baseline development, as described in Section 2.3.

Under **Option 1a**, the hire market is opened up for own account operators in IT, ES, PT, EL where restrictions on HGVs above 6 tonnes GVW are in place at present. This leads to an additional 39,000 HGVs replaced by hired vehicles by 2030 (see Section 7.1.1 above). Since each vehicle replaced produces annual savings of just over €800 (see Table 7-5), total annual savings amount to some €31m. Under the sensitivity case of a 5% fuel saving from hired vehicles, total savings increase to €75m, as each vehicle replaced leads to an additional €1,100 worth of fuel saving per year.

Under **Option 1b**, along with the fleet size reduction through improvement in utilisation, operating cost savings through hiring increase from 10% to 11% of annual vehicle fixed cost (an increase in net savings per vehicle replaced of 10%). In the case of LCVs, this saves transport operators on average another ~€48 per vehicle per year for each of the 875,000 LCVs replaced by hired vehicles in 2030 in the 17 Member States affected, resulting in savings of €42m over the baseline scenario. In the case of HGVs, it means around €90 per vehicle per year for each of the roughly 355,000 HGVs replaced by hiring in 2030, i.e. annual savings of €32 m. In total, savings are thus around €74m per year

by 2030. Under the fuel saving sensitivity, they increase to €83m. The above savings are expected to apply to Member States where cross-border hiring for over 3 months is restricted. For the other Member States, the additional benefits are assumed to be part of the baseline.

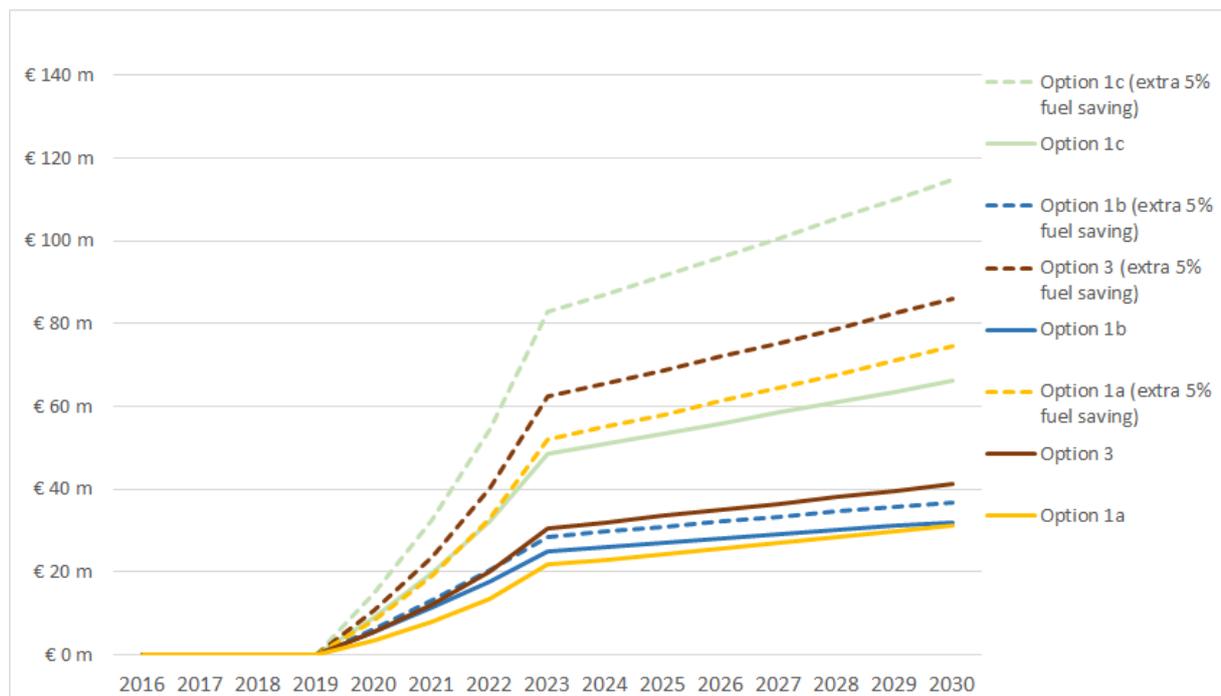
Under **Option 1c**, a combination of 1a and 1b, total annual savings add up to €108m (and €161m under the fuel saving sensitivity).

Since under **Option 3** cross-border hiring is only (further) liberalised in IT, IE, PT and LU (see Section 7.1.1), total savings under Option 3 are far lower than under Option 1c.

The modelling results for the different policy options are summarised in Figure 7-4 and Figure 7-5.

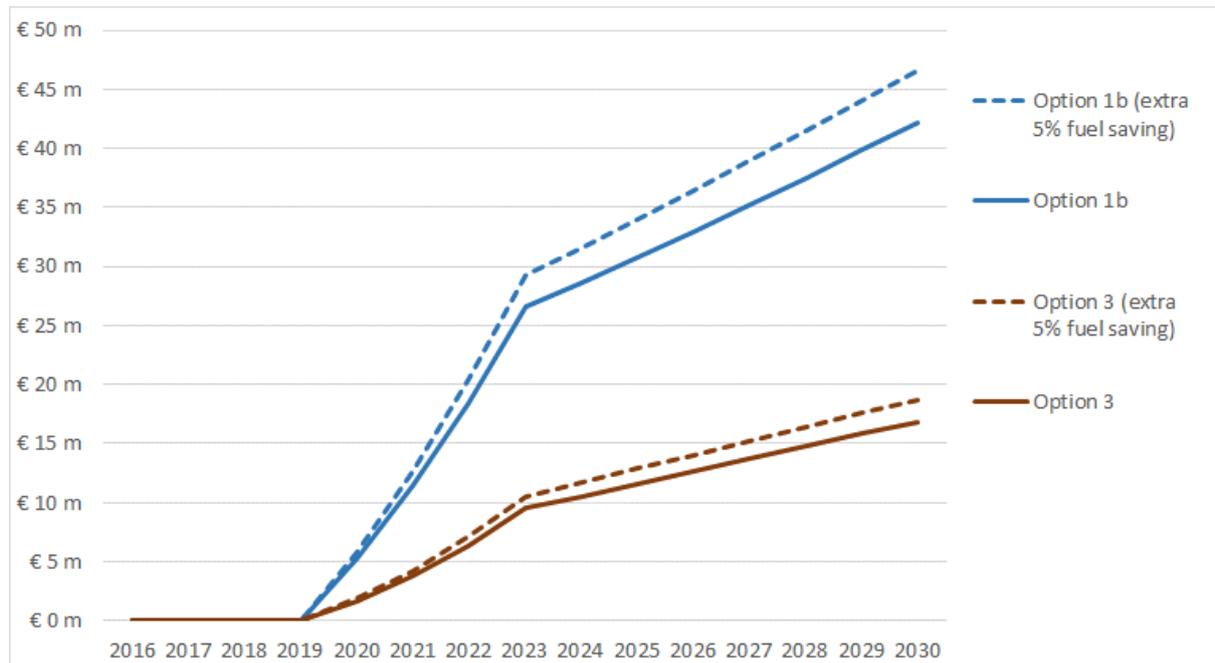
It has not been possible to quantify the impacts of including road passenger transport under the Directive, as foreseen under **Options 2**, due to a general lack of data (see also section 2.3.1 on developing a baseline, and section 7.1.3 on market developments in the passenger transport sector). However, our surveys and consultations of stakeholders have found that, in contrast to the road freight transport sector, there is currently no significant market for the hiring of buses and coaches without driver and very limited stakeholder interest in extending the scope of the Directive to passenger transport. Therefore, we would expect the impact on passenger transport to be very low relative to the impacts on freight transport as quantified below.

**Figure 7-4: Summary of total annual operating cost savings for HGVs in the EU28 over baseline for all policy options (except Option 2)**



*Note: the slope changes in 2023 as all policy options are presumed to be phased in between 2020 and 2023 and only take full effect from 2023 onwards*

**Figure 7-5: Summary of total annual operating cost savings for LCVs in the EU28 over baseline for all relevant policy options**



Note: the slope changes in 2023 as all policy options are presumed to be phased in between 2020 and 2023 and only take full effect from 2023 onwards

Table 7-6 shows the projected cost savings in relation to annual operating costs in the sector. The latter is likely to be an underestimate, firstly because we can expect the whole sector to grow further by 2030, and secondly because it does not cover own account operations. Revenues from most of the various businesses using LCVs are likely to be omitted, too. As with the preceding assumptions made, the resulting percentage operating cost savings should therefore be seen as an upper-bound estimate.<sup>13</sup>

**Table 7-6: projected cost savings in 2030 relative to total sector operating costs**

Policy option	Operators' cost saving in 2030 [1]		2014 operating costs in freight transport by road and removal services [2]	Approximate % operating cost saving
	LCVs	HGVs		
Option 1a	€ 0 m	€ 31 m	€ 277,836 m	0.01%
Option 1a (extra 5% fuel saving)	€ 0 m	€ 75 m		0.03%
Option 1b	€ 42 m	€ 32 m		0.03%
Option 1b (extra 5% fuel saving)	€ 47 m	€ 37 m		0.03%
Option 1c	€ 42 m	€ 66 m		0.04%
Option 1c (extra 5% fuel saving)	€ 47 m	€ 115 m		0.06%
Option 3	€ 17 m	€ 41 m		0.02%
Option 3 (extra 5% fuel saving)	€ 19 m	€ 86 m		0.04%

Sources: [1] own calculations, [2] Eurostat (2016)

<sup>13</sup> If we estimated overall transport costs by multiplying our estimate of annual costs per vehicle (incl. driver) by the number of vehicles registered, we would get a figure of €547bn for HGVs, and €1,707bn for LCVs, as opposed to the total of €278bn from Eurostat used in Table 7-6.

Notes: Operating costs estimated by subtracting 'gross operating surplus' from 'turnover or gross premiums written'. This may underestimate the total operating costs since it does include any capital costs.

### Impact on specific Member States/sectors

Regarding the removal of restrictions for own account operators (under **Options 1a, 1c and 3**), we have assumed that hiring vehicles reduces fixed fleet operating costs by 10% due to a reduction in fleet size. Since fixed costs account for roughly 15% of total annual costs per vehicle (this differs slightly by EU Member State), there could be gross operating cost savings of around 1.5% when own account operators in IT, ES, PT and EL switch to hiring, with around half, i.e. 0.75% accruing to the operators, under all options entailing the removal of own account hiring restrictions (Options 1a, 1c, 3). Assuming that hiring also provides a 5% reduction in fuel consumption (which accounts for some 30% of operating costs), total operating cost may be reduced by another 1.5%, with all savings potentially accruing to the operator. Combined, cost reductions of over 2% are conceivable in the own account sector for each vehicle replaced by a hiring scheme. However, it should be noted that we have not been able to corroborate these estimates with representatives of own account operators during the course of the study.

Table 7-7 puts the total annual savings expected as a result of the policy into context with total estimated transport costs in the Member States from Eurostat. Given the large market share of own account operators, Greece is most strongly affected by the proposed option, with total transport cost savings of around 1.7%.

However, it should be noted again that the Eurostat figures on sector operating costs do not contain own account transport, so the resulting percentage cost savings for the sector should be viewed as an upper bound estimate, especially in Greece where own account transport accounts for 55% of freight transport vehicle mileage.

**Table 7-7: Projected cost savings in 2030 from removing own account restrictions for HGVs in affected Member States (including 5% fuel saving assumption)**

		Italy	Spain	Portugal	Greece	Total (4 MS)
A. Annual cost saving per vehicle to operator [1]		€ 768	€ 979	€ 703	€ 787	€ 804
B. Potential extra 5% fuel savings	+	€ 1,136	€ 1,211	€ 1,457	€ 1,044	€ 1,116
C. Maximum overall annual cost savings per vehicle	=	€ 1,904	€ 2,190	€ 2,159	€ 1,830	€ 1,919
D. Extra number of vehicles replaced by hired vehicles through removing own account restrictions	x	12,190	5,430	1,860	19,363	38,843
E. Total extra operating cost savings in Member State from Option 1a	=	€ 23.2 m	€ 11.9 m	€ 4.0 m	€ 35.4 m	€ 74.6 m
F. 2014 total costs in freight transport by road and removal services [2]	÷	€ 40,261 m	€ 26,234 m	€ 4,638 m	€ 2,127 m	€ 73,260 m
G. Total % transport cost savings	=	0.06%	0.05%	0.09%	1.67%	0.10%

Source: [1] based on Ricardo (forthcoming), see Annex 4, [2] Eurostat (2016)

Regarding the liberalisation of cross-border hiring, the modelling assumes a uniform 10% increase in the *operating cost savings* from hiring vehicles, via an additional 1% improvement in utilisation compared to the status quo, as previously discussed. It is likely that in reality relatively greater gains will be experienced in border regions and

small Member States, whereas relatively weaker gains will be found in regions further away from borders and in larger Member States. However, there is no basis for delivering a more precise quantified estimate of this regional differentiation.

### **Impacts on firm productivity**

Improved vehicle utilisation through flexible rental arrangements increases capital productivity, as less capital (trucks) is needed to provide the same level of road transport services. In terms of labour productivity, the transfer of maintenance and service activities and the handling of administrative tasks to hiring companies should also lead to some labour productivity improvement. Hiring companies should be more efficient and better equipped to handle any such activities in a more efficient manner than individual, particularly small, operators. Thus, firm-level productivity should also be expected to increase although, on the basis of the net cost savings estimated in the quantitative analysis of the policy options of 0.1% or less, the overall improvements in productivity should be similarly limited. Evidently, these overall improvements will not be equally distributed between firms and Member States, and some firms may experience notable impacts, especially among own-account operators in IT, ES, PT and EL, as a result of the improved capital productivity that flexible hiring arrangements allow for.

### **7.1.3. Impact on markets (road transport and vehicle hiring)**

In this section, we look at the impact on market growth in the following sectors:

- Road freight transport (including hire and reward and own account operations)
- Commercial vehicle hiring
- Road passenger transport with buses and coaches

### **Growth in the road freight transport sector**

As summarised in the previous section, road transport operating costs (including both own account and hire and reward operations) may fall by up to 0.06% across the sector as a result of the implementation of the policy options.<sup>14</sup> Given the competitive nature of the market, it is likely that these cost reductions will be passed on to the customers of road transport operations. Assuming that road transport demand is unit-elastic (elasticity of -1), as estimated by (Significance & CE Delft, 2010), transport demand would grow by an equal percentage share.

**Table 7-8: Estimated impact of transport cost reductions on transport demand at EU level under the policy options in 2030**

<b>Policy option</b>	<b>Decrease in transport costs</b>	<b>tkm price elasticity</b> (Significance & CE Delft, 2010)	<b>Increase in transport demand</b>
Option 1a	0.01%	<b>-1</b>	<b>0.01%</b>
Option 1a (extra 5% fuel saving)	0.03%		<b>0.03%</b>
Option 1b	0.03%		<b>0.03%</b>
Option 1b (extra 5% fuel saving)	0.03%		<b>0.03%</b>
Option 1c	0.04%		<b>0.04%</b>
Option 1c (extra 5% fuel saving)	0.06%		<b>0.06%</b>
Option 3	0.02%		<b>0.02%</b>
Option 3 (extra 5% fuel saving)	0.04%		<b>0.04%</b>

<sup>14</sup> Note that, as previously described, the figure is derived by only using total cost of hire-and-reward operations as a denominator. The true percentage cost saving is therefore likely to be lower than the figure indicated.

**Growth in the vehicle hire sector**

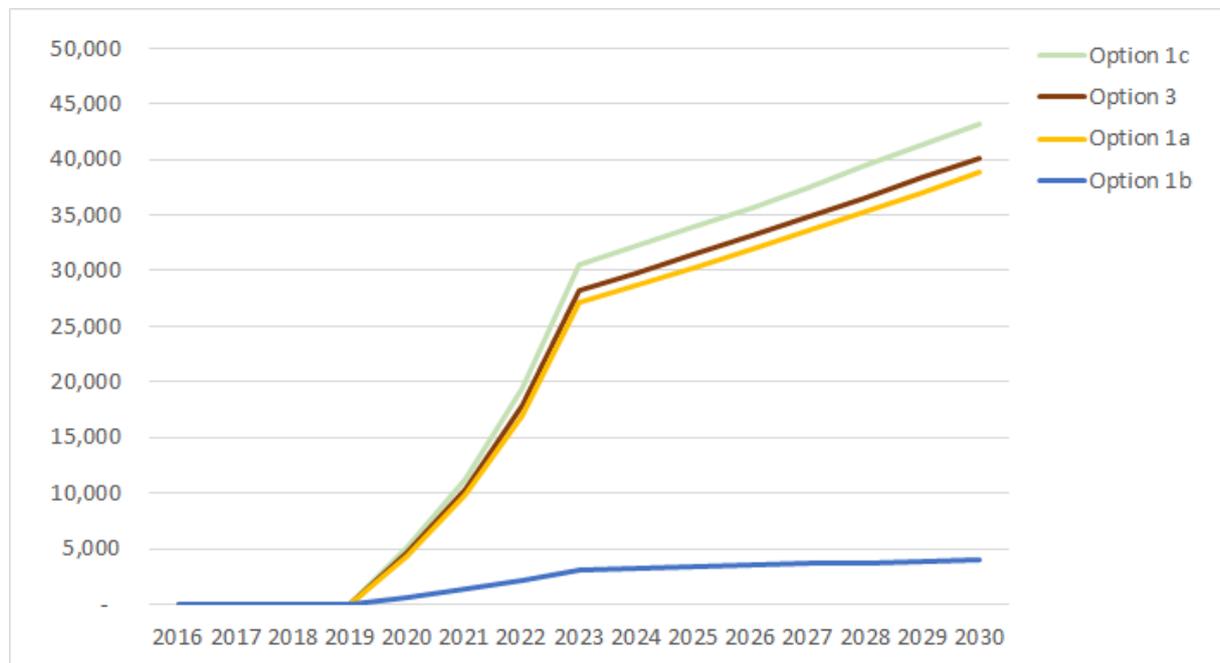
As already suggested by the above quantitative analysis, the removal of barriers for the use of hired vehicles under the different policy options would only have very small impacts on transport costs and therefore not affect overall transport sector growth to a significant extent.

However, the options do have a notable growth impact in terms of the truck hire sector. The number of vehicles replaced should provide a good indicator of the size and profitability of the hire sector, as it takes into account both growth of rental stock and the intensity of rental stock utilisation. By 2030, under Option 1a the number of trucks replaced by flexible renting is 6.4% larger than in the baseline, and under Option 1b, it is 0.7% larger than in the baseline.<sup>15</sup> Under the combined Option 1c, the market is 7.2% larger compared to the baseline. Figure 7-6 shows this difference over baseline in absolute terms. The maximum additional number of HGVs replaced by hiring reaches just over 43,000 in 2030.

Annual average non-fuel vehicle costs are around €17,000 for a HGV (see Annex 4), which can be expected to roughly correspond to turnover per vehicle in the HGV hiring sector. Under Option 1a, the extra number of HGVs replaced in 2030 is around 39,000, thus resulting in some extra €660m turnover. With an additional 4,000 HGVs replaced by hired vehicles in 2030 under Option 1b, turnover can be expected to increase by some €68m. Assuming a 10% profit rate in the industry<sup>16</sup>, expected profits in 2030 may thus increase by €66m, €7 m and €73m under Options 1a, 1b and 1c, respectively.

Option 3 is very close in impact to Option 1a, with a total of 40,000 extra HGVs replaced by hiring.

**Figure 7-6: Number of HGVs replaced by hiring for the EU28 over baseline**



<sup>15</sup> Even though Option 1a only affects four Member States, the fact that a whole new market segment (own account operators) is opened to hired vehicles >3.5t in these Member States leads to a higher growth in vehicles replaced over baseline at EU28 level than under Option 1b, where 17 Member States are concerned but only the utilisation of hired vehicles is improved.

<sup>16</sup> As an example of typical sector profit rates, Fraikin Ltd reported pre-tax profit rates of between 4% and 12% for the years 2010 to 2014, with an average of 7% (<http://ukbizdb.com/company/01350718/fraikin-limited/finances>)

*Note: the slope changes in 2023 as all policy options are presumed to be phased in between 2020 and 2023 and only take full effect from 2023 onwards*

In terms of the LCV hire sector, growth is also an extra 1% over baseline under Option 1b.

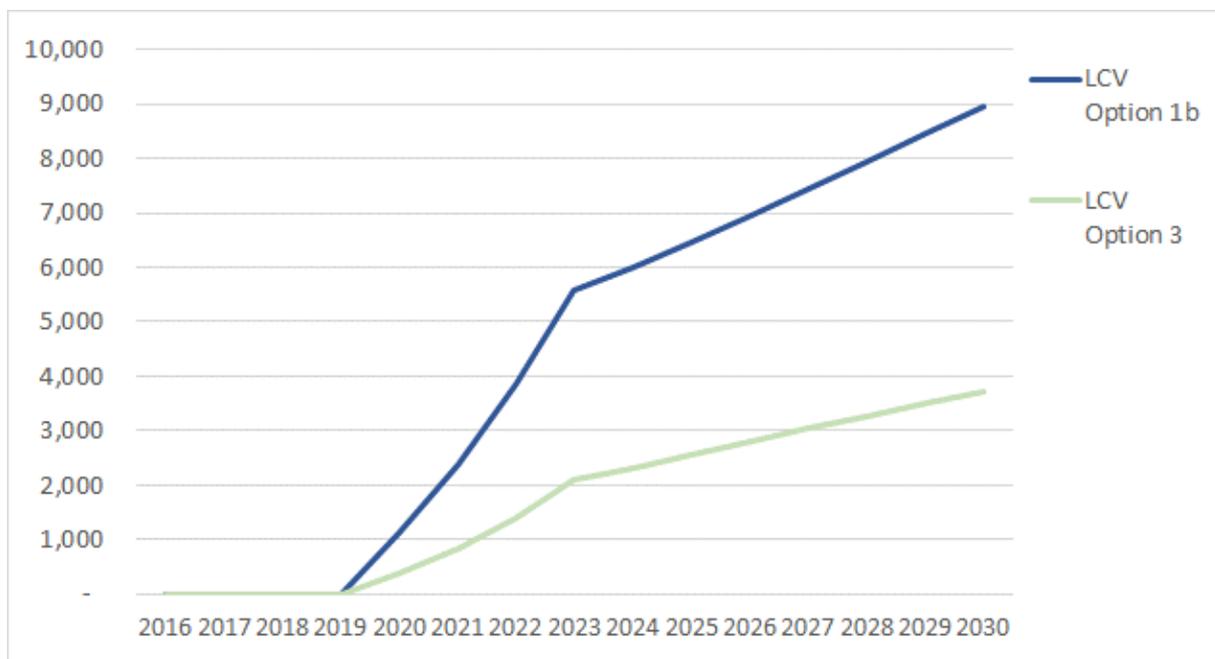
Under Option 3, growth is significantly lower (recall from the previous section that improvements in vehicle utilisation from cross-border hiring under Option 3 are only presumed to apply to IT, IE, PT and LU).

Since there are no restrictions on the hiring of LCVs for own account operators, the LCV market is not affected by Option 1a. Figure 7-7 shows the difference over baseline in absolute terms, showing an increase in the number of LCVs replaced by hiring of around 9,000 by 2030 under Option 1b.

At typical annual non-fuel costs for LCVs of around €10,000 (Annex 4), this increases turnover increases by €90m, leading to some €9m extra profits.

Under Option 3, some 3,800 LCVs are replaced by hiring by 2030.

**Figure 7-7: Number of LCVs replaced by hiring for the EU28 over baseline**



*Note: the slope changes in 2023 as all policy options are presumed to be phased in between 2020 and 2023 and only take full effect from 2023 onwards*

**Growth in the passenger transport (bus and coach) sector**

By definition, changes to the market for the hiring of buses and coaches would only occur under Option 2. However, as was previously mentioned, it has not been possible to develop a quantified baseline for hired buses and coaches, as no dedicated rental market currently exists. The stakeholder consultation did not find any reported restrictions on the hiring of buses and coaches, except for Italy. In Greece, hiring of buses/coaches is only possible amongst tourist operator licence holders. In the SME panel, several respondents from Hungary also reported restrictions. The stakeholder consultation also found little appetite for change in the legislation from the stakeholders involved. Since there are currently few restrictions on the market overall, it is unlikely that more harmonised rules for the use of hired buses and coaches under Option 2 would have any notable economic impact.

The main circumstance under which coach operators have indicated they may be able to benefit from cross-border hiring is in the very rare circumstance of an accident or breakdown abroad, requiring a replacement vehicle. Currently, such an event may require hiring a local coach with driver, meaning that it may be necessary to pay two drivers for the remainder of the trip. While it is not expected that a liberalised cross-border hiring regime would significantly reduce costs to operators, the European Transport Workers' Federation (ETF) expressed concerns about an extension of the Directive to buses and coaches, especially if in combination with a liberalisation in cross-border hiring. In ETFs view, the possibility of hiring vehicles registered abroad may weaken the conditions of establishment for road transport operators and thus facilitate the operation of letterbox companies. ETF also suggests that there has been a decline in coach drivers' working conditions as a result of the liberalisation in intercity coach transport in Germany and argues that liberalisation of hired vehicles could lead to negative synergies when combined with wider passenger transport market liberalisation. In the absence of specific evidence we are not able to either refute or support this claim.

#### ***7.1.4. Impact on competition and the operation of the single market***

As already indicated earlier, Option 0 is not expected to be able to bring specific changes to the current framework applicable to the hiring of goods vehicles and remove any restrictions. Thus, it cannot be seen as having any impact on either the freedom of providing road transport services or on competition.

In general, with the exception of Option 0, all options are expected to have positive impacts in terms of the freedom to access hired vehicles, and an increase in the level of competition should also, in principle, be expected. However, only a qualitative assessment of the options is possible.

The Ex-post Evaluation concluded that the presence of restrictions and specific requirements applicable in IT, ES, PT, EL have a limiting impact on the use of hired vehicles in these markets and that this goes against the development of the Single Market in transport services. Furthermore, the fact that a large number of Member States do not allow their undertakings to use hired vehicles registered in a different Member State means that there are effectively various separate hired vehicle markets across Member States rather than one single market. Users (hire and reward and own account operators) in more than half of the Member States are potentially restricted in terms of not being able to hire vehicles from other Member States, even for a period as short as 3-4 months to cover temporary or seasonal demand peaks.

Option 1a concerning the use of hired goods vehicles for own account operations should be expected to have a direct effect on the freedom to provide services in the area of hiring of goods vehicles in the four Member States where restrictions are still in place (ES, PT, IT, EL). In these States, hiring for own account operators is currently not allowed for vehicles >6 tonnes GVW, so the adoption of Option 1a will have a clear and direct impact in that respect. In the case of Spain, Italy and Portugal, operating leasing/rental companies are required to hold a license as transport operators in order to be allowed to offer rental HGVs to haulage operators (for hire and reward). It is not expected that amendments to the Directive leading to an opening of the market to own account operators would remove these barriers to the establishment of hire companies. However, it would open the own account market to hire companies. The larger market potential may thus increase competition by attracting new market entrants.

Consequently, leasing companies expect that the removal of restrictions should lead to increased competition within the market of these specific Member States. On the other hand, some hire and reward operators indicated that there is a danger that such removal of restrictions may lead to unfair competition from own account operators. Greek haulage operators indicated that, while they are not against the opening of this market, there is concern that it will become easier for own account operations to replace hire and reward. Italian authorities and haulage operators are strongly against any such change on the basis that they expect it to facilitate unfair competition which hire and reward operators

face from own account operators who illegally engage in hire and reward operations while not having to comply with the same level of rules and regulations. The authorities have claimed that this is already an issue in Italy – although no specific evidence was provided – and are concerned that it could grow if own account operators had easy, flexible access to hired goods vehicles. It should be noted however that the issue of own account operators engaging in hire and reward operations (for which they have no licence) in case they have access to hired goods vehicles has not been raised by anyone in any other Member State, where this is already possible. As no evidence has been provided, the fears of unfair competition may not be justified.

Option 1b should also be expected to have a positive contribution to increasing the freedom of providing and accessing hired vehicles. It will give greater flexibility to hiring companies in terms of responding to temporary changes in demand making use of vehicles registered in different Member States and to haulage operators in terms of being able to use hired vehicles registered elsewhere for 3-6 months. From both sides it should be expected to lead to a more integrated market of vehicle hiring. Furthermore, as indicated by one leasing company, it will make it easier for hiring companies to establish themselves in new EU markets. It allows hire companies to make use of the vehicles registered in another Member State to test the level of demand for specific services. This may facilitate fast market entry and exit, benefitting competition. On the other hand, allowing cross-border hiring should mainly benefit hiring companies with large fleets and international presence, which might reduce competition.

Option 2 should, similar to Option 1, have a positive impact in terms of the freedom to provide services of leasing/hiring of buses and coaches in those Member States where this is currently not allowed (IT, HU). However, stakeholders have indicated that hiring of buses and coaches without driver is very rarely done, even in markets which currently do not face restrictions.

Finally, Option 3 should be expected to have similar impacts to those identified under Options 1 both in relation to the freedom to provide services and competition.

**Table 7-9: Analysis of the impact of examined options on the single market and competition**

Option	Impact on freedom of provide services	Impact on competition
Option 0	No expected impact – Restriction will continue where applicable	No expected impact
Option 1a	Positive impact in Member States with restrictions	Increased competition expected in the markets with restrictions Concerns that it may facilitate unfair competition
Option 1b	Positive. Expect to make it easier and cheaper for hire firms to offer services in other Member States	Uncertain, could provide structural advantage to large operators with international presence.
Option 2	Expected positive impact in those Member States where there are restrictions (IT) – although such services are currently very limited even where allowed	Positive in principle but limited supply/demand at this point
Option 3	Positive. Expect to increase freedom to provide services in road freight and road passenger transport services in Member States where such restrictions are in place.	Positive impact. Increase supply of hired vehicles and level of competition in both road freight and passenger transport markets.

#### **7.1.5. Impact on the conditions for investment in the relevant sectors**

In general, leasing and rental options for vehicles facilitate investment in vehicles, as evidenced by the fact that almost all vehicle manufacturers offer these services. The extension of operating leasing and rental to own account operators in those Member States that currently face restrictions (Option 1a) should therefore make it easier for own account operators to use new vehicles. Similarly, harmonising the rules for temporary

cross-border hiring (under Option 1b and to a lesser extent Option 3) may help reduce gaps in the cost of capital currently experienced between Member States, as vehicles can temporarily be hired from wherever they are cheapest.

Moreover, hiring vehicles can improve access to finance for other investments, as it allows companies to take vehicles off their balance sheet. Outstanding loans for vehicles may otherwise compromise operators' ability to access finance, or increase their interest payments on a loan.

In accordance with these observations, respondents to the public consultation felt that the policy options could be beneficial towards investments in new vehicles.

**Table 7-10- Expected impact on the conditions for investment**

Option	Impact
Option 0	No expected impact – Not relevant
Option 1a	Positive impact for own account sector in Member States with restrictions, both in funding new vehicles and access to investment finance for other purposes
Option 1b	Positive impact for road transport sector in general in funding new vehicles, may contribute towards equalising capital costs across Member States although the magnitude is probably limited
Option 2	No major impact expected for passenger transport as no market for hired vehicles
Option 3	Positive impact for road transport sector, both in widening vehicle funding options and widening access to investment finance for own account sector in Member States with current restrictions

### **7.1.6. Impact on SMEs**

#### **Providers of hired vehicles**

As discussed in Section 7.1.4 above, further liberalisation may increase the overall market potential for hired vehicles, which should benefit all vehicle hire/rental companies, including SMEs. However, large hire companies with an international presence may benefit more from a liberalisation of cross-border hiring than their smaller competitors as it would enable the former to move vehicles internationally between their outlets. SMEs are likely to only have a regional or local presence and may therefore benefit from the liberalisation to a lesser extent, although liberalisation may incentivise them to grow their business internationally. Consequently, while Option 1a will probably benefit small and large hire companies alike, Options 1b, 1c and 3 which entail different degrees of cross-border liberalisation may have mixed impacts on small and medium sized hire companies without international presence.

#### **Transport operators**

The Ex-post Evaluation found that SMEs may benefit more from the options as they tend to be major users of hired vehicle fleets (they are less likely to have the necessary funds available for investing in the purchase of new vehicles). However, even assuming for illustrative purposes that overall cost-savings from the policy options for some SMEs were five or ten times higher than the average (of 0.06% under Option 1c), they would still account for 1% or less of a company's total costs. However, as was discussed above, individual firms moving from owning to hiring vehicles may save up to around 2% of total annual operating costs. Own-account firms in IT, ES, PT, and EL, many of which are SMEs, currently do not have this possibility. Options 1a, 1c and 3 would open the own-account market, thus allowing individual firms to save up to 2%.

156 SMEs from various sectors of the economy responded to the SME panel survey on hired goods vehicles. Around half of them had experience in hiring vehicles. Most found having the option to hire vehicles to be beneficial, in particular the increase in the flexibility of operations, as well as the possibility to replace defective or damaged vehicles, and helping meet seasonal or temporary demand peaks. However, the SMEs

surveyed (SME panel) were generally uncertain about how the removal of existing restrictions on hired vehicles would affect their level of use of hired vehicles. Moreover, as part of the public consultation, some respondents felt that the policy options (Option 1a in particular) could have negative impacts on small hauliers, as some of their clients may instead move their goods on own account.

Overall, the policy options should generally benefit SMEs through improving their access to hired vehicles.

### **7.1.7. Impact on authorities**

The possible impact on authorities of the proposed policy options can take the following forms:

- Additional administrative burden related to the implementation and enforcement of the adopted measures
- Budgetary impacts as a result of the proposed measures

#### **Additional governmental administrative burden**

Options 0, 1a and 3 are not expected to create any tangible additional administrative burden for government. However, some Member States have raised the issue that the liberalisation of cross-border hiring (under Options 1b and 3) may create an additional burden on enforcement (DK, IT). The Greek authorities made reference to the need of introducing a register for such vehicles which would create additional costs. In contrast, the Swedish authorities, where foreign-registered vehicles can be used for up to one year do not have a separate register and do not see any issue with additional enforcement costs. The Swedish authorities have commented that at present they estimate that approximately 60 foreign vehicles are in use with Swedish transport operators. Arguably, such small numbers do not justify the creation of a dedicated register. However, if the use of foreign hired vehicles were allowed across the EU, even only for a limited period (3-6 months), thus also eliminating legal uncertainty on the use of hired vehicles from different Member States in international transport, it is possible that the number of vehicles registered in a different Member State from where the operator is based would increase significantly, even in those Member States where this is already permitted.

A register could help prevent abuses of the temporary hiring provisions. First, it can help with keeping haulage companies traceable, thus addressing the concerns voiced by road transport workers' associations and some haulage operators' associations that cross-border hiring may function as another barrier for effective enforcement of the conditions of establishment for haulage companies. Second, a register may be the only effective means of ensuring that cross-border hiring is only used as a temporary solution and not a permanent way of minimising tax burdens or obscuring illegal business practices.

A precedent for a common register exists: the European Vehicle and Driving Licence Information System (EUCARIS), allows the participating Member States to search each other's vehicle registration and driving licence databases. Its budget for 2012 was €640,000. It would be reasonable to expect a similar register for hired vehicles to result in a cost of around €0.5m per year for upkeep of the system, plus further amounts for staff training and IT systems at the level of the national authorities.

Alternatively, the European Transport Workers' Federation has suggested as part of the stakeholder interviews that if Option 1b (and 1c) were to be implemented, the following conditions should be met:

- Mandatory declaration of the vehicle number plate of all vehicles in use by a haulier, by including the information in the list of minimum data to be entered in the national electronic registers (NERs) (currently, the declaration of vehicle number plates is optional – see European Commission (2009))

- Allocation of a temporary number plate of the Member State to which the vehicle is relocated, with clear visual elements, during the entire relocation period
- Introduction of infringements relating to the Hired Vehicles Directive in the so called 'list on categorisation of infringements leading to the loss of good repute' (European Commission, 2016a)

Whilst building upon the existing system of NERs would reduce the annual costs of operating a dedicated register of hired vehicles, the system does not apply to own account operators. Moreover, allocating temporary number plates for vehicles hired from other Member States could contribute to a significant increase in administrative burden and associated costs.

Consequently, if common rules for cross-border hiring were to be introduced (as foreseen under Options 1b and 1c), a new register of hired vehicles would likely be needed. Both would be likely be associated with a small increase in the government administrative burden.

### ***Budgetary consequences for public authorities***

All policy options (except Option 0) may potentially affect Member State governments' taxation revenues.

Firstly, there may be implications for taxation revenues as a result of the liberalisation of the market under Options 1b, 1c, 2 and 3 due to different tax regimes among Member States which may incentivise companies to register vehicles in Member States with relatively lower vehicle taxes and hire them back. In addition, there could be reductions in vehicle registration tax revenues if the overall vehicle stock is reduced as a result of intensified utilisation through flexible renting of vehicles under all options, including Option 1a. However, the cost savings achieved through intensified utilisation may translate into increased profitability in the sector, leading to increases in corporate tax revenues.

It has not been possible to quantify shifts in vehicle registrations between Member States that may occur under Options 1b, 2 and 3 due to the possibility to use foreign-registered vehicles for longer within a Member State, or the implications for tax revenues. The impact depends on the tax levels for a certain vehicle type relative to tax levels in other Member States. For example, the Danish tax authorities estimate that temporary hiring of foreign-registered vehicles would not significantly affect taxation revenues for vehicles above 12 tonnes. However, taxes for vehicles between 3.5 tonnes and 12 tonnes in Denmark are higher than in other Member States and so the authorities expect that hiring of foreign-registered vehicles could reduce taxation revenues by as much as 40% within this vehicle type. Other government stakeholders interviewed (IT, SE, EL) have not been able to provide quantified estimates of impacts on taxation revenues, although EL expected overall revenues to be slightly reduced. It was not possible to gain further stakeholder input on the taxation implications of changes to the Directive.

However, based on the assessment of operating cost savings and hired vehicles growth undertaken above, it is possible to develop some very basic estimates of the aforementioned vehicle taxation revenue losses as well as corporate tax gains.

**Table 7-11: EU28-level overview of estimated losses in taxation revenues from net LCV stock reductions in 2030**

Option	Rental fleet [1]	Stock replaced by rental fleet [1]	Net reduction in stock	Net reduction in stock over baseline	Weighted average tax per vehicle [2]	Total loss in tax revenues
<b>LCV Baseline</b>	2,334,088	2,593,431	259,343			
<b>Option 1b</b>	2,334,088	2,602,382	268,294	8,950	€ 306	€ 3 m
<b>Option 3</b>	2,334,088	2,597,150	263,062	3,719	€ 249	€ 1 m

Source: [1]: own modelling (see section 7.1), [2]: estimates based on ACEA (2016)

**Table 7-12: EU28-level overview of estimated losses in taxation revenues from net HGV stock reductions in 2030**

Option	Rental fleet [1]	Stock replaced by rental fleet [1]	Net reduction in stock	Net reduction in stock over baseline	Weighted average tax per vehicle [2]	Total loss in tax revenues
<b>Baseline</b>	543,454	603,838	60,384			
<b>Option 1a</b>	578,413	642,681	64,268	3,884	€ 1,115	€ 4 m
<b>Option 1b</b>	543,454	607,844	64,390	4,006	€ 926	€ 4 m
<b>Option 1c</b>	578,413	647,058	68,646	8,262	€ 1,491	€ 8 m
<b>Option 3</b>	578,413	643,960	65,548	5,164	€ 1,072	€ 6 m

Source: [1]: own modelling (see section 7.1), [2]: estimates based on OECD (2016)

Recall from section 7.1.2 that the policy of cross-border hiring may lead to operating cost savings (on fixed vehicle costs) of up to €108m by 2030. Assuming that these cost savings translate into extra income for operators (or their customers), taxed at the effective average tax rate estimated by the European Commission, tax authorities may gain an extra €18m under Option 1b.

**Table 7-13: EU28-level overview of estimated gains in corporate tax revenues from operating cost savings (extra profits) in 2030**

Option	Operators' cost saving in 2030 [1]		Hire/rental companies' extra profits [2]		Effective average tax rate [3]	Increase in average taxation revenues
	LCVs	HGVs	LCVs	HGVs		
<b>Option 1a</b>	€ 0 m	€ 31 m	€ 0 m	€ 65 m	27% (4 MS)	€ 26 m
<b>Option 1b</b>	€ 42 m	€ 32 m	€ 9 m	€ 7 m	21% (average for 17 MS covered)	€ 18 m
<b>Option 1c</b>	€ 42 m	€ 66 m	€ 9 m	€ 73 m		€ 38 m
<b>Option 3</b>	€ 17 m	€ 41 m	€ 4 m	€ 68 m		€ 26 m

Source: [1]: own modelling (see Section 7.1.2), [2]: own modelling (see Section 7.1.3), [3]: European Commission (2016)

The taxation impacts under Option 1a are separately provided at Member State level in Table 7-14.

**Table 7-14: Estimated gains in corporate tax revenues from operating cost savings (/extra profits) in 2030 under Option 1a**

	Operators' cost saving in 2030 (Option 1a) [1]	Effective average tax rate in Member State [2]	Additional taxation revenues
Italy	€ 9,362,346	24%	€ 2.2 m
Spain	€ 5,314,563	33%	€ 1.8 m
Portugal	€ 1,306,886	27%	€ 0.4 m
Greece	€ 15,232,749	27%	€ 4.1 m
<i>Total</i>	<i>€ 31,216,544</i>		<i>€ 8.5 m</i>

Source: [1]: own modelling (see Section 7.1), [2]: European Commission (2016)

Comparing Table 7-11 and

Table 7-12 with Table 7-13, if the operating cost savings generated through the policy options translated into equivalent increases in companies' taxable income, there would be a small net increase in taxation revenues under all options, amounting to some €27m in 2030 under Option 1c. This contrasts with overall transport tax revenues excluding fuel duties of some €68 billion (European Commission, 2016). Note that under the assumption of hired vehicles generating a further 5% fuel saving, the net gains in tax revenue would be further reduced due to the loss in revenue from fuel duties.

Overall, given the cost saving assumptions used in the modelling, the impact on taxation revenues is negligible but positive under all policy options.

#### 7.1.8. Impact on consumers

Impacts on consumers from the proposed policy options potentially include increased consumer choice and reduced prices. In both cases these should come in the form of impacts of the proposed options resulting from increased competition and cost efficiencies. There are no potential direct impacts on consumers since all options considered concern the use of freight or passenger transport vehicles by transport operators or businesses (own account). Even in the case of passenger transport, hiring of buses and coaches by individual consumers takes place with professional drivers in almost all cases, given the requirements of Regulation (EC) No 1073/2009.

We do not have evidence of indirect impacts on consumers from any of the examined options. In principle, the impact on competition and the cost efficiencies and reduced operating costs associated with the use of hired vehicles may be passed down to consumers particularly in Member States where restrictions are currently in place. However, in light of the small calculated cost savings in the event of 100% pass-through (0.06% maximum in the case of Option 1c, including 5% fuel savings from hired vehicles), and the likelihood that a share of these savings would be retained by the rental companies, we consider that potential impacts on consumers are positive, but negligible.

**Table 7-15: Initial analysis of the impact of examined options on the single market and competition**

Option	Impact on consumer choice	Impact on prices
Option 0	No impact expected	No impact expected
Option 1a	No impact expected	Indirect impact on consumer prices through businesses passing down reduced transport costs as a result of increased competition and cost-efficiencies (limited but positive (lower prices))
Option 1b	No impact expected	Indirect impact on consumer prices through businesses passing down reduced transport costs as a result of increased competition (limited but positive (lower prices))

Option 2	No impact expected	Indirect impact on passenger prices through businesses passing down reduced transport costs as a result of increased competition and cost-efficiencies (very limited/negligible)
Option 3	No impact expected	Indirect impact on consumer prices through businesses passing down reduced transport costs as a result of increased competition and cost-efficiencies (limited but positive (lower prices))

### 7.1.9. Impact on modal split

Improved efficiency of road transport operators may increase their relative competitiveness against rail, maritime or air transport modes. In particular, the options may lead to cost reductions and enable operators to increase the volume of services that they provide. However, the resulting efficiency and cost improvements are likely to be of a low magnitude overall, as indicated by the initial numerical results provided above. Moreover, in several transport areas there may not be any direct competition between road and rail or water-bound transport, for example due to the absence of non-road infrastructure and specialist non-road transportation equipment.

In Option 1a, which would remove the possibility of banning own account operators from hiring heavy goods vehicles, no impact on modal shift is expected. Manufacturers, retailers and wholesalers, who decide to operate partly on own account, typically do so for perishables, where delivery is time-critical, or other types of goods which require specialist vehicles. Given that the very purpose of own account transport is generally to meet these special requirements, it is unlikely that current users of third account rail or water transport operators would switch to own account road transport operations if the latter became slightly cheaper as a result of a newly-introduced opportunity to hire vehicles.

Options 1b, 1c and 3 could affect wider sections of the road freight transport market, including contestable markets (although it is still likely that own account operators whose core business is not the operation of vehicles would tend to benefit more from the cost saving potentials from hiring vehicles). Available figures for the cross-price elasticity of rail transport suggest a high sensitivity to changes in prices for road transport, with estimates ranging from 1.1 to 2.4 (for price per tkm), suggesting that a 1% decrease in road transport costs would result in a reduction in rail transport tkm by 1.1 to 2.4% (Significance & CE Delft, 2010). These values are surprisingly high, but are the only quantitative indication currently available.

However, since the modelling results suggest that the impact of the policy options on transport costs are practically insignificant, so will be the impact on modal shift. Under Option 1c, including the sensitivity of a 5% fuel saving from hired vehicles (which is the option with the strongest overall impact) the average price decrease of 0.06% would lead to an impact on rail transport demand of only -0.07% to -0.14%.

Option	Impact on modal shift
Option 0	No impact expected
Option 1a	No impact expected
Option 1b	Reduction in rail transport demand of less than 0.07% expected
Option 1c	Reduction in rail transport demand of less than 0.14% expected
Option 2	No impact expected
Option 3	Reduction in rail transport demand of less than 0.10% expected

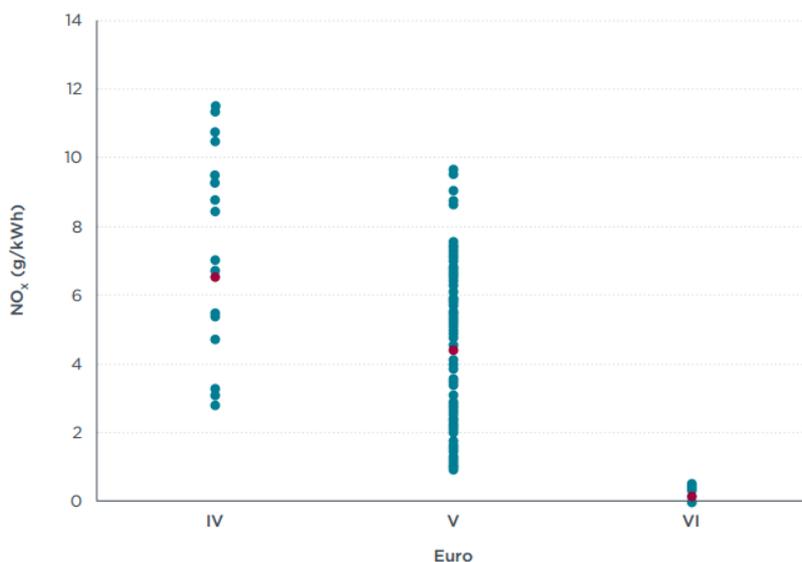
## 7.2. Environmental impacts

### 7.2.1. Impact on air pollutants and GHG emissions

This section first gives an overview over plausible trajectories for the future development of NO<sub>x</sub> and PM emissions, as well as fuel consumption/CO<sub>2</sub> emissions amongst new LCVs and HGVs. Then, the impacts of the more frequent fleet renewal on the sector's overall emission performance are quantified.

**Air pollutant emissions** have historically been driven by emission standards. With the introduction of a new standard, manufacturers adjust their emission treatment technologies and strategies in order to remain compliant. Therefore, reductions to air pollutant emissions are usually step-wise and not linear. Figure 7-8 shows real world NO<sub>x</sub> emission performance data from **HGVs** by Euro emission standard.

**Figure 7-8: Real-world NO<sub>x</sub> emissions for a sample of HGVs by Euro emission standard (ICCT, 2015)**

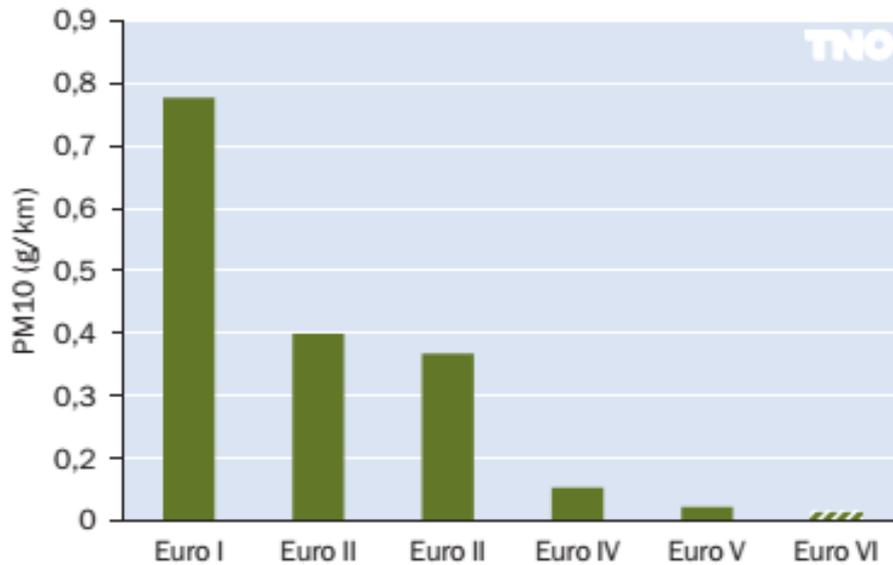


*Note: Red dots indicate sample average within each standard*

It is notable that the introduction of Euro VI (mandatory for new HDV type approvals since beginning of 2013 and for new registrations since 2014) has led to NO<sub>x</sub> emission reductions of around a factor of 10 on average compared to Euro V vehicles. Further reductions on this scale cannot be expected for any future tightening of emission standards. For the quantitative analysis, we therefore assume further reductions in NO<sub>x</sub> emissions, at a small rate of 1% per year.

Similarly, emissions of particulate matter have drastically decreased over time with the introduction of new Euro standards. Figure 7-9 shows how the introduction of particulate filters in HGV with Euro IV drastically reduced PM emissions, which have since been further reduced under Euro V and Euro VI vehicles. Similar to NO<sub>x</sub> emission performance, no further radical leaps in PM reduction can be expected, so again, reductions at an annual rate of 1% are assumed.

**Figure 7-9: Average real-world PM<sub>10</sub> emissions (g/km) for a sample of HGVs by Euro emission standard (TNO, 2015)**

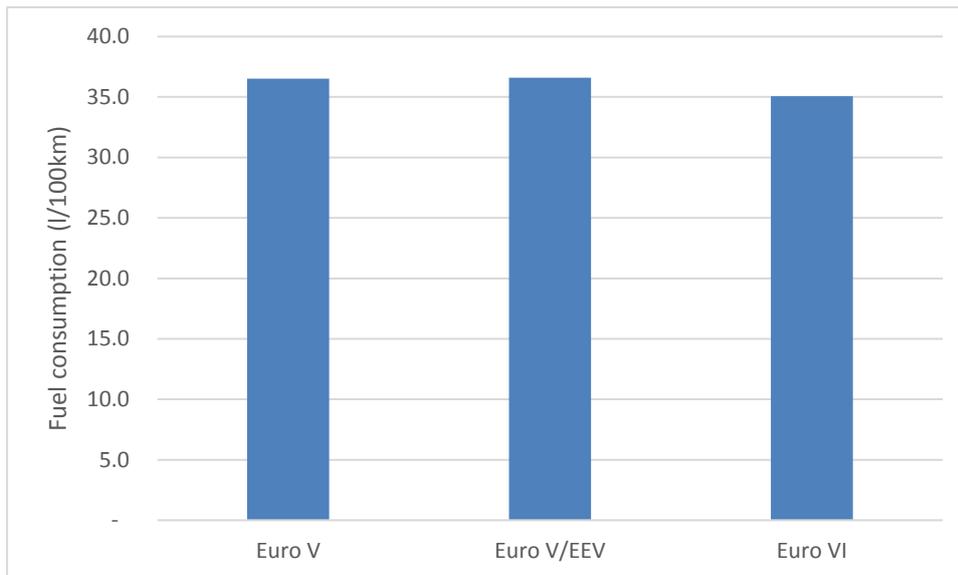


Note: The shading for Euro VI values denotes small sample size

Regarding **LCVs**, as with HGVs, all new vehicles are equipped with particulate filters which practically eliminate PM emissions, and so a similar rate of emission reductions as for HGVs can be assumed. Regarding emissions of NO<sub>x</sub> from LCVs, current evidence suggests a great variation in real-world performance between different new Euro 6 vehicle models. It is currently expected that these variations will be reduced through the introduction of a 'not to exceed' value under real world testing conditions from 2017 (ICCT, 2016). It is currently expected that a conformity factor of 2.1 (ratio between 'not to exceed' value and Euro 6 limit value) will apply to all new vehicles from September 2019, and that this will be reduced to 1.5 by January 2021 (*Ibid.*). Therefore, significant reductions in the NO<sub>x</sub> emissions of new vans can be expected over the coming years. However, given that changes to the Directive are not expected to be implemented before 2020, steep reductions are unlikely to still be taking place once the revised legislation enters into force. In order to avoid underestimating possible NO<sub>x</sub> reductions we assume a 3% year-on-year reduction.

Regarding **CO<sub>2</sub> emissions**, which are directly proportionate to (fossil) fuel consumption, overall consumption of **HGVs** slightly increased in the early 1990 as the first Euro emission standards for trucks were introduced and engine management was optimised towards reducing NO<sub>x</sub> emissions. Over the subsequent two decades, fuel consumption has remained largely static (Eurotransport, 2014). However, with the introduction of Euro VI vehicles, average truck fuel consumption has shown signs of decreasing. It is likely that this decreasing trend will continue for some time as legislation allowing for more aerodynamic truck designs is forthcoming (Directive (EU) 2015/719), the EU is considering the introduction of fuel economy standards for HDVs, and manufacturers are shifting towards prioritising fuel consumption optimisation. Fernfahrer, a German truck magazine performing regular vehicle tests on a standardised route has found that Euro VI articulated trucks had about 4% lower fuel consumption compared to Euro V trucks (Figure 7-10) (Eurotransport, 2014). Given that the Euro V standard was introduced around 4 years before Euro VI, this is equivalent to a 1% reduction per year. For the quantitative analysis, we assume this rate of reduction to continue over the modelled time horizon 2016-2030.

**Figure 7-10: Average fuel consumption (l/100km) for a sample of articulated trucks by Euro emission standard (Eurotransport, 2014)**



*Notes: Based on a sample of 7 Euro V trucks, 7 Euro V/EEV trucks and 8 Euro VI trucks*

Regarding **LCV** CO<sub>2</sub> emissions, in the absence of real-world data it is assumed that real-world emissions of new LCVs fall at similar rates compared to test cycle emissions. These are currently falling at around 2.5% per year, roughly in line with meeting the target of 147g by 2020 (EEA, 2016). In order to avoid underestimating potential impacts, a 3% year-on-year reduction in van CO<sub>2</sub> emissions is assumed.

The Ex-post Evaluation identified several data sources on the average age of owned versus hired vehicles, finding that hired vehicles are significantly younger. This means that new technologies are likely to be adopted earlier amongst hired vehicles than amongst non-hired vehicles. However, ultimately, one can expect lifetime vehicle mileage and emissions to be roughly equal between hired and non-hired vehicles. The key difference is that hired vehicles are used more intensively over the first few years of their life, thus running a greater share of their lifetime mileage in early years and thus reaching their lifetime vehicle mileage sooner than non-hired vehicles. Therefore, the intensified utilisation of hired vehicles means more frequent fleet renewal.

Other things equal, if rented vehicles are utilised over a five year use period, this would mean an average age of 2.5 years. If these rented vehicles are utilised 11% more intensively than the vehicles they replace in a company fleet (as was assumed in the quantification of economic impacts), this means replacing a fleet that is 11% larger and used 11% longer. Therefore, the average age of the replaced fleet would be 0.28 years (just over three months) above that of the rental fleet.

Given that an annual improvement of 1% is assumed for NO<sub>x</sub>, PM and CO<sub>2</sub> emissions from HDVs, a reduction in average fleet age by 0.28 years will mean reductions of 0.28% amongst these emission categories for the share of transport activity replaced by hired vehicles. For LCVs, where improvements in NO<sub>x</sub> and CO<sub>2</sub> emissions of 3% annually are assumed, hired vehicle emissions will be 0.83% lower than average vehicle emissions.

Under these assumptions, emission savings of up to 0.002% are achieved for HGVs, (relative to total HGV fleet emissions). For LCVs, savings are around 0.0003%. Consequently, there is almost no overall environmental impact.

**Table 7-16: Summary of the environmental impacts of the policy options in 2030 for the EU28 for LCVs and HGVs**

Option	Share replaced by rental vehicles in 2030	Improvement in NO <sub>x</sub> , PM and CO <sub>2</sub> performance of rental fleet	Emissions savings from rental vehicles	Savings over baseline
LCV Baseline	8.70%	0.83%	0.0725%	-
LCV Option 1b	8.73%	0.83%	0.0727%	0.0003%
LCV Option 3	8.71%	0.83%	0.0726%	0.0001%
HGV Baseline	9.96%	0.28%	0.0277%	-
HGV Option 1a	10.60%	0.28%	0.0294%	0.0018%
HGV Option 1b	10.03%	0.28%	0.0279%	0.0002%
HGV Option 1c	10.67%	0.28%	0.0297%	0.0020%
HGV Option 3	10.62%	0.28%	0.0295%	0.0018%

Higher CO<sub>2</sub> emission savings arise under the assumption that operating leasing/rental vehicles have an overall higher fuel efficiency compared to non-rented vehicles, given rental companies' superior market knowledge and higher vehicle utilisation rates which warrant further investment into fuel saving technologies. However, even under the optimistic assumption of a uniform 5% increase in the fuel economy of hired vehicles, the overall impact of the policy options on CO<sub>2</sub> emissions would not be greater than 0.04%.

**Table 7-17: Summary of CO<sub>2</sub> emission reductions from the policy options in 2030 for the EU28 under the assumption of an additional 5% improvement in fuel consumption of hired vehicles over non-hired vehicles**

Option	Share replaced by rental vehicles in 2030	Improvement CO <sub>2</sub> performance of rental fleet	Emissions savings from rental vehicles	Savings over baseline
LCV Baseline (extra 5% fuel saving)	8.70%	5.83%	0.5074%	-
Option 1b (extra 5% fuel saving)	8.73%	5.83%	0.5092%	0.0018%
Option 3 (extra 5% fuel saving)	8.71%	5.83%	0.5082%	0.0007%
Baseline (extra 5% fuel saving)	9.96%	5.28%	0.5257%	-
Option 1a (extra 5% fuel saving)	10.60%	5.28%	0.5595%	0.0338%
Option 1b (extra 5% fuel saving)	10.07%	5.28%	0.5292%	0.0035%
Option 1c (extra 5% fuel saving)	10.72%	5.28%	0.5634%	0.0376%
Option 3 (extra 5% fuel saving)	10.62%	5.28%	0.5607%	0.0349%

As previously discussed, Option 1a, i.e. removing own account restrictions, only applies to the four Member States which currently have restrictions in place, while the option of cross-border hiring applies to 17 Member States in Options 1b and 1c and to 4 Member States in Option 3. Therefore, Table 7-18 summarises the impact of Option 1a on the affected four Member States. In Greece, the impacts are most pronounced due to a high

share of own account goods transport activity. Still, by 2030 emissions are reduced by no more than 0.02% under this option. Calculations performed for options 1c and 3 yielded almost identical results.

**Table 7-18: Summary of environmental impacts under Option 1a in 2030 in the affected Member States for HGVs**

Member State	Share of own account operations (vkm)	Share of vehicles replaced by renting in 2030	Share of own vehicles replaced through policy	Improvement in NO <sub>x</sub> , PM and CO <sub>2</sub> performance of rental fleet	Improvement in NO <sub>x</sub> , PM and CO <sub>2</sub> performance of total fleet
Italy	12%	13%	1.61%	0.28%	0.00%
Spain	11%	7%	0.81%		0.00%
Portugal	22%	10%	2.11%		0.01%
Greece	55%	14%	7.53%		0.02%

Notes: almost equal results for Options 1c and 3

Under the additional assumption a uniform 5% increase in the fuel economy of hired vehicles, savings may reach 0.11% in Portugal and 0.4% in Greece.

**Table 7-19: Summary of CO<sub>2</sub> emission reductions under Option 1a in 2030 in the affected Member States for HGVs under the assumption of a 5% additional improvement in fuel consumption of hired vehicles over non-hired vehicles**

Member State	Share of own account operations (vkm)	Share of vehicles replaced by renting in 2030	Share of own vehicles replaced through policy	Improvement in CO <sub>2</sub> performance of rental fleet	Improvement in CO <sub>2</sub> performance of total fleet
Italy	12%	13%	1.61%	5.28%	0.08%
Spain	11%	7%	0.81%		0.04%
Portugal	22%	10%	2.11%		0.11%
Greece	55%	14%	7.53%		0.40%

Notes: almost equal results for Options 1c and 3

### **Sensitivity: hired vehicles prompt early retirement of old vehicles**

In the above analysis, reductions in the vehicle age of hired vehicles have been purely driven by the assumption of intensified vehicle utilisation, as it was expected that vehicles will ultimately tend to run the same lifetime mileage, regardless of whether they are owned or hired by the operator. However, it is conceivable that in some cases operators with poor access to capital would choose to continue operating old, repair-intensive trucks in the absence of a hire market, whereas if the operator had access to a hire market, it may be more attractive to retire old vehicles earlier and replace them with hired vehicles. For example, Leaseurope (n.d.) claims that part of the reason why Greece has a very high (18 years) average age for trucks is because the market for hired trucks is virtually non-existent.

In the following sensitivity it is assumed that in the four Member States with restrictions on the use of hired vehicles by own account operators (where incidentally the average vehicle age tends to be relatively high), the vehicles which are replaced by rental vehicles are old vehicles which are retired one year earlier than they otherwise would be. Hence the proportion of vehicles retired one year early is equivalent to the proportion of newly replaced vehicles (increase on the previous year) relative to the overall fleet. Moreover, it is assumed that the difference in air pollutant emission performance between the vehicle

retired early and the new vehicle is twice the average fleet emissions.<sup>17</sup> This means that the emission reduction across the fleet in a given year is twice the share of newly replaced vehicles relative to the overall fleet.

For CO<sub>2</sub> emissions, it is assumed that the difference between the vehicle retired early and the new vehicle is 0.25 times the fleet average level, meaning that the emission reduction across the fleet in a given year is a quarter of the share of newly replaced vehicles in the overall fleet.<sup>18</sup>

The sensitivity analysis is performed for Option 1c as this is the option with the highest impact on hired vehicles growth. Given that the year-on-year growth in the vehicle hire market over baseline is highest as the new legislation is phased in during the early 2020s (and not in the year 2030), the average values for the 2020-2030 period is presented.

Under the sensitivity, air pollutant emission reductions are much higher than under the initial analysis: Option 1c reduces air pollutant emissions by up to 1.4%, in the case of Greece. Reductions in CO<sub>2</sub> emissions are less pronounced.

**Table 7-20: Summary of environmental impacts for HGVs under Option 1c under the assumption that hiring prompts early retirement of old vehicles, average 2020-2030**

	Average number of newly replaced HGVs each year between 2020 and 2030 over baseline	As a share of total vehicle fleet	Impact on fleet NO <sub>x</sub> and PM emissions of early retirement (improvement x2 fleet average)	Resulting impact on fleet CO <sub>2</sub> emissions (improvement x0.25 fleet average)
Italy	1212	0.16%	0.32%	0.04%
Spain	542	0.08%	0.16%	0.02%
Portugal	178	0.20%	0.40%	0.05%
Greece	1796	0.70%	1.40%	0.17%

*Notes: almost equal results for Options 1a and 3*

For LCVs, the impact of the sensitivity is very low across the four Member States analysed, mostly because the policy has a very limited impact on growth in the LCV hire market.

**Table 7-21: Summary of environmental impacts for LCVs under Option 1c under the assumption that hiring prompts early retirement of old vehicles, average 2020-2030**

	Average number of newly replaced LCVs each year between 2020 and 2030 over baseline	As a share of total vehicle fleet	Impact on fleet NO <sub>x</sub> and PM emissions of early retirement (improvement x2 fleet average)	Resulting impact on fleet CO <sub>2</sub> emissions (improvement x0.25 fleet average)
Italy	292	0.009%	0.017%	0.002%
Spain	164	0.004%	0.007%	0.001%
Portugal	33	0.003%	0.005%	0.001%
Greece	31	0.004%	0.007%	0.001%

<sup>17</sup> This is the case if, for example, fleet average NO<sub>x</sub> emissions are 5g/kWh (~Euro V real-world average), the replaced vehicle's emissions are 10.5g/kWh and the new vehicle's emissions are 0.5g/kWh (~Euro VI real-world average).

<sup>18</sup> This is the case if, for example, fleet average fuel consumption is 36l/100km, the replaced vehicle's fuel consumption is 40l/100km and the new vehicle's fuel consumption is 31l/100km.

### **7.2.2. Impact on the efficient use of resources**

The Ex-post Evaluation has found that hired vehicles tend to be used more intensely, thus reducing the demand for new vehicles, but that the fleet is also renewed more frequently, thus increasing demand for new vehicles. In the assessment of environmental impacts above, we have assumed that lifetime mileage is the same for hired versus non-hired vehicles which means that the more intensely a vehicle is used, the earlier it is replaced, thus leaving overall demand for new vehicles, and the material resources required, unaffected. Wear and tear from vehicle usage is obviously a key parameter in aging a vehicle and driving the replacement cycle. However, calendar age (time since manufacture) matters, too, especially with regard to corrosion, the effects of which increase over time. It is therefore conceivable that vehicles starting their lives as intensely-used (and well maintained) rental vehicles will ultimately gain a higher lifetime mileage and similar calendar life to less intensely used vehicles. This would mean gains in resource efficiency but may also reduce some of the gains in terms of vehicle emissions, if the calendar life is not reduced in proportion to intensified utilisation. Given significant uncertainty about the aging parameters, and the low overall magnitude of the potential impact, we have not carried out a further quantification of this impact which we expect to be insignificant under all policy options.

### **7.3. Social impacts**

The social impacts of the policy options considered include:

- Employment creation or job losses;
- Impacts on working conditions;
- Impacts on road safety.

These impacts are largely linked with the respective economic impacts analysed earlier. Changes in company behaviour (e.g. decision to hire new vehicles, preference for use of vehicles with and without drivers) and understanding of how the road haulage and more generally the road transport sector may respond to each policy option (analysed in Section 7.1) have informed the assessment of the social impacts.

#### **7.3.1. Employment creation or job losses**

The analysis in Section 7.1 provides some indications of an expected increase in hiring activity of vehicles under the different policy options. A central assumption of the analysis has been that hiring leads to improved vehicle utilisation, i.e. doing the same job with fewer vehicles. Since this requires an expansion of the vehicle hire sector, it may also lead to a certain level of job creation in the hire sector, in proportion to the increase in demand. Under this assumption, an increase in hiring to some extent means labour (in the vehicle hire sector) replacing capital (transport operators' under-utilised vehicles).

Table 7-22 summarises the number of jobs in the commercial vehicle hiring sector expected to be created across the EU as a result of the increase in the total hiring activity. The estimates are based on the average number of vehicles replaced by rental/leasing per employee in the commercial vehicle rental and leasing industry (18.1), a figure calculated on the basis of data provided by nine Leaseurope members covering multiple EU Member States. Impacts are presented separately for LCVs and HGVs before a combined estimate is presented. Option 1a is not expected to have any impact on LCVs. In the case of Option 2, specific estimates could not be developed but the impact is expected to be much smaller given the very limited demand for hired buses and coaches.

As can be seen, Option 1c may lead to the creation of up to 4,000 new jobs by 2030 – an increase of 2.2% of total employment in the commercial vehicle hiring sector (the same as the overall relative increase in sector activity). The impact is relatively larger when just taking into account HGV rental employment, where Option 1c leads to a 7.6% increase. More than 40% of all new jobs in Option 1c will be in the four Member States affected by Option 1a (EL, IT, ES, PT). Under Option 1a, all extra jobs are created there.

**Table 7-22: Employment impacts in commercial vehicle hire sector in 2030**

Option	Commercial vehicle stock replaced by rental vehicles [1]	Number of vehicles replaced by hiring per employee [2]	Resulting estimate of jobs in commercial vehicle hire sector	Change in employment over baseline	
<b>LCV</b>					
Baseline	2,593,431	18.1	143,288	<b>number</b>	<b>%</b>
Option 1b	2,602,382		144,721	1,433	1.0%
Option 3	2,597,150		143,493	205	0.1%
<b>HGV</b>					
Baseline	603,838	18.1	33,362	<b>number</b>	<b>%</b>
Option 1a	642,681		35,508	2,146	6.4%
Option 1b	607,844		33,733	371	1.1%
Option 1c	647,058		35,903	2,541	7.6%
Option 3	643,960		35,579	2,217	6.6%
<b>LCV+HGV</b>					
Baseline	3,197,269	18.1	176,650	<b>number</b>	<b>%</b>
Option 1a	3,236,112		178,796	2,146	1.2%
Option 1b	3,220,226		178,453	1,804	1.0%
Option 1c	3,249,440		180,623	3,974	2.2%
Option 3	3,241,110		179,072	2,422	1.4%

Source: [1]: own modelling (see Section 7.1), [2]: based on averaged data from Leaseurope members on number of rental vehicles per employee (16.45), multiplied by 1.11, to account for the assumption that a shift to hiring reduces fleet sizes by 10% (see Section 7.1) and consequently each hired vehicle replaces 1.11 owned vehicles.

Likewise, the estimated increases in demand for hire and reward indicated under Options 1a, 1b, 2 and 3 should also be expected to translate into similar increases in road transport employment. Assuming that a 1% increase in activity would lead to a similar level of growth in employment, we can estimate job creation (relative to the baseline) for the haulage sector. Given that the sector employs some 2.9 million people across the EU28 (Eurostat, 2016), implementing Option 1c (including the assumption that hired vehicles are on average 5% more fuel efficient), and considering both LCV and HGV markets, the estimated growth in activity by 0.06% should translate into around 1,700 extra jobs (see Table 7-23). Job creation under all other policy options is lower.

**Table 7-23 – Expected job creation in road transport from different policy options (total jobs created in comparison to the baseline) for 2030**

Option	Estimated increase in road transport sector size over baseline in 2030 [1]	Estimated number of employees in road transport	Estimated additional number of jobs
<b>Option 1a</b>	0.01%	2.9m	326
<b>Option 1a (extra 5% fuel saving)</b>	0.03%		778
<b>Option 1b</b>	0.03%		774
<b>Option 1b (extra 5% fuel saving)</b>	0.03%		870
<b>Option 1c</b>	0.04%		1,130
<b>Option 1c (extra 5% fuel saving)</b>	0.06%		1,683
<b>Option 3</b>	0.02%		605
<b>Option 3 (extra 5% fuel saving)</b>	0.04%		1,091

Sources: [1]: own modelling (see Section 7.1), [2]: Eurostat [sbs\_na\_1a\_se\_r2] (2016), number of persons employed in 'Freight transport by road and removal services'

Overall, job creation under all options is limited. Option 1c (combining Options 1a and 1b) has the greatest absolute impact, creating a combined total of some 5,700 new jobs by 2030. It should also be noted that all estimates are based on optimistic, upper-bound scenarios – the figures for new activity and job creation should be seen as representing the maximum possible impact.

### **7.3.2. Working conditions**

Only a few stakeholders considered that there is a link between the extension in the use of hired vehicles and working conditions. However, it should be kept in mind that a majority of stakeholders represent employers' interests and only one of the stakeholders surveyed explicitly represents transport workers' interests (see section 6.1). Most respondents to the online consultation did not respond to the question related to the impact on working conditions or indicated that there are no such impacts. Among interviewees, again only few stakeholders identified any specific impacts. The Italian authorities voiced concerns that under **Option 1a** working conditions could deteriorate through an indirect impact: according to the authorities, at present, own account operators sometimes illegally expanding their activity to hire-and-reward operations (thereby undercutting the more stringent regulations faced by legitimate hire-and-reward operators). The authorities are concerned that improved access to hired vehicles for own account operators could exacerbate this phenomenon of illegal hire-and-reward operations by own account operators. However, issues of illegal hire-and-reward operations from own account operators have not been raised in any other Member State and are in any case not directly linked to hired vehicle legislation.

In the case of **Option 1b** (hiring of vehicles registered in another Member State), trade union representatives, Italian authorities and one haulage operators' association have raised the concern that a liberalisation of the use of hired goods vehicles registered in another Member State can facilitate non-compliance with relevant social legislation (namely Regulation (EC) No 561/2006, Directive 2002/15/EC, and Directive 2006/22/EC) and the rules on access to the occupation of road transport operator and on access to the international road haulage market (Regulations 1071/2009 and 1072/2009 respectively).

Currently, the Directive (Article 2.2b) is considered as providing a direct linkage between the vehicle and the driver. It is argued that allowing operators to hire vehicles from other Member States may facilitate a situation in which dubious operators based in Member State A can hire vehicles from another Member State B and employees from a third Member State C in order to complicate enforcement and effectively reduce the strength of the link between driver and vehicle. Controlling illegal cabotage could be further complicated as enforcement authorities would no longer be able to discriminate by the operator's Member State of origin based on the vehicle registration plates.

As previously mentioned (Section 7.1.7), the European Transport Workers' Federation has suggested that these issues could partly be mitigated if vehicles hired across Member State borders meet the following conditions:

- Mandatory declaration of the vehicle number plate of all vehicles in use by a haulier, by including the information in the list of minimum data to be entered in the national electronic registers (NERs) (currently, the declaration of vehicle number plates is optional – see European Commission (2009))
- Allocation of a temporary number plate of the Member State to which the vehicle is relocated, with clear visual elements, during the entire relocation period
- Introduction of infringements relating to the Hired Vehicles Directive in the 'list of serious infringements leading to the loss of good repute' established by Commission Regulation (EU) 2016/403 (European Commission, 2016a).

However, a potential issue with this proposal is that it would not affect own account operators, which are not part of the NERs.

On the other hand, we should note that the replacement of old vehicles with new vehicles that meet higher quality standards may represent an improvement to the working conditions of some drivers.

Overall, in the absence of more concrete evidence and the relatively limited impact on the overall level of the use of hired vehicles, we consider that the direct impacts on working conditions from the proposed policy options will also be limited. It is possible that unscrupulous operators may attempt to use the more flexible access to hired vehicles to circumvent their obligations but this will be a matter of better and more effective enforcement of the legal framework to avoid this.

### **7.3.3. Road safety**

The majority of stakeholders – authorities, hauliers associations, leasing companies who contributed to the study - indicated that there should be a neutral or positive impact on road safety from the proposed options. Positive contributions are expected to the extent that the policy options can lead to the increased use of hired vehicles, which tend to be newer and better-maintained (since proper maintenance is an important determinant of the safety of vehicles).

However, some stakeholders from the bus and coach sector, where road safety is a particularly salient issue, expressed reservations about **Option 2**, as they felt that having a driver who is unfamiliar with the vehicle could have a negative impact on road safety. Moreover, there were also some concerns that liberalised cross-border hiring might in some cases compromise the high standards for vehicle roadworthiness in some Member States. However, any possible differences in roadworthiness between Member States are expected to decrease over time as vehicle roadworthiness standards are progressively harmonised throughout the EU in line with Directive 2009/40/EC (soon 2014/45/EU). Concerns about less thorough vehicle technical inspections in some Member States in the case of cross-border hiring in principle also apply to goods vehicles. However, potential cost savings from poor maintenance would need to be set against the wider costs of vehicle operation and the cost of regularly returning vehicles to their Member State of registration for technical inspections. Therefore, no major incentive for cost savings at the expense of road safety can be established under **any of the proposed policy options**.

The analysis presented in Section 7.1 found that the share of HGVs replaced by hired vehicles increases on average by 0.6 percentage points under Option 1a and by 0.1 percentage points under Option 1b in 2030. Given this very small difference, the net improvement on road safety is expected to be marginal. As Option 1a only affects Italy, Spain, Portugal and Greece, the impacts are concentrated in these Member States. By 2030, the share of hired HGVs in total stock increases by 7.5 percentage points in Greece, 2.1 percentage points in Portugal and 1-2 percentage points in Spain and Italy. If there is indeed a significant improvement in the safety performance of hired vehicles over the vehicles they replace, very small improvements in overall traffic-related injuries and fatalities from HGVs could be conceivable under Option 1a.

The share of LCVs replaced by hiring only increases by 0.1 percentage points under Option 1b in 2030, so potential impacts on LCV safety are probably lower.

In all cases, given the small overall share of the hired commercial vehicle fleet to the total vehicles on the road, the net impact on road safety should be expected to be small.

## **7.4. Conclusions – Summary of impacts**

Table 7-24 below provides an overview of the expected impacts of each of the proposed options. We have used colour coding to clearly depict positive and negative economic, environmental and social impacts. The general conclusion is that despite generally quantifying the impacts using optimistic, upper-bound assumptions, there is no option that has strong positive impacts (in absolute or relative terms) on the road transport sector. At the same time, few negative impacts are expected from any policy option. In

all cases the differences between options were small in absolute terms and almost always less than 0.1% in comparison to the baseline at EU28 level. However, in the case of Greece, reductions in sector costs and increases in demand could reach up to 1.7%.

The impact of the policy options on the truck hiring sector is relatively stronger. The opening of the own account sector to hiring in Southern Europe (Option 1a) may lead to an overall growth in the HGV hire market of over 6%, while liberalisation of cross-border hiring (Option 1b) may lead to a further 1% growth in both hiring of LCVs and HGVs.

**Table 7-24: Summary of impacts for the different policy options compared to the baseline**

Key: Impacts expected				
xx	x	0	✓	✓✓
Strongly negative	Weakly negative	No impact	Weakly positive	Strongly positive

	Option 0	Option 1a	Option 1b	Option 1c (a+b)	Option 2*	Option 3
<b>Economic impacts</b>						
Economic impacts on road transport sector	0	✓	✓	✓	0	✓
Economic impacts on vehicle leasing sector	0	✓	✓	✓	0	✓
Impact on SMEs	0	✓	✓	✓	0	✓
Impact on specific markets/Member States		✓	0	✓	0	✓
Growth in road haulage sector	0	0	✓	✓	0	0
Growth in vehicle hiring sector	0	✓	✓	✓	0	✓
Impacts on passenger transport sector	0	N/A	N/A	N/A	0	0
Impact on competition/freedom to provide services	0	✓	0	✓	✓	✓
Impact on conditions for investment	0	✓	✓	✓	0	✓
Budgetary and other consequences for public authorities	0	0	0	0	0	0
Impact on consumer	0	0	0	0	0	0
Impact on modal shift	0	0	x	x	0	x
<b>Environmental impacts</b>						
CO <sub>2</sub> from road transport	0	✓	✓	✓	0	✓
Air pollution road transport	0	✓	✓	✓	0	✓
Efficient use of resources	0	0	0	0	0	0
<b>Social impacts</b>						
Employment in haulage sector	0	0	✓	✓	0	0
Employment in vehicle hiring sector	0	✓	✓	✓	0	✓
Working conditions	0	0	x	x	x	x
Road safety	0	✓	✓	✓	0	✓

Notes: \* while Option 2 has been defined as including all measures from Option 1, plus inclusion of passenger transport, this table only summarises the expected additional impacts from including passenger transport, i.e. additional costs/benefits over Option 1c.

## 8. COMPARISON OF THE OPTIONS

In this section we compare the policy options in relation to a number of key criteria:

- Effectiveness: The extent to which the examined options would achieve the identified policy objectives
- Efficiency: The costs associated with the implementation of the policy options – in total and for specific subgroups
- Coherence: The coherence of each option with the overarching objectives of EU policies
- Proportionality: The relation between achievement of the policy objectives and restrictions in the scope for national decision making

### 8.1. Effectiveness

In this section we consider the effectiveness of the options examined against the policy objectives identified in Section 0. The criteria presented in Table 8-1 have been used to help in assessing effectiveness.

**Table 8-1 – Objectives and assessment criteria related to the effectiveness of policy options**

General	Specific objectives	Assessment criteria
Ensure efficient use of factors of production (vehicles) in transport operations	Improve resource efficiency through the more efficient and flexible use of goods vehicles from firms across the EU	Vehicle utilisation in vehicle leasing sector and in road transport sector
Increase productivity and flexibility of transport operations	<ul style="list-style-type: none"> <li>• Reduce (vehicle related) operating costs /increase profitability of road transport operations</li> <li>• Strengthen the capacity of EU firms to respond to changes in demand through the use of hired goods vehicles</li> </ul>	<ul style="list-style-type: none"> <li>• Costs of operation in the vehicle hiring and road transport sectors</li> <li>• Growth of the vehicle hiring sector</li> </ul>
	Simplify/improve regulatory framework concerning the use of hired goods vehicles	Administrative costs associated with the use of hired vehicles in road freight and passenger transport
Support further integration and level playing field of the EU transport market	Ensure regulatory framework provides EU firms with equal access to market for hired vehicles	Freedom to provide and access vehicle hiring services across the EU
Reduce environmental impacts from road transport	Reduce fuel consumption and air pollution from road transport	CO <sub>2</sub> and NO <sub>x</sub> emissions from vehicles used in road freight and passenger transport

In relation to **Option 0**, the analysis suggests that very limited – if any – contribution should be expected in relation to any of the objectives set. All stakeholders consider that the development of guidance and recommendation will not help remove existing restrictions in own account operations or in accessing hired vehicles registered elsewhere. A guidance document, which is not legally binding, may help operators and leasing companies to better understand the existing legal framework but should not be expected to lead to any measurable change in terms of the access to hired vehicles.

All sub-options under **Option 1** are expected to have a marginally positive contribution towards a more flexible use of vehicles in road freight transport operations as well as in the reduction of costs of road transport operations. Furthermore, all sub-options are expected to have a positive contribution in terms of increasing the freedom of providing vehicle hiring services across the EU, increasing competition, supporting the growth of vehicle hiring markets and investment into new vehicles. However, in the case of **Option**

**1a** the benefits will be largely focused on the four Member States where restrictions on own account operators are in place. A significant increase in the level of vehicle hiring is expected in all four Member States by 2030, leading to a total of around 35,000 additional hired goods vehicles (HGVs) over baseline, replacing 38,800 owned vehicles in these four Member States. Consequently, there is an overall increase in the utilisation of the vehicle stock leading to annual savings for operators in the four Member States of up to €75m by 2030 (~0.10% reduction in overall transport costs across those four MS).

In the case of **Option 1b**, the possible benefits are spread more broadly across the 17 EU Member States where there are restrictions to cross-border hiring covering both the use of HGVs and LCVs in transport operations. It is thus expected that Option 1b will lead to an additional 1.1% increase in the number of vehicles replaced by hiring across those 17 MS while the total number of hired vehicles remains constant. Given the greater size of the markets affected compared to Option 1a— particularly in the case of LCVs - the total operating cost savings under Option 1b reach up to €83m per year by 2030 (€47 million from the increased use of hired LCVs and €37 million from hired HGVs, a ~0.06% reduction in overall transport costs across the affected Member States).

**Option 1c** is a combination of the benefits associated with 1a and 1b in terms of improved access to hired vehicles for own account operators, a more efficient and flexible use of vehicles and operating cost reductions. The total maximum conceivable annual savings are expected to be around €161m (€47 million for LCVs and €115 million for HGVs, a ~0.10% reduction in overall transport costs across the affected Member States). The increased effectiveness arises both from the opening of the markets in the Member States where there are currently restrictions as well as from the increased flexibility provided by the temporary use of vehicles registered in another Member State.

In terms of **Option 2**, while specific data are not available, more probably the possible extension of the scope of the Directive to cover the hiring of buses and coaches is expected to have insignificant or very marginal impacts in any of the key objectives. This is because there is no dedicated market of hiring of buses and coaches without driver and limited interest from the sector. An EU legislation cannot be expected to bring changes to the current structure of the passenger transport sector.

Under **Option 3**, there are similar advantages to those under Options 1a and 1b in terms of ensuring access to vehicle hiring services across the EU. However, the effectiveness in terms of increasing vehicle utilisation only accrues to those Member States which currently temporarily restrict the hiring of vehicles registered abroad while allowing longer grace periods for vehicle re-registration by residents owning vehicles registered abroad (IT, IE, PT, LU). Only these Member States would need to change their legislation and align rental and owned vehicle re-registration periods. Consequently, the effectiveness in terms of vehicle utilisation and operating cost savings under Option 3 are lower than those under Option 1c with a maximum of €105 million in cost savings expected (€19 million for LCVs and €86 million for HGVs, a ~0.14% reduction in overall transport costs across the six Member States affected). Furthermore, in the absence of specific legislation on harmonised rules for vehicle re-registration (since the proposed Regulation has not been adopted), Option 3 appears to be ineffective in terms of simplifying and harmonising the legal framework in relation to the use of vehicles registered in another Member State. It will harmonise the requirement between owned and hired vehicles but will maintain the differences among Member States.

In terms of the effectiveness of the proposed policy options in reducing fuel consumption and air pollution from the use of vehicles in road transport, the analysis in Section 7.2 shows that all Options (except Option 0) can contribute to the greater use of hired vehicles, which are generally cleaner and more efficient. However, the assessment shows that they are expected to have very small impacts on the total level of CO<sub>2</sub> and air pollutant emissions, with expected improvements in comparison to the baseline in 2030 of just 0.04% under the most far-reaching scenario at EU28 level. At the Member State level, if the development of a hired HGV market in Greece leads to early retirement of old HGVs, reductions in air pollutant emissions of up to 1.4% are conceivable.

## 8.2. Efficiency

Concerning the costs of implementation of the legislation, the analysis pointed to potential costs for authorities and for the industry – vehicle renting and leasing industry and transport operators. Overall, the additional costs of implementation of the policy measures are expected to be limited. However, as with the benefits, there is substantial uncertainty as to the potential costs of the policy options.

Under **Option 0** there is no expectation of additional costs arising for stakeholders – besides those for the issuing of guidance and recommendations which national authorities may or may not decide to adopt. Thus, it can still be said that, in comparison to the very limited benefits expected, the option is still cost-effective.

In the case of **Option 1a**, enforcement authorities in the Member States (EL, IT, ES, PT) will no longer be required to enforce compliance with restrictions on the use of hired vehicles for own account operations, thus potentially experiencing some – although most probably very limited – enforcement cost savings. However, the Italian authorities have opposed changes to the Directive on the grounds that providing own account operators with access to hired vehicles may increase incidences of own account operators illegally taking on transport for hire and reward. Therefore, more enforcement effort in this area may be required – thus increasing enforcement costs. Option 1a does not bring any changes to the current administrative costs for either transport operators or vehicle hiring companies. While specific cost estimates were not possible, it is expected that the benefits in terms of road transport cost savings exceed any additional enforcement costs.

**Option 1b (and consequently Option 1c)** most probably entails some implementation costs. For authorities, the introduction of a minimum period of 3-6 months during which a vehicle hired (and registered) in another Member State can be used will require changes to their legal framework to transpose any new Directive in this field and the introduction of mechanisms in order to ensure compliance with the Directive. As indicated by some authorities and leasing industry representatives, there is a possible need to introduce a system through which hiring companies (or transport operators) provide information on the specific vehicle indicating the period during which it will be used in another Member State (e.g. a hired vehicles registry) in order to be able to effectively monitor and enforce the maximum period. The costs of adoption and operation of such a system for the authorities and the users may vary depending on its specific features and the way that this is implemented (e.g. paper-based system, electronic registry), and it may be possible to make use of existing systems. Overall, the analysis suggests that the cost of such a system would tend to be lower than the benefits in terms of estimated road transport cost savings.

Some authorities pointed to the possible loss of tax revenues from vehicle registration fees as a result of registrations shifting to Member States with lower tax rates under **Options 1b (and 1c)**. However, it has not been possible to quantify these losses.

In the case of **Option 2**, there will be certain additional implementation costs for Member States to introduce provisions concerning the hiring of buses and coaches in line with the provisions of the Directive and to enforce them. Additional costs of enforcement should be expected to be limited on the basis that they will be part of standard roadside checks. On the other hand, as already indicated, while not quantified, the additional impacts of such an option (beyond those related to Option 1c) are expected to be very limited, if any. As such, as far as the additional aspects related to buses and coaches are concerned, it is not clear whether the additional benefits would exceed the costs of introducing and enforcing the measure.

In the case of **Option 3**, Member States would not apply more restrictive requirements to hired vehicles registered elsewhere and used by residents than they would to vehicles that are registered elsewhere but owned by residents. Only a few Member States (IT, IE, PT, LU) will need to make changes to the existing legal framework concerning the use of hired vehicles. Consequently, any additional enforcement requirements would also only

accrue to these four Member States. Thus, the costs of implementation of Option 3 are expected to be largely similar to those under Option 1c.

The quantitative analysis performed indicates that the reductions in overall vehicle **taxation revenues** under all policy options due to intensified utilisation may be outweighed by an increase in corporate tax revenues as a result of the expected increased profitability and growth of the hired vehicles sector. The net benefits are expected to be €22 million under Option 1a, €11 million under Option 1b, €27 million under Option 1c and €20 million under Option 3. There is no specific figure calculated for Option 2 on the basis that there is no expected impact on the stock of hired buses and coaches. It should also be noted that in all cases the net savings are a tiny fraction of the total tax income from vehicles in 2014 (<0.07%).

**Social impacts** of a liberalisation of cross-border hiring (under Options 1b, 1c and 2) are rather uncertain. Enforcement of existing road transport legislation may become more complicated as the country of registration of a vehicle may differ from the Member State of establishment of the undertaking. It has not been possible to estimate the extent to which this would facilitate instances of unfair competition, or to quantify its costs.

Overall, the costs for Option 0 are close to zero against similarly expected very limited benefits. The costs for Option 1a are expected to be less than those for the implementation of Option 1b. Option 3 is expected to have similar costs as those of Options 1a and 1b put together (1c), however with lower benefits. On balance, in those areas where it has been possible to quantify impacts, the benefits outweigh the costs for all policy options under the assumptions used. Net benefits are greatest under Option 1c. However, it should be kept in mind that the analysis of road transport cost savings is based on optimistic, upper-bound assumptions, and that we could only quantify a few potential costs (setting up a vehicle register, loss in taxation revenues). What the analysis shows clearly is that both potential benefits and costs are likely to be of a limited magnitude. Whether the implementation of any of the proposed policy options would lead to net benefits in practice can therefore not be assessed with certainty.

### **8.3. Coherence**

The assessment of coherence considers whether the proposed policy options are in line with the current EU transport policy and related EU economic, social and environmental goals. The following policy documents have been used as the basis for this assessment:

1. The Agenda for Jobs, Growth, Fairness and Democratic Change of the new president of the European Commission (also known as "Juncker Priorities") (Juncker, 2014)
2. White Paper – Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system (European Commission, 2011a)
3. Europe 2020: the European Union strategy for growth and employment (European Commission, 2010) and the relevant flagship initiative (Resource Efficient Europe (European Commission, 2011))

Overall, the analysis suggests that the policy options 1a, 1b, 2 and 3 are largely coherent with the key EU policy priorities (see Table 8-2). More specifically, they are in line with the key objective of the development of the internal market and the promotion of fair competition, aspects where the evaluation found that the current Directive only partly corresponds to these new EU policy priorities. Option 2 is broader in scope since it also covers the road passenger transport market.

All options considered are also coherent with the objectives for jobs, growth and investment since they are expected to contribute – directly or indirectly – to the growth and investment in the vehicle hiring sector and, to a lesser extent the transport sector. Clearly, the analysis in Section 7 pointed out that Options 1a and 1b are more effective in that respect while the contribution of Option 2 is very limited.

A third set of policy objectives identified concerns the promotion of energy efficiency and the reduction of greenhouse gas emissions. While all options (except Option 0) are potentially relevant in relation to both aspects, the analysis in Section 7 showed that the actual expected effects are marginal.

A further aspect of coherence relates to the proposed Regulation on simplifying the transfer of motor vehicles registered in another Member State within the Single Market (European Commission, 2012), which would harmonise rules for vehicle re-registration across the entire EU28. Vehicles would then only need to be registered in the Member State where the holder of the registration certificate is based after a certain grace period (6 months). This would affect all motor vehicles, including goods vehicles, and may therefore make Options 1b, 1c and 3 partly redundant.<sup>19</sup> However, given that it has not been approved by the EU legislator to date, its implementation has not been included under the baseline. Coherence issues would only arise in the event of the legislative proposal being adopted.

Other relevant policy aspects include road safety and modal shift. In both cases, the proposed policy options are coherent in principle but are not expected to make significant contributions.

**Table 8-2: Coherence of policy options with key EU policy objectives**  
 (“+” positive contribution; “o” no contribution; “-” negative contribution)

Policy areas and priorities	Option 0	Option 1a	Option 1b	Option 1c	Option 2	Option 3
<b>Juncker priorities</b>						
- Boost for Jobs, Growth and Investment	O	+	+	+	O	+
- Resilient Energy Union with a Forward-Looking Climate Change Policy	O	+	+	+	O	+
- Deeper and fairer internal market	O	+	+	+	+	+
<b>2011 White paper</b>						
- Access to market and fair competition	O	+	+	+	+	+
- GHG emissions reduction	O	+	+	+	O	+
- Reducing local noise and air pollution.	O	+	+	+	O	+
- Road safety	O	+	+	+	O	+
- Modal shift	O	O	O	O	O	O
<b>EU 2020</b>						
- Resource efficiency	O	+	+	+	O	+
<b>Overall</b>	O	+	+	+	O	+

<sup>19</sup> The Regulation on simplifying vehicle transfer, if adopted, is expected to cover the use of a vehicle hired abroad in the MS of establishment of the undertaking hiring it, but may not necessarily the use of such a vehicle in a third Member State. So, if a haulier from, say, Luxembourg hires a vehicle in nearby Metz (France), he may use it in Luxembourg for up to six months (given the proposed re-registration deadline in the Regulation), but not necessarily in Spain. An adjustment of Article 2 of the Directive may thus be required should the Regulation be adopted.

#### **8.4. Proportionality**

The assessment of the proportionality of the proposed measures is based on two key considerations:

- The extent that the expected impacts justify the proposed action
- The extent that the specific EU action is needed to achieve the objectives and that action at Member State level cannot bring the desired results.

In terms of the proportionality of the proposed policy options, **Option 1a** provides a clear answer to the issue of the existing restrictions in specific markets and ensuring a more harmonised legal framework. The economic and other impacts for the hired vehicles market are not expected to be sizeable but there are no sizeable costs either. EU action is not the only method available to address the underlying problem – action by the four Member States within the current legal framework could still provide an answer. However, there is no indication that the Member States concerned are prepared to take relevant action on their own. In contrast, 2 out of 4 relevant authorities (IT, PT) have clearly expressed their willingness to maintain the existing restrictions. On this basis, it can be argued that EU action is the only way to effectively address the problem.

In the case of **Option 1b**, it could be considered that the level of demand for the use of vehicles hired in another Member State – and thus the level of the problem addressed – is very limited and as such would not justify legislative action. Still, while the analysis of economic and other impacts does not point to significant impacts, the costs are also relatively limited. At the same time, most stakeholders appear to be supportive of action in relation to this aspect. The leasing industry is clearly in favour of such a measure and the same applies to most transport operators who considered that EU legal action is appropriate. Furthermore, action at EU level is indeed necessary if it is to provide a harmonised answer to this specific issue and to simplify the regulatory framework.

However, there may be some issues regarding the extent to which the implementation of Option 1b (and consequently Option 1c) would indeed achieve a simplification of the regulatory framework. The implementation of Option 1b may lead to the harmonisation of the minimum period during which hired vehicles registered in other Member States may be used. However, by only applying this rule to hired goods vehicles, it may further complicate the rules at Member State level. An approach such as the proposed Regulation on harmonised vehicle registration rules (European Commission, 2012) may be more appropriate to simplify the fragmented system of national rules on all vehicle registrations although it would likely need to be accompanied by changes to the Directive which would ensure that vehicles hired abroad could be used EU-wide.

In comparison, action in relation to the use of hired buses and coaches (**Option 2**) appears rather disproportionate. While some stakeholders call for a harmonised approach between vehicles used for the transport of goods and passengers, there seems to be no obvious need for EU action given the absence of a real market for the hiring of buses and coaches. Also almost all stakeholders found the existing legal framework rather effective.

**Option 3** is less effectively addressing the problem of a complicated legal framework in relation to hired goods vehicles.

#### **8.5. Conclusions – preferred policy option**

The expected impacts of all proposed policy options are fairly small, both in terms of their costs and benefits. Therefore, whether the implementation of any of the proposed policy options would lead to net benefits in practice cannot be assessed with certainty.

Implementing the policy options could make the enforcement of existing road transport legislation more difficult and increase the amount of unfair competition within the sector. Provided these issues are successfully mitigated, e.g. through a register of cross-border vehicle hire, Option 1c (combining 1a and 1b) is the option that, on balance, has the greatest benefits and most effectively and efficiently addresses the identified problems.

**Table 8-3: Comparison of policy packages**

<b>Key:</b>				
--	-	0	+	++
Strongly negative	Weakly negative	No impact	Weakly positive	Strongly positive

	Option 0	Option 1a	Option 1b	Option 1c	Option 2	Option 3
<b>Effectiveness</b>						
Efficient and flexible use of goods vehicles	0	+	+	+	0	+
Reduce operating costs /increase profitability of road transport operations	0	Max. €75m (0.03% cost reduction)	Max. €84m (0.03% cost reduction)	€161m (0.06% cost reduction)	0	€ 105m (0.04% cost reduction)
Capacity to respond to changes in demand	0	+	+	+	0	+
Simplify/improve regulatory framework	0	+	0	0	0	0
Equal access to market for hired vehicles	0	+	+	+	+	+
Reduce fuel consumption and air pollution from road transport	0	+	+	+	0	+
<b>Efficiency</b>						
Costs to authorities (implementation /enforcement)	0	0	0/- <sup>20</sup>	0/-	0	0/-
Costs to industry	0	0	0/-	0/-	0	0
Cost: benefit ratio	0	+	+	+	0/-	+
<b>Coherence</b>	0	+	+	+	0	+
<b>Proportionality</b>	0	+	+	+	-	+

It should be noted that the expected impacts of Option 1a are concentrated in IT, ES, PT and EL while those of Option 1b are spread across most EU28 Member States (although some MS already allow temporary use of foreign vehicles by domestic operators – see Table 2-1). It should also be noted that some resistance from the specific national authorities that currently impose restrictions may be expected. In that case, an alternative of adopting only Option 1b on the use of vehicles registered in another Member State for a specific period could also be considered. The selection of Option 1b is based on the hypothesis that there are no changes to the existing legal framework concerning the registration and re-registration of vehicles.

<sup>20</sup> Negative sign denotes increased costs in comparison to the baseline.

## 9. MONITORING AND EVALUATION

On the basis that **Option 1c** is the preferred policy option we have developed a monitoring and evaluation framework.

It should be noted that there are currently no procedures included within the Directive that require Member States to monitor and evaluate the effects of the national legislation implementing the Directive. The Directive only includes the statement that "*Member States shall take the necessary measures to ensure that their undertakings may use, for the carriage of goods by road, under the same conditions as vehicles owned by them, hired vehicles registered or put into circulation in compliance with the laws in their countries*". The Ex-post Evaluation found that very few Member States have introduced dedicated enforcement measures and there are no specific monitoring procedures in place. A few Member States had data on the number of checks and cases of non-compliance with road haulage legislation, most often not specific to the Directive. Overall, the current monitoring arrangements do not provide an appropriate basis for assessing the performance of the Directive.

### 9.1. Operational objectives of the preferred policy option

As a first step, the development of the monitoring and evaluation framework requires the establishment of the operational objectives of the preferred policy option. We can discern two relevant aspects in that respect.

The first concerns the effective transposition of the Directive and the subsequent removal of any restrictions on the use of hired vehicles for own account operations from national legislation. Similarly, Member State will need to introduce relevant legislation that will provide that the use of hired goods vehicles registered in another Member State is possible for a period of 3-6 months. As such, a first set of operational objectives should include:

- All Member States allow the use of hired goods vehicles for own account operations
- All Member States introduce into national legislation relevant provisions to ensure that road goods transport operators (including hire-and-reward and own account) can use for a period of 3-6 months hired goods vehicles registered in another Member State without restrictions or the requirement for re-registration.

The new legislation should also introduce a date by which Member States should transpose the legislation and inform the Commission. The Commission services will be responsible for ensuring that all EU Member States have introduced the relevant provisions which properly transpose the Directive.

- Number of Member States that allow the use of hired goods vehicles for own account operations (Target: 28)
- Number of Member States that have by a set date introduced into national legislation provisions to ensure that transport operators can use for a period of 3-6 months hired goods vehicles registered in another Member State without restrictions or requirement for re-registration (Target: 28).

Moving beyond the effective establishment of the legal framework, a range of operational objectives can be used to reflect the expected impact of the policy options on the market for hired vehicles (see Table 9-1). However, not all of them are appropriate in the context of the monitoring framework that should make use of data that are largely available and can be directly linked with the action taken.

Some of them are indirectly related to the policy measures and will require a more thorough assessment in the context of a detailed evaluation study to establish whether the increased use of hired vehicles has indeed played a positive role.

## 9.2. Identification of relevant indicators and data sources

Indicators reflecting the size of the market and the level of use of vehicles are more easily available and can show how the specific markets are developing. Relevant data are collected on an annual basis from Leaseurope through its members and it is not expected to be difficult to collect them. The same applies to the number of new entries in the hired vehicles market which can also provide an indication of the openness of the market. In all cases above, changes to the legal framework are only one of the possible drivers of these developments. A subsequent evaluation will need to establish in more clear terms the role that the legal framework has played.

Other relevant indicators include the number of vehicles registered in another Member State hired by transport operators. This will be a particularly relevant data source that should be possible to collect from Member States – particularly if a registry is established. Alternatively, Leaseurope members could be asked to report on the number of such transactions.

Finally, an industry survey in the context of an evaluation will be needed to help assess whether the legal framework has been simplified.

The Table 9-1 below presents the indicators proposed for monitoring and evaluating the proposed policy measures.

**Table 9-1 – Proposed monitoring and evaluation framework**

Operational objectives	Indicator	Source(s)
<b>Implementation</b>		
All Member States allow the use of hired goods vehicles for own account operations	Number of Member States that allow the use of hired goods vehicles for own account operations	Commission/National authorities
All Member States introduce into national legislation relevant provisions to ensure that transport operators can use for a set period – as defined in the Directive - hired goods vehicles registered in another Member State without restrictions or the requirement for re-registration.	Number of Member States that have by a set date introduced into national legislation provisions to ensure that transport operators can use for a set period – as defined in the Directive - hired goods vehicles registered in another Member State without restrictions or requirement for re-registration.	Commission/National authorities
<b>Monitoring</b>		
Increase the size and share of the hired goods vehicles market in road freight transport operations	Size and growth of the hired goods vehicles market across the EU (number of vehicles/turnover of sector)	Industry (Leaseurope)
	Share of hired vehicles in new vehicles registrations	Industry (Leaseurope)
Minimise obstacles for firms entering the hired vehicles market in Member States	Number of new firms entering in the hired goods vehicles market	Industry (Leaseurope), Eurostat (SBS)
Increase access to hired vehicles registered in another Member State	Number of vehicles registered in another Member State hired by transport operators	National authorities (registry) or Industry reports (survey)
Remove/address any aspects of the legal framework that cause confusion and uncertainty	Number of infringements related to the use of hired vehicles (total/cross-border)	Commission/National authorities

Operational objectives	Indicator	Source(s)
<b>Evaluation</b>		
Increase access to hired vehicles to transport operators	Extent that transport operators consider that there are issues/constraints to the access and use of hired goods vehicles.	Survey of transport operators
Increased use of hired goods in road freight transport leads to reduced operating costs and increased profitability of road transport operations	Operating costs in road transport sector	Survey of transport operators
Increased use of hired goods in road freight transport leads to increased vehicle utilisation	Level of utilisation of (hired) vehicles by road transport operators	Survey of transport operators
Increased use of hired vehicles in road freight transport leads to lower fuel consumption and air pollution	Characteristics of hired vehicle fleet compared to overall fleet (across all MSs), e.g. in terms of <ul style="list-style-type: none"> <li>- Age / fuel efficiency</li> <li>- Average operating costs</li> <li>- Emission standards</li> </ul>	Survey of transport operators Data from leasing industry
Remove/address any aspects of the legal framework that cause confusion and uncertainty	Extent that transport operators and hiring sector firms consider that the legal framework on the use of hired vehicles is complicated	Survey of transport operators and leasing industry

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